

# PROFESSIONAL CCTV

2019/2020

SOLUTIONS AND  
PROFESSIONAL  
SYSTEMS FOR  
SPECIALISTS

 Comelit®  
Passion. Technology. Design.

# PROFESSIONAL CCTV

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THE ICONS LEGEND  
IS ON THE BACK OF  
THIS FLYER COVER.



## Deep roots, global vision.

Founded in 1956, Comelit Group SpA is an industrial company operating on a worldwide scale and specialising in the design and manufacture of video entry, video surveillance, anti-intrusion, home automation and access control systems. The company has a strong international vocation thanks to its close ties with the area in which it was created and in which its headquarters are still located today.

## An international group.

Comelit exports to over 70 countries worldwide and, in addition to its Italian headquarters, has 15 branches located in strategic areas in which the company operates: from Europe to the Far East, the United States and the Middle East. This articulated sales structure integrates shared know-how with the awareness of specific requirements in each market.

## Constant innovation, friendly technology.

Comelit makes constantly looking to the future its mission. Innovation through continuous investment in manpower and technology finds an outlet in the design of new solutions dedicated to improving the quality of everyday life by maximising simplicity and functionality.

## Design: style, passion, art.

Besides placing technology at the service of mankind, Comelit is also a byword for design. Its unique and original style combines the most hi-tech materials with simple lines, clean shapes and cutting-edge colours. Every Comelit product therefore conveys a new concept for living in a space, in harmony with modern architectural trends.





## ADVANTAGES OF THE RANGE 100 SERIES IP CAMERAS

### 3MP/5MP/4K RESOLUTION

**3 MP**  
3 MEGAPIXELS

**5 MP**  
5 MEGAPIXELS

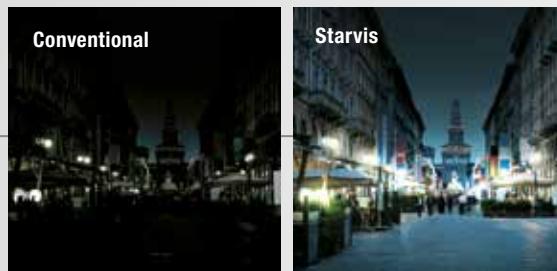
**4K**  
ULTRA HD



Optimal resolution for viewing even the smallest details.

### STARVIS/CMOS

**STARVIS/CMOS**



Ultra-sensitive CMOS STARVIS image sensor with backlighting, capable of capturing images in low light conditions.

### SMARTFOCUS

**SMARTFOCUS**



Automatic focussing for a perfect image in any ambient conditions and without the need for any manual intervention.

### WDR

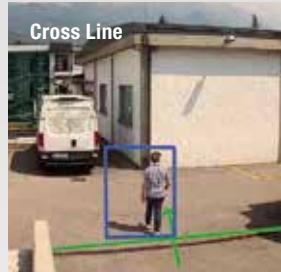
**WDR**



WIDE DYNAMIC RANGE - balanced image, even in situations with strong backlighting.



An alarm is generated when moving objects cross the line in the specified direction



An alarm is generated when the number of line crossings in the specified direction reaches the set figure

## VIDEO ANALYTICS (IP TECHNOLOGY)



An alarm is generated when, once the set time has elapsed, an object is abandoned or removed from the specified zone



This technology allows the IP camera to analyse the captured images for certain complex behaviour in the scene under surveillance.



## CAMERA MOVEMENT ON THREE AXIS

LED ARRAYS UP TO 50M

SUNSHIELD

SMD LED

SMART IR

MOTORISED LENS

## CABLE

POWER



MONITOR SPOT



AUDIO OUT



AUDIO IN



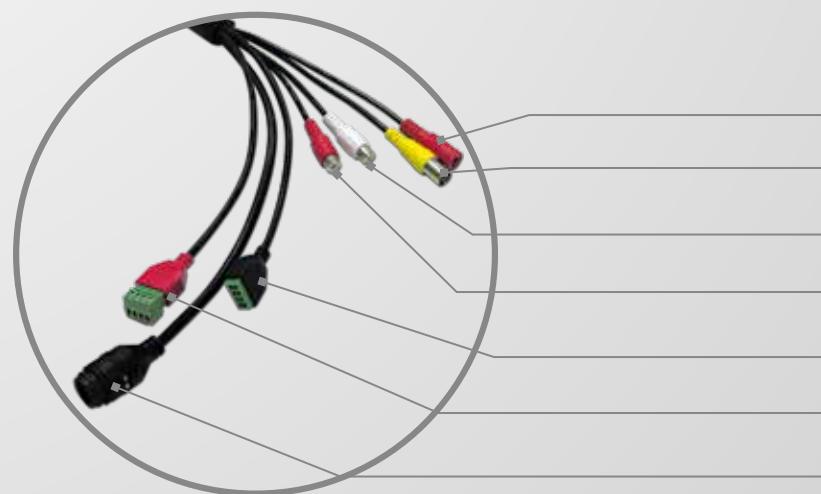
ALARM IN



ALARM OUT



LAN PoE

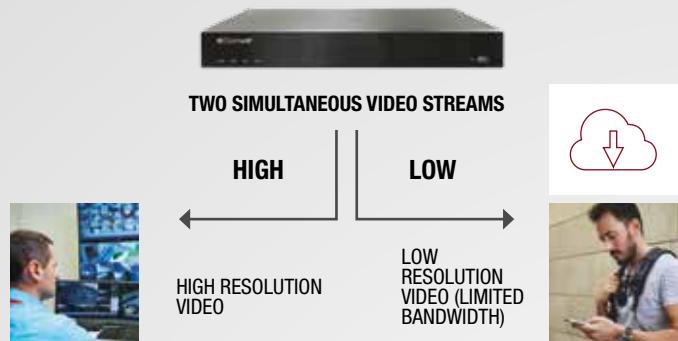




## ADVANTAGES OF THE RANGE IP 100 SERIES NVR

### DUAL STREAMING RECORDING

The devices are capable of emitting two video streams - with different resolutions - at the same time. This function allows you to view high-quality images in networks with high bandwidth and lower quality images in networks with limited bandwidth (smartphones).

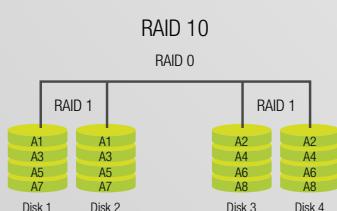
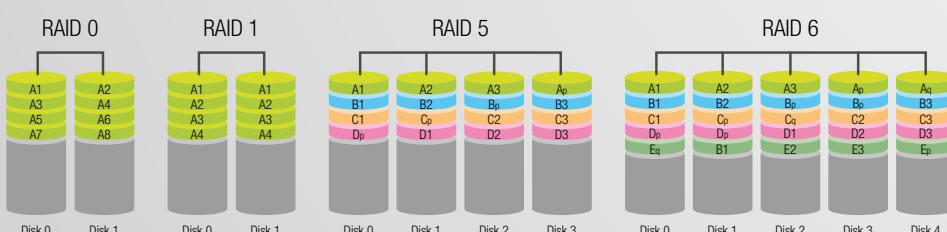


### FUNCTIONAL AND INTUITIVE GUI

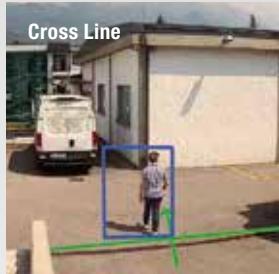


### UP TO 16 HDD

(RAID0, RAID1, RAID5, RAID6, RAID10, HDD grouping)



An alarm is generated when moving objects cross the line in the specified direction



An alarm is generated when the number of line crossings in the specified direction reaches the set figure

## VIDEO ANALYTICS (IP TECHNOLOGY)



VIDEO ANALYTICS

An alarm is generated when, once the set time has elapsed, an object is abandoned or removed from the specified zone



Meter: 1/100

Management of local video and dedicated camera feed analysis (cross line, area in/out, object removed/abandoned, line counter, motion detection up to 396 zones)



RESOLUTION UP TO 4K

INSTANT PLAYBACK OF INDIVIDUAL CHANNELS

DUAL PASSWORD AUTHENTICATION SYSTEM

EVENT/ALARM ALERTS

UP TO TWO GIGABIT NETWORK INTERFACES



TWO-WAY AUDIO

S.M.A.R.T FUNCTION FOR CHECKING AND CORRECT HDD OPERATION



S.M.A.R.T.



PROPRIETARY ANTI-FORGERY RECORDING FORMAT

EMAIL ALERTS



## ADVANTAGES OF THE RANGE 100 SERIES IP PTZ CAMERAS

### RESOLUTION UP TO 3MP



Optimal resolution for viewing even the smallest details.

### ZOOM UP TO 30X



30x optical zoom, night vision up to 400 m.

### POE



Power supply via CAT5 cable, no additional power supply unit, standard IEEE802.3at.

### ACCESSORIES



IPPT-401 - Pole mounting support art. IPPTZ110IRA

IPPT-402 - Corner mounting support art. IPPTZ110IRA

IPPT-403 - Flush mounting support art. IPPTZ110IRA

IPPT-1201 - Pole mounting support art. IPPTZ120IRD-IPPTZ130IRD

IPPT-1202 - Corner mounting support art. IPPTZ120IRD-IPPTZ130IRD

IPPT-604 - Ceiling mounting support art. IPPTZ120IRD-IPPTZ130IRD





**WDR**



WIDE DYNAMIC RANGE - balanced image, even in situations with strong backlighting.



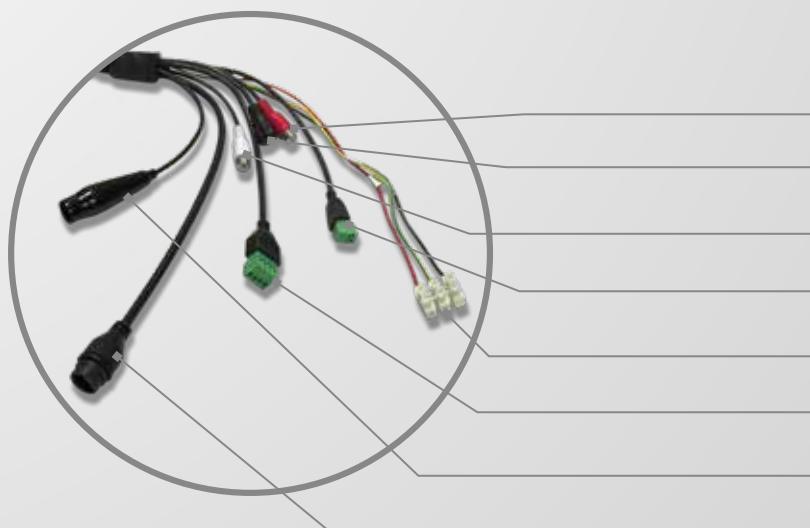
**6" WATERPROOF CASE IP66**



SYNCHRONISED INFRARED LIGHTS WITH RANGE UP TO 150 M

WALL MOUNTING SUPPORT INCLUDED

**CABLE**



AUDIO IN



RESET



AUDIO OUT



ALARM OUT



POWER



ALARM IN



MONITOR SPOT



LAN PoE





## ADVANTAGES OF THE RANGE AHD 100 SERIES CAMERAS

**5MP**  
5 MEGAPIXELS

D-WDR

IP 66

VANDAL PROOF  
IK10

Cameras with ultra-sensitive CMOS sensor, for high-quality images even with feeds in infrared fields.

Resolution up to 5 MP, with motorised zoom and autofocus, protection rating up to IP66, anti-vandal

protection rating IK10, AHD/CVI/TVI video outputs.

They use the same accessories as the IP100 range.

### 5MP RESOLUTION

**5MP**  
5 MEGAPIXELS



Optimal resolution for viewing even the smallest details.

### SMARTFOCUS

SMARTFOCUS



The motorised lens means that the autofocus always works perfectly, in any environmental conditions and without requiring manual intervention.

### D-WDR

D-WDR



DIGITAL WIDE DYNAMIC RANGE - balanced image, even in situations with strong backlighting.



## PTZ WITH UP TO 20X ZOOM



20x Optical Zoom night vision up to 150 m.

## CAMERA MOVEMENT ON THREE AXIS

LED ARRAYS UP TO 50 M

SUNSHIELD

SMD LED

SMART IR

MOTORISED LENS

OSD MENU

UTC CONTROL

## ACCESSORIES





## ADVANTAGES OF THE RANGE AHD100 SERIES DVR



## 5-IN-1 HYBRID DVR

The new AHD100 series DVRs are capable of managing up to 5 technologies with a resolution of up to 4 Megapixels:

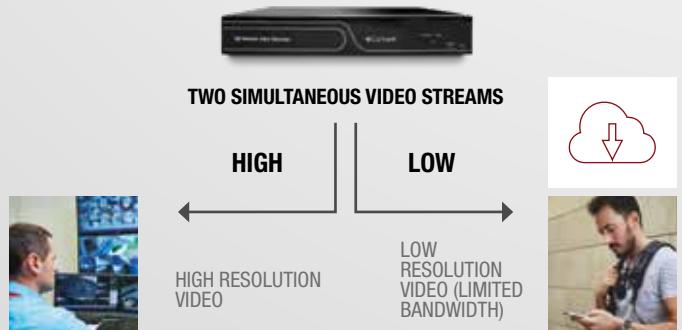


## FUNCTIONAL AND INTUITIVE GUI



## DUAL STREAMING RECORDING

The devices are capable of emitting two video streams - with different resolutions - at the same time. This function allows you to view high-quality images in networks with high bandwidth and lower quality images in networks with limited bandwidth (smartphones).



## TRUE HYBRID CAPABILITY

The DVRs offer the option of doubling their channels when used in conjunction with IP cameras. The 4-channel model also has 8 BNC inputs to double the number of analogue channels if cameras with a resolution of up to 3 MP are used, meaning that up to 16 cameras (8 analogue + 8 IP, max. 3 MP) can be managed

- AHDVR104A: 4 BNC and 4 IPC (4 Mpx) or 8 BNC (max. 3Mpx) and 8 IPC (3 Mpx)
- AHDVR108A: 8 BNC and 8 IPC (4 Mpx)
- AHDVR106A: 16 BNC and 8 IPC (4 Mpx)

INSTANT PLAYBACK OF INDIVIDUAL CHANNELS

DUAL PASSWORD AUTHENTICATION SYSTEM

EVENT/ALARM ALERTS

FRONT MOUNTED USB

COMELITDNS AND P2P

UTC CONTROL

MAXIMUM SIZE FOR HDD: 8 TB

PROPRIETARY RECORDING FORMAT

ANTI-FORGERY

EMAIL ALERTS

TWO-WAY AUDIO

S.M.A.R.T FUNCTION FOR VERIFICATION AND PROPER  
HDD OPERATION

ALARM INPUTS-OUTPUTS





## ADVANTAGES OF THE RANGE COMELIT VIEW 100 SOFTWARE

### LIVE STREAMING & PLAYBACK



Manages several monitors at once.

### GRAPHIC MAPS AND SUB-MAPS



Option of adding connected interactive graphic maps and sub-maps with cameras in position.

### PLAYBACK/BACKUP



- Search calendar
- Search by type of video streaming
- Search by type of recording (Normal, Motion, Alarm, Video analysis)
- Search by type of video analysis
- View video analysis settings
- Playback bar with associated Backup Function channel.



## POP-UP ON EVENT

If events/alarms occur, one or more pop-up windows can be enabled, showing the images from the specified channels.



## AUTOMATIC SEARCH FOR ONLINE DEVICES

Automatic search for all online devices in the same network.



## REAL-TIME EVENT LOG

Real-time display of the events stored by the equipment.



MANAGEMENT OF UP TO 1000 VIDEO CHANNELS

LOCAL SNAPSHOT  
REMOTE DEVICE SETUP

PTZ MANAGEMENT

LAYOUT CUSTOMISATION



## ADVANTAGES OF THE RANGE COMELIT VIEW 100 APP



### JUNCTION

Device registration via P2P and QR code, IP address and Comelit DNS



### VIEWING OF LIVE IMAGES

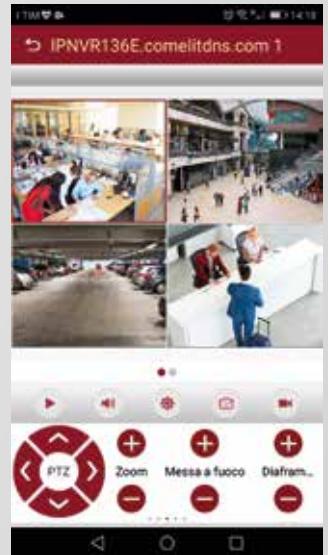
- Live multiscreen streaming— single channel
- Option of enabling two-way audio
- Switching between Main stream and Sub stream





## PLAYBACK

- Recording playback
- Option of activating audio
- Capture screenshot
- Manual recording



## PTZ MANAGEMENT

- Full PTZ pan/tilt
- Zoom and focus control
- Preset and Tour setting and recall



Comelit View 100

HIGH AND LOW RESOLUTION IMAGE DISPLAY (SELECT)

LOCAL SNAPSHOT AND RECORDING WITH CORRESPONDING DISPLAY

TWO-WAY AUDIO



## ADVANTAGES OF THE RANGE LICENSE PLATE READER CAMERAS

### MAGIC SPOT LIGHT

Function which makes a license plate legible even if the captured image seems dark and illegible to the human eye.



### ANTI-GLARE

Glare can cause problems when reading license plates. Visible light must be eliminated and the body of the license plate lit with infrared lighting. For this reason, the camera light plays a fundamental role in an effective license plate reading system.



### ANTI-REFLECTION

Sunlight reflection can make reading license plates difficult, even with sophisticated OCR systems. Comelit uses special sensors to overcome this phenomenon.



### VIRTUAL RECONSTRUCTION OF DETERIORATED CHARACTERS

In the case of license plates that have deteriorated due to age or wear and tear, the Comelit license plate reading system combines probability analysis algorithms with virtual character reconstruction to offer optimal results.



## ANTI-SHADOW



Dark shadows that partially obscure characters on the license plate may affect recognition.

Comelit uses multi-exposure lights and special anti-shadow algorithms to resolve this problem.

## ANTI-DIRT



Especially in autumn and winter, we need to deal with license plates that are dirty and hard to read. Comelit uses specifically devised algorithms to overcome this limitation.



OCR SOFTWARE FOR FRONT AND REAR LICENSE PLATE RECOGNITION

READING ACCURACY GREATER THAN 95% IN ALL WEATHER CONDITIONS

HIGH FRAME RATE SENSOR (60FPS)

ALGORITHM FOR ELIMINATING SYMBOLS, COATS OF ARMS AND ADVERTISING STICKERS

128 MB (32 GB MAX) MEMORY CARD in solid state which allows you to save white/black lists (unlimited with automatic recognition and indication)

HALF/FULL DUPLEX TWO-WAY AUDIO

RELAY FOR EXTERNAL ACTIVATIONS, also via virtualisation or white list.

COMPLIANCE WITH SPECIFIC REGULATIONS: UNI 10772 Class A (Intelligent Transport Systems

- Systems For The Processing Of Video Images For Automatic Number Plate Recognition),  
EN62471:2008 (Photobiological safety)

## TRAFFIC CONTROL (ON REQUEST)



CAMERAS FOR DETECTING HIGH SPEEDS, KEMLER/ADR PANELS FOR HAZARDOUS GOODS AND CONTAINER ILU-BIC CODES

PARKING MANAGEMENT LICENSE

LOGGING AND STATISTICS SOFTWARE



# 100 SERIES IP VIDEO SURVEILLANCE

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Accessories and software	53

The icons legend is on the back of this flyer cover.



## 100 SERIES IP CAMERAS

### IPBCAMPO2FA

#### IP BULLET CAMERA, 2MP, 3.6MM, SMD LEDS, WHITE



- 1/3" CMOS sensor
- FULL-HD resolution
- Dual streaming dual compression
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- Motion detection
- 3DNR (Digital Noise Reduction)
- Privacy zones
- Smart IR
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Camera sensor	1/2.9" CMOS Sony
Camera lens	3.6mm
Horizontal FoV (°)	77
Vertical FoV (°)	50
Electronic shutter (s)	1/25-1/10000
Sensitivity (lux)	0.05 (colour), 0 (B/W, led IR ON)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Management software	Comelit View 100
Video resolution (H x V - pixel)	1920x1080 (Full-HD 1080p)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG (Dual streaming, Dual compression)
Frame rate	30fps
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS, DHCP, HTTP
Updating firmware using network	Yes
Users connected at the same time	3
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verify.
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Safari
Remote control by mobile	Comelit View 100 app (Android, iOS)

#### FUNCTIONS

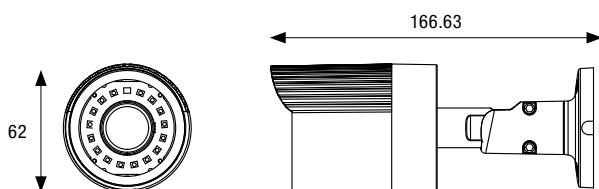
Main functions	Multicast, DST, Snapshot, Event notification via e-mail and FTP (JPEG images)
Motion detection (zones)	1
Privacy zones	4
Digital effects	Corridor mode (90°/270° rotation), Anti-flicker (50/60Hz), Defog, Mirror (Horizontal, Vertical, 180° rotation), Tampering
Enhanced DNR control	3DNR
Exposure control	Manual, Auto
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	16 led SMD / 20m (Smart IR)
IP protection rating	IP66
LAN output type	Ethernet 10/100 Mbit/s (RJ45)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	6
POE power supply	Standard IEEE 802.3af
Diameter (mm)	66
Depth (mm)	167
Weight (g)	400
Type of finish	Die-cast aluminum
Colour	White
Operating temperature (°C)	-20 - 55
RH max operating humidity (%)	90



#### ACCESSORIES

- JB-100MBAW - Junction box for mini bullet white
- PM100W - Pillar-mount bracket, white





## IPBCAMPO4FA

### IP BULLET CAMERA, 4MP, 3.6MM, IP66, WHITE

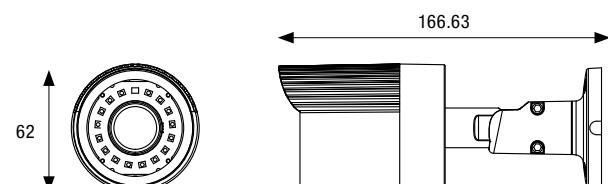


- 1/3" CMOS Starvis sensor
- 4MP resolution
- Dual Streaming, Triple Compression
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- Video analytics
- D-WDR
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)

<b>4MP</b> 4 MEGAPIXELS					
<b>Onvif</b> ONVIF					



#### ACCESSORIES

- JB-100MBAW - Junction box for mini bullet white
- PM100W - Pillar-mount bracket, white

#### MAIN FEATURES

Camera sensor	1/3" CMOS
Camera lens	3.6mm
Horizontal Fov (°)	77
Vertical Fov (°)	50
Electronic shutter (s)	1/25-1/10000
Slow shutter	Yes
Sensitivity (lux)	0.5 (colour), 0 (B/W, led IR ON)
Signal/noise ratio (dB)	>35 (AGC OFF)
IR filter	Mechanical
Management software	Comelit View 100
Video resolution (H x V - pixel)	2592x1520 (4MP)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG (Dual streaming, Dual compression)
Frame rate	2592x1520@30fps/2560x1440@30fps (main) + VGA@30fps (sub)
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS, DHCP, HTTP
Updating firmware using network	Yes
Users connected at the same time	4 (Live)
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verif.
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Safari

#### FUNCTIONS

Main functions	ANR, Multicast, DST, Snapshot, Event notification via e-mail and FTP (JPEG images)
Motion detection (zones)	Yes
Video analytics	Counting, object stolen/abandoned, area detection, virtual guard
Privacy zones	4
Digital effects	Corridor mode (90°/270° rotation), Anti-flicker (50/60Hz), Defog, Mirror (Horizontal, Vertical, 180° rotation), Tampering, Zone ROI
Wide Dynamic Range WDR (dB)	D-WDR
Enhanced DNR control	3DNR
Exposure control	Manual, Auto
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	16 led SMD / 30m (Smart IR)
IP protection rating	IP66
Analogue Video output	CVBS (BNC - 1 Vpp/75 ohm)
LAN output type	Ethernet 10/100 Mbit/s (RJ45)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	6
POE power supply	Standard IEEE 802.3af
Diameter (mm)	66
Depth (mm)	167
Weight (g)	400
Type of finish	Die-cast aluminum
Colour	White
Operating temperature (°C)	-30 - 55
RH max operating humidity (%)	90





## 100 SERIES IP CAMERAS

### IPCAM122A

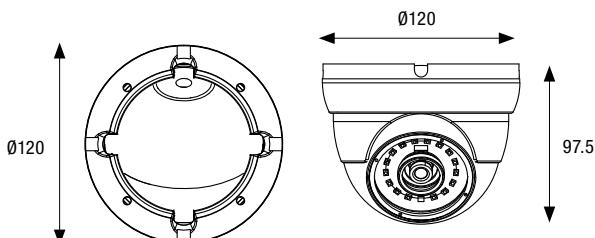
#### FULL-HD IP MINIDOME CAMERA, 3.6MM



- 1/3" CMOS sensor
- FULL-HD resolution
- Dual streaming dual compression
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- Motion detection
- 3DNR (Digital Noise Reduction)
- Privacy zones
- Smart IR
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- JB-100MDA - Junction box for Minidome fix focal
- PM100W - Pillar-mount bracket, white
- WM100SD - Minidome wall mounting support

#### MAIN FEATURES

Camera sensor	1/2.9" CMOS Sony
Camera lens	3.6mm
Horizontal FoV (°)	77
Vertical FoV (°)	50
Electronic shutter (s)	1/25-1/10000
Sensitivity (lux)	0.05 (colour), 0 (B/W, led IR ON)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Management software	Comelit View 100
Video resolution (H x V - pixel)	1920x1080 (Full-HD 1080p)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG (Dual streaming, Dual compression)
Frame rate	30fps
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS, DHCP, HTTP
Updating firmware using network	Yes
Users connected at the same time	3
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verify.
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Safari
Remote control by mobile	Comelit View 100 app (Android, iOS)

#### FUNCTIONS

Main functions	Multicast, DST, Snapshot, Event notification via e-mail and FTP (JPEG images)
Motion detection (zones)	1
Privacy zones	4
Digital effects	Corridor mode (90°/270° rotation), Anti-flicker (50/60Hz), Defog, Mirror (Horizontal, Vertical, 180° rotation), OSD, Tampering
Enhanced DNR control	3DNR
Exposure control	Manual, Auto
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	16 led SMD / 30m (Smart IR)
IP protection rating	IP66
LAN output type	Ethernet 10/100 Mbit/s (RJ45)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	6
POE power supply	Standard IEEE 802.3af
Diameter (mm)	120
Height (mm)	97.5
Weight (g)	740
Type of finish	Die-cast aluminum
Housing type	Minidome
Colour	White
Operating temperature (°C)	-20 - 55
RH max operating humidity (%)	90





## IPCAM124A

### 4MP IP MINIDOME CAMERA, 3.6MM, DWDR, AIF

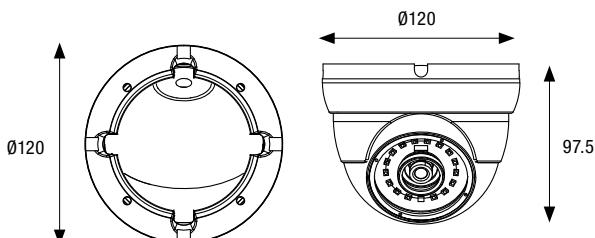


- 1/3" CMOS Starvis sensor
- 4MP resolution
- Dual Streaming, Triple Compression
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- Video analytics
- D-WDR
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)

<b>4MP</b> 4 MEGAPIXELS					



#### ACCESSORIES

- JB-100MDA - Junction box for Minidome fix focal
- PM100W - Pillar-mount bracket, white
- WM100SD - Minidome wall mounting support

#### MAIN FEATURES

Camera sensor	1/3" CMOS
Camera lens	3.6mm
Horizontal FoV (°)	77
Vertical FoV (°)	50
Electronic shutter (s)	1/25-1/10000
Slow shutter	Yes
Sensitivity (lux)	0.5 (colour), 0 (B/W, led IR ON)
Signal/noise ratio (dB)	>35 (AGC OFF)
IR filter	Mechanical
Management software	Comelit View 100
Video resolution (H x V - pixel)	2592x1520 (4MP)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG
Frame rate	2592x1520@30fps/2560x1440@30fps (main) + VGA@30fps (sub)
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS, DHCP, FTP, HTTP
Updating firmware using network	Yes
Users connected at the same time	4 (Live)
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verif.
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Safari

#### FUNCTIONS

Main functions	ANR, Multicast, DST, Snapshot, Event notification via e-mail and FTP (MJPEG images)
Motion detection (zones)	Yes
Video analytics	Counting, object stolen/abandoned, area detection, virtual guard
Privacy zones	4
Digital effects	Corridor mode (90°/270° rotation), Anti-flicker (50/60Hz), Defog, Mirror (Horizontal, Vertical, 180° rotation), Tampering, Zone ROI
Wide Dynamic Range WDR (dB)	D-WDR
Enhanced DNR control	3DNR
Exposure control	Manual, Auto
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	16 led SMD / 30m (Smart IR)
IP protection rating	IP66
Analogue Video output	CVBS (BNC - 1 Vpp/75 ohm)
LAN output type	Ethernet 10/100 Mbit/s (RJ45)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	6
POE power supply	Standard IEEE 802.3af
Diameter (mm)	120
Height (mm)	98
Weight (g)	740
Type of finish	Die-cast aluminum
Housing type	Minidome
Colour	White
Operating temperature (°C)	-30 - 55
RH max operating humidity (%)	90





## 100 SERIES IP CAMERAS

### IPCAM144A

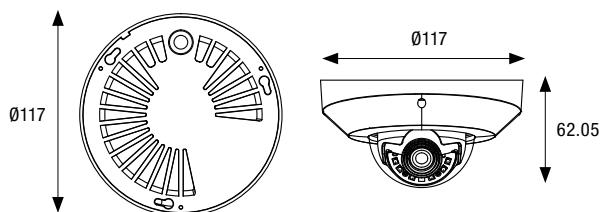
4MP IP UFO DOME CAMERA, 2.8MM, H265, DWDR, AIF



- 1/3" CMOS sensor
- 4MP resolution
- Dual Streaming, Triple Compression
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- Video analytics
- Video recording on micro-SD card (128 GB max)
- D-WDR
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- IP66, IK09

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Camera sensor	1/3" CMOS
Camera lens	2.8mm
Horizontal FoV (°)	83
Vertical FoV (°)	61
Electronic shutter (s)	1/25-1/10000
Slow shutter	Yes
Sensitivity (lux)	0.5 (colour), 0 (B/W, led IR ON)
Signal/noise ratio (dB)	>35 (AGC OFF)
IR filter	Mechanical
Management software	Comelit View 100
Video resolution (H x V - pixel)	2592x1520 (4MP)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG (Dual streaming, Dual compression)
Frame rate	2592x1520@30fps/2560x1440@30fps (main) + VGA@30fps (sub)
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS, DHCP, FTP, HTTP
Users connected at the same time	4 (Live)
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verif.
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Safari

#### FUNCTIONS

Main functions	ANR, Multicast, DST, Snapshot, Event notification via e-mail and FTP (MJPEG images)
Motion detection (zones)	Yes
Video analytics	Counting, object stolen/abandoned, area detection, virtual guard
Privacy zones	4
Digital effects	Corridor mode (90°/270° rotation), Anti-flicker (50/60Hz), Defog, Mirror (Horizontal, Vertical, 180° rotation), Tampering, Zone ROI
Wide Dynamic Range WDR (dB)	D-WDR
Enhanced DNR control	3DNR
Exposure control	Manual, Auto
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	6 led SMD / 10m (Smart IR)
IP protection rating	IP66
Analogue Video output	CVBS (BNC - 1 Vpp/75 ohm)
LAN output type	Ethernet 10/100 Mbit/s (RJ45)
Support SD card (card not included)	Micro-SD (128GB max)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	8
POE power supply	Standard IEEE 802.3af
Diameter (mm)	117
Height (mm)	86
Type of finish	Die-cast aluminum
Housing type	Minidome
Colour	White
Operating temperature (°C)	-20 - 55
RH max operating humidity (%)	90





## IPBCAMP02V02A

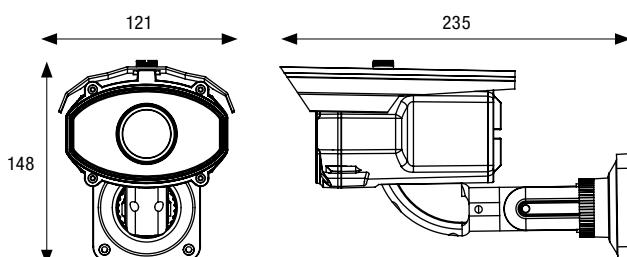
### IP BULLET CAMERA, FULL-HD, 6-22MM, LED ARRAY BIANCA



- 1/2.9" SONY Starvis
- 2MP resolution
- Dual Streaming
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- D-WDR
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- JB-100BBAW - Junction box for big bullet white
- PM100W - Pillar-mount bracket, white

#### MAIN FEATURES

Camera sensor	1/2.9" CMOS Sony Exmor Progressive Scan
Camera lens	6-22mm
Horizontal Fov (°)	19-44
Vertical Fov (°)	10-24
Electronic shutter (s)	1/25-1/10000
Sensitivity (lux)	0.05 (colour), 0 (B/W, led IR ON)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Management software	Comelit View 100
Video resolution (H x V - pixel)	1920x1080 (Full-HD 1080p)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG (Dual streaming, Dual compression)
Frame rate	30fps
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS, DHCP, HTTP
Updating firmware using network	Yes
Users connected at the same time	3
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verify.
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Safari

#### FUNCTIONS

Main functions	Defog, ANR, Multicast, DST, Snapshot, Event notification via e-mail and FTP (MJPEG images)
Motion detection (zones)	1
Privacy zones	4
Digital effects	Corridor mode (90°/270° rotation), Anti-flicker (50/60Hz), Mirror (Horizontal, Vertical, 180° rotation), OSD, Tampering
Wide Dynamic Range WDR (dB)	D-WDR
Enhanced DNR control	3DNR
Exposure control	Manual, Auto
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	2 led arrays / 50m (Smart IR)
IP protection rating	IP66
LAN output type	Ethernet 10/100 Mbit/s (RJ45)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	6
POE power supply	Standard IEEE 802.3af
Height (mm)	148
Width (mm)	121
Depth (mm)	235
Weight (g)	1000
Type of finish	Die-cast aluminum
Colour	Dark grey
Operating temperature (°C)	-20 - 55
RH max operating humidity (%)	90





## 100 SERIES IP CAMERAS

### IPBCAMPO2V01A

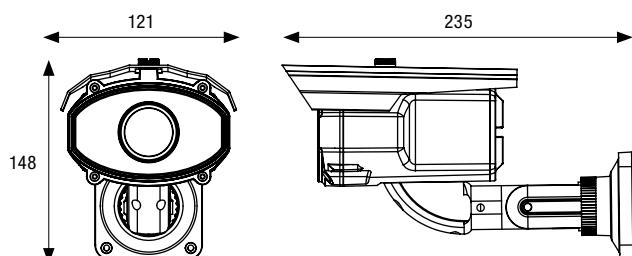
#### IP BULLET CAMERA, 2MP, 2.8-12MM, ARRAY LEDS, WHITE



- 1/2.9" SONY Starvis
- 2MP resolution
- Dual Streaming
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- D-WDR
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- JB-100BBAW - Junction box for big bullet white
- PM100W - Pillar-mount bracket, white

#### MAIN FEATURES

Camera sensor	1/2.9" CMOS Sony Exmor Progressive Scan
Horizontal FoV (°)	40-83
Vertical FoV (°)	30-62
Electronic shutter (s)	1/25-1/10000
Sensitivity (lux)	0.05 (colour), 0 (B/W, led IR ON)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Management software	Comelit View 100
Video resolution (H x V - pixel)	1920x1080 (Full-HD 1080p)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG (Dual streaming, Dual compression)
Frame rate	30fps
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS, DHCP, HTTP
Updating firmware using network	Yes
Users connected at the same time	3
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verif.
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Safari
Remote control by mobile	Comelit View 100 app (Android, iOS)

#### FUNCTIONS

Main functions	Defog, ANR, Multicast, DST, Snapshot, Event notification via e-mail and FTP (MJPEG images)
Motion detection (zones)	1
Privacy zones	4
Digital effects	Corridor mode (90°/270° rotation), Anti-flicker (50/60Hz), Mirror (Horizontal, Vertical, 180° rotation), OSD, Tampering
Wide Dinamic Range WDR (dB)	D-WDR
Enhanced DNR control	3DNR
Exposure control	Manual, Auto
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	2 led arrays / 50m (Smart IR)
IP protection rating	IP66
LAN output type	Ethernet 10/100 Mbit/s (RJ45)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	6
POE power supply	Standard IEEE 802.3af
Height (mm)	148
Width (mm)	121
Depth (mm)	235
Weight (g)	1000
Type of finish	Die-cast aluminum
Colour	Dark grey
Operating temperature (°C)	-20 - 55
RH max operating humidity (%)	90





## IPBCAMP03ZA

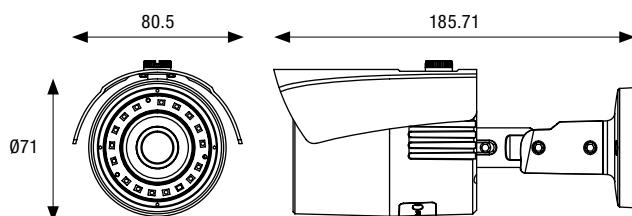
### IP BULLET CAMERA, 3MP, 2.8-8MM, SMART IR, WHITE



- 1/2.5" CMOS 8MP Progressive Scan sensor
- 3MP resolution
- Dual Streaming, Dual Compression
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- Video analytics
- 3x motorized optical zoom
- Video recording on micro-SD card (64 GB max)
- WDR (120 dB)
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- Smart IR
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- JB-100MBAW - Junction box for mini bullet white
- PM100W - Pillar-mount bracket, white
- WM100SD - Minidome wall mounting support

#### MAIN FEATURES

Camera sensor	1/2.8" CMOS Sony EXMOR Starvis Progressive scan
Effective pixels (H x V - pixels)	2048x1536
Camera lens	2.8 - 8mm, motorized, autofocus
Horizontal FoV (°)	55-92
Vertical FoV (°)	41-67
Electronic shutter (s)	1/25-1/10000
Camera optical zoom	3x
Sensitivity (lux)	0.5 (colour), 0 (B/W, led IR ON)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Video resolution (H x V - pixel)	2048x1536 (3MP)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG (Dual streaming, Dual compression)
Frame rate	30fps
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTP/RTSP, SMTP, TCP/IP, UDP, UPnP, DHCP, HTTP
Updating firmware using network	Yes
Remote viewer from browser	Internet Explorer, Firefox, Chrome

#### FUNCTIONS

Main functions	Video analytics, Defog
Motion detection (zones)	Yes
Video analytics	Counting, object stolen/abandoned, area detection, virtual guard
Privacy zones	4
Wide Dinamic Range WDR (dB)	WDR (120dB)
Enhanced DNR control	3DNR
White balance control	AWB
Exposure control	AE, Manuale, Flickerless
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	15 led SMD / 30m (Smart IR)
IP protection rating	IP66
Alarm Inputs/Outputs	2/1
Audio Inputs/Outputs	1/1 (G.711A)
RS-485 control	Yes
Analogue Video output	CVBS (BNC)
Support SD card (card not included)	Micro-SD (64GB max)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	7
POE power supply	Standard IEEE 802.3af
Diameter (mm)	71
Depth (mm)	185
Weight (g)	600
Colour	White
Operating temperature (°C)	-30 - 55
RH max operating humidity (%)	90
Operating temperature (°C)	-20 - 55
RH max operating humidity (%)	90





## 100 SERIES IP CAMERAS

### IPBCAMPO4ZA

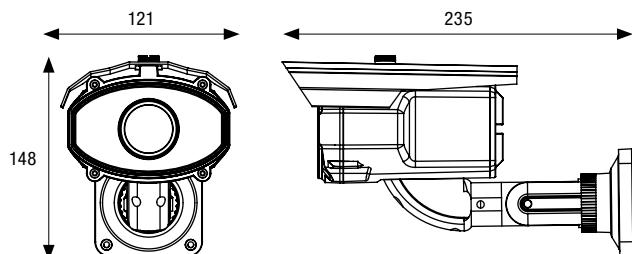
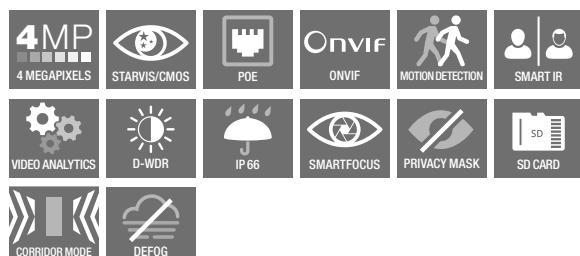
#### IP BULLET CAMERA, 4MP, 2.8-8MM, H265, WHITE



- 1/3" CMOS Starvis sensor
- 4MP resolution
- Dual Streaming, Triple Compression
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- Video analytics
- 3x motorized optical zoom
- Video recording on micro-SD card (128 GB max)
- D-WDR
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- Smart IR
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- JB-100BBAW - Junction box for big bullet white
- PM100W - Pillar-mount bracket, white

#### MAIN FEATURES

Camera sensor	1/3" CMOS
Camera lens	2.8-8mm, motorized, autofocus
Horizontal Fov (°)	40-83
Vertical Fov (°)	30-62
Electronic shutter (s)	1/25-1/10000
Slow shutter	Yes
Camera optical zoom	3x
Sensitivity (lux)	0.5 (colour), 0 (B/W, led IR ON)
Signal/noise ratio (dB)	>35 (AGC OFF)
IR filter	Mechanical
Management software	Comelit View 100
Video resolution (H x V - pixel)	2592x1520 (4MP)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG (Dual streaming, Dual compression)
Frame rate	2592x1520@30fps/2560x1440@30fps (main) + VGA@30fps (sub)
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS, DHCP, HTTP
Updating firmware using network	Yes
Users connected at the same time	4 (Live)
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verify.
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Safari

#### FUNCTIONS

Main functions	ANR, Multicast, DST, Snapshot, Event notification via e-mail and FTP (MJPEG images)
Motion detection (zones)	Yes
Video analytics	Counting, object stolen/abandoned, area detection, virtual guard
Privacy zones	4
Digital effects	Corridor mode (90°/270° rotation), Anti-flicker (50/60Hz), Defog, Mirror (Horizontal, Vertical, 180° rotation), Tampering, Zone ROI
Wide Dynamic Range WDR (dB)	D-WDR
Enhanced DNR control	3DNR
Exposure control	Manual, Auto
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	15 led SMD / 30m (Smart IR)
IP protection rating	IP66
Analogue Video output	CVBS (BNC - 1 Vpp/75 ohm)
LAN output type	Ethernet 10/100 Mbit/s (RJ45)
Support SD card (card not included)	Micro-SD (128GB max)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	9
POE power supply	Standard IEEE 802.3af
Diameter (mm)	80
Depth (mm)	185
Weight (g)	600
Type of finish	Die-cast aluminum
Colour	Dark grey
Operating temperature (°C)	-30 - 55
RH max operating humidity (%)	90





## IPBCAMP04Z01A

### IP BULLET CAMERA, 4MP, 2.8-12MM, H265, WHITE

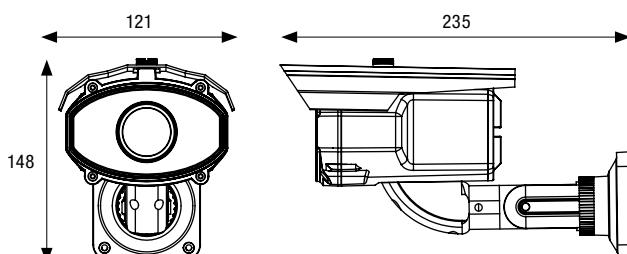


- 1/3" CMOS Starvis sensor
- 4MP resolution
- Dual Streaming, Triple Compression
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- Video analytics
- 4x motorized optical zoom
- Video recording on micro-SD card (128 GB max)
- D-WDR
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)

<b>4MP</b> 4 MEGAPIXELS					



#### ACCESSORIES

- JB-100BBAW - Junction box for big bullet white
- PM100W - Pillar-mount bracket, white

#### MAIN FEATURES

Camera sensor	1/3" CMOS
Camera lens	2.8-12mm, motorized, autofocus
Horizontal FoV (°)	40-83
Vertical FoV (°)	30-62
Electronic shutter (s)	1/25-1/10000
Slow shutter	Yes
Camera optical zoom	4x
Sensitivity (lux)	0.5 (colour), 0 (B/W, led IR ON)
Signal/noise ratio (dB)	>35 (AGC OFF)
IR filter	Mechanical
Management software	Comelit View 100
Video resolution (H x V - pixel)	2592x1520 (4MP)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG
Frame rate	2592x1520@30fps/2560x1440@30fps (main) + VGA@30fps (sub)
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS, DHCP, HTTP
Updating firmware using network	Yes
Users connected at the same time	4 (Live)
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verif.
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Safari

#### FUNCTIONS

Main functions	ANR, Multicast, DST, Snapshot, Event notification via e-mail and FTP (JPEG images)
Motion detection (zones)	Yes
Video analytics	Counting, object stolen/abandoned, area detection, virtual guard
Privacy zones	4
Digital effects	Corridor mode (90°/270° rotation), Anti-flicker (50/60Hz), Defog, Mirror (Horizontal, Vertical, 180° rotation), Tampering, Zone ROI
Wide Dynamic Range WDR (dB)	D-WDR
Enhanced DNR control	3DNR
Exposure control	Manual, Auto
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	2 led arrays / 50m (Smart IR)
IP protection rating	IP66
Analogue Video output	CVBS (BNC - 1 Vpp/75 ohm)
LAN output type	Ethernet 10/100 Mbit/s (RJ45)
Support SD card (card not included)	Micro-SD (128GB max)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	9
POE power supply	Standard IEEE 802.3af
Height (mm)	148
Width (mm)	121
Depth (mm)	235
Weight (g)	1220
Type of finish	Die-cast aluminum
Colour	Dark grey
Operating temperature (°C)	-30 - 55
RH max operating humidity (%)	90





## 100 SERIES IP CAMERAS

### IPBCAMPO5Z01A

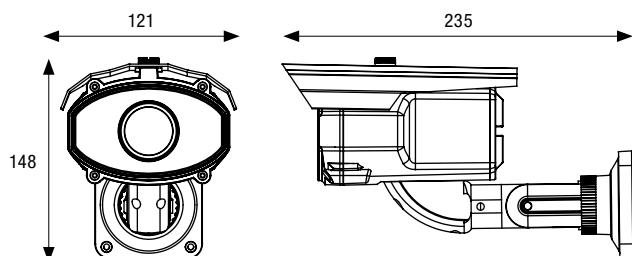
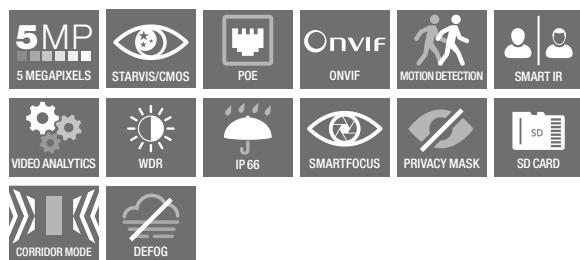
#### 5MP BULLET IP CAMERA, 3.6-10MM, IR 50M, IP66 WHITE



- 1/1.8" CMOS Sony Starvis Progressive Scan sensor
- 5MP resolution
- Dual Streaming, Dual Compression
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- Video analytics
- 3x motorized optical zoom
- Video recording on micro-SD card (64 GB max)
- D-WDR
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- JB-100BBAW - Junction box for big bullet white
- PM100W - Pillar-mount bracket, white

#### MAIN FEATURES

Camera sensor	1/1.8" CMOS Sony EXMOR Starvis
Camera lens	3.6-10mm, motorized, autofocus
Horizontal FoV (°)	40-83
Vertical FoV (°)	30-62
Electronic shutter (s)	1/25-1/10000
Camera optical zoom	3x
Sensitivity (lux)	0 (led IR ON)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Rimozione meccanica filtro IR	Yes
Video resolution (H x V - pixel)	2592x1944 (5MP)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG (Dual streaming, Dual compression)
Frame rate	30fps
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTP/RTSP, SMTP, TCP/IP, UDP, UPnP, DHCP, HTTP
Updating firmware using network	Yes
Remote viewer from browser	Internet Explorer, Firefox, Chrome

#### FUNCTIONS

Main functions	Video analytics
Motion detection (zones)	Yes
Video analytics	Counting, object stolen/abandoned, area detection, virtual guard
Privacy zones	4
Digital effects	Mirror (Horizontal, Vertical, 180° rotation)
Enhanced DNR control	3DNR
White balance control	AWB
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	2 led arrays / 50m
IP protection rating	IP66
Alarm Inputs/Outputs	2/1
Audio Inputs/Outputs	1/1
RS-485 control	Yes
Analogue Video output	CVBS (BNC)
Support SD card (card not included)	Micro-SD (64GB max)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	9
POE power supply	Standard IEEE 802.3af
Height (mm)	148
Width (mm)	121
Depth (mm)	235
Weight (g)	1220
Type of finish	Die-cast aluminum
Colour	Dark grey
Operating temperature (°C)	-30 - 55
RH max operating humidity (%)	90





## IPBCAMP08Z01A

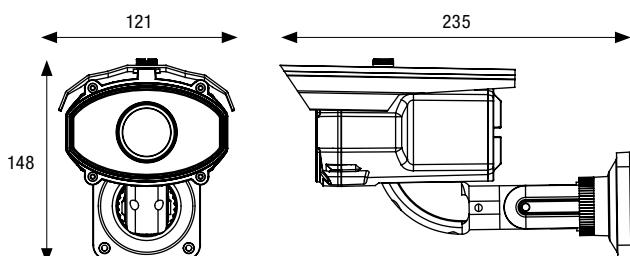
### 4K IP BULLET CAMERA, 3-10MM, SMART IR WHITE



- 1/2.5" CMOS Sony Exmor Starvis Progressive Scan sensor
- 4K (8MP) resolution
- Dual Streaming, Dual Compression
- Web viewing with Internet Explorer
- Video analytics
- 3x motorized optical zoom
- Video recording on micro-SD card (128 GB max)
- WDR (Wide Dynamic Range)
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- JB-100BBAW - Junction box for big bullet white
- PM100W - Pillar-mount bracket, white

#### MAIN FEATURES

Camera sensor	1/2.5" CMOS Progressive Scan
Effective pixels (H x V - pixels)	3840x2160
Camera lens	3.6-10mm, motorized, autofocus
Horizontal FoV (°)	41-97
Vertical FoV (°)	26-53
Electronic shutter (s)	1/25-1/10000
Slow shutter	Yes
Camera optical zoom	3x
Sensitivity (lux)	0.1 (colour), 0 (White and Black, led IR ON)
Video resolution (H x V - pixel)	4K (8MP)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG (Dual streaming; Dual compression)
Frame rate	3840x2160@30 fps (Main), D1@30 fps (Sub)
Protocols supported	HTTPS, NTP, ONVIF 2.2 Profile-S, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS, DHCP, HTTP
Updating firmware using network	Yes
Users connected at the same time	4 (Live)
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verif.
Remote viewer from browser	Internet Explorer

#### FUNCTIONS

Main functions	ANR, Multicast, DST, Snapshot, Event notification via e-mail and FTP (MJPEG images)
Video analytics	Counting, object stolen/abandoned, area detection, virtual guard
Privacy zones	4
Digital effects	Corridor mode (90°/270° rotation), Defog, Mirror (Horizontal, Vertical, 180° rotation), Tampering, ROI zones
Wide Dynamic Range WDR (dB)	WDR (120dB)
Enhanced DNR control	3DNR
Exposure control	Manual, Auto
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	2 led arrays / 50m (Smart IR)
IP protection rating	IP66
Alarm Inputs/Outputs	4/4
RS-485 control	Yes
Analogue Video output	CVBS (BNC - 1 Vpp/75 ohm)
Support SD card (card not included)	Micro-SD (128GB max)

#### GENERAL DATA

Power supply voltage (VAC)	24
Power supply voltage (VDC)	12
Max absorption (W)	9
Height (mm)	148
Width (mm)	121
Depth (mm)	235
Weight (g)	1220
Type of finish	Die-cast aluminum
Colour	Dark grey
Operating temperature (°C)	-30 - 55
RH max operating humidity (%)	90





## 100 SERIES IP CAMERAS

### IPCAM168B

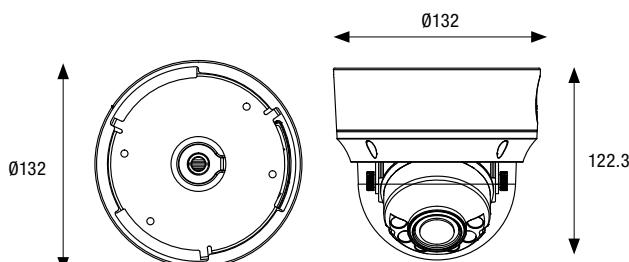
#### VANDALDOME FULL-HD IP CAMERA, 2.8-12MM, IR 30M, IP66



- 1/2.9" SONY Starvis
- 2MP resolution
- Dual Streaming
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- D-WDR
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- PM18X - Pole-mount support for ipcam183-185
- WM18X - Wall mounting support for ipcam183-185
- JB-100BDA - Junction box for vandaldome varifocal, IP65

#### MAIN FEATURES

Camera sensor	1/2.9" CMOS Sony
Camera lens	2.8-12mm
Horizontal Fov (°)	40-83
Vertical Fov (°)	30-62
Electronic shutter (s)	1/25-1/10000
Slow shutter	Yes
Sensitivity (lux)	0.05 (colour), 0 (B/W, led IR ON)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Management software	Comelit View 100
Video resolution (H x V - pixel)	1920x1080 (Full-HD 1080p)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG (Dual streaming, Dual compression)
Frame rate	30fps
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS, DHCP, HTTP
Updating firmware using network	Yes
Users connected at the same time	3
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verif.
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Safari

#### FUNCTIONS

Main functions	Multicast, DST, Snapshot, Event notification via e-mail and FTP (JPEG images)
Motion detection (zones)	1
Privacy zones	4
Digital effects	Corridor mode (90°/270° rotation), Anti-flicker (50/60Hz), Defog, Mirror (Horizontal, Vertical, 180° rotation), OSD, Tampering
Wide Dinamic Range WDR (dB)	D-WDR
Enhanced DNR control	3DNR
Exposure control	Manual, Auto
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

Vandal Resistant rating (IK code)	IK10
IP protection rating	IP66
3-axis adjustment	Yes
LAN output type	Ethernet 10/100 Mbit/s (RJ45)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	6
POE power supply	Standard IEEE 802.3af
Diameter (mm)	132
Height (mm)	112
Weight (g)	900
Type of finish	Die-cast aluminum
Housing type	Minidome
Colour	White
Operating temperature (°C)	-20 - 55
RH max operating humidity (%)	90





## IPCAM169A

### VANDALDOME FULL-DH IP CAMERA, 6-22MM, IR15M, IP65



- 1/2.9" SONY
- 2MP resolution
- Dual Streaming
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- D-WDR
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Camera sensor	1/2.8" CMOS Sony
Camera lens	6-22mm
Horizontal FoV (°)	19-44
Vertical FoV (°)	10-24
Electronic shutter (s)	1/25-1/10000
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Rimozione meccanica filtro IR	Yes
Video output	BNC
Video resolution (H x V - pixel)	1920x1080 (Full-HD 1080p)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, MJPEG (Dual streaming)
Frame rate	30fps
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTP/RTSP, SMTP, TCP/IP, UDP, UPnP, DHCP, HTTP
Updating firmware using network	Yes
Remote viewer from browser	Internet Explorer, Firefox, Chrome

#### FUNCTIONS

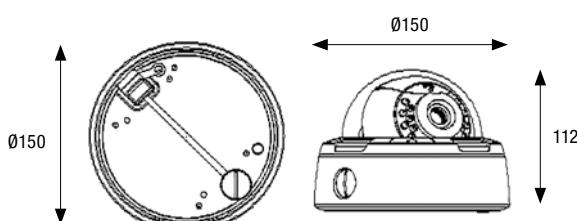
Motion detection (zones)	Yes
Privacy zones	4
Enhanced DNR control	3DNR
White balance control	AWB
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	18 led / 15m
Vandal Resistant rating (IK code)	IK10
IP protection rating	IP65
3-axis adjustment	Yes
Analogue Video output	CVBS (BNC)
LAN output type	Ethernet 10/100 Mbit/s (RJ45)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	6
POE power supply	Standard IEEE 802.3af
Diameter (mm)	150
Height (mm)	112
Weight (g)	1000
Housing type	Minidome
Colour	White
Operating temperature (°C)	-30 - 55
RH max operating humidity (%)	90



#### ACCESSORIES

- IPPT-1004W - Junction box for minidome, white





## 100 SERIES IP CAMERAS

### IPCAM172A

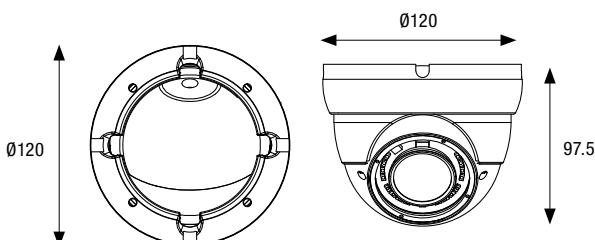
#### 2MP IP IR BALL CAMERA, 2.8-12MM



- 1/2.9" SONY
- 2MP resolution
- Dual Streaming
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- D-WDR
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- JB-100MDA - Junction box for Minidome fix focal
- PM100W - Pillar-mount bracket, white
- WM100SD - Minidome wall mounting support

#### MAIN FEATURES

Camera sensor	1/2.9" CMOS Sony
Horizontal FoV (°)	40-83
Vertical FoV (°)	30-62
Electronic shutter (s)	1/25-1/10000
Sensitivity (lux)	0.06 (colour), 0.01 (White and Black)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Management software	Comelit View 100
Video resolution (H x V - pixel)	1920x1080 (Full-HD 1080p)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG
Frame rate	1920X1080@30 fps (Main), D1@30 fps (Sub)
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS,DHCP, HTTP
Updating firmware using network	Yes
Users connected at the same time	3
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verif.
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Safari

#### FUNCTIONS

Main functions	Multicast, DST, Snapshot, Event notification via e-mail and FTP (MJPEG images)
Motion detection (zones)	Yes
Video analytics	Counting, object stolen/abandoned, area detection, virtual guard
Privacy zones	4
Digital effects	Corridor mode (90°/270° rotation), Anti-flicker (50/60Hz), Defog, Mirror (Horizontal, Vertical, 180° rotation), Tampering
Wide Dinamic Range WDR (dB)	D-WDR
Enhanced DNR control	3DNR
Exposure control	Manual, Auto
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	16 led SMD / 30m (Smart IR)
IP protection rating	IP65
Analogue Video output	CVBS (BNC - 1 Vpp/75 ohm)
LAN output type	Ethernet 10/100 Mbit/s (RJ45)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	6
POE power supply	Standard IEEE 802.3af
Diameter (mm)	120
Height (mm)	97
Type of finish	Die-cast aluminum
Housing type	Minidome
Colour	White
Operating temperature (°C)	-20 - 55
RH max operating humidity (%)	90





## IPCAM174A

### IP BALL CAMERA, 4MP, MOTOR, ZOOM 2.8-12MM

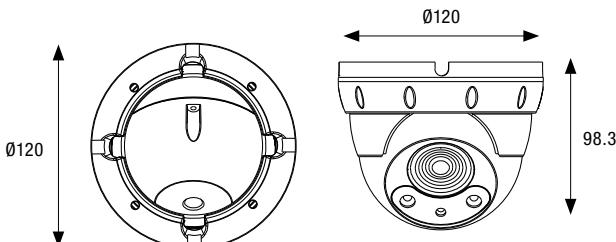


- 1/3" CMOS Starvis sensor
- 4MP resolution
- Dual Streaming, Triple Compression
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- Video analytics
- Video recording on micro-SD card (128 GB max)
- D-WDR
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)

<b>4MP</b> 4 MEGAPIXELS					



#### ACCESSORIES

- JB-100MDA - Junction box for Minidome fix focal
- PM100W - Pillar-mount bracket, white
- WM100SD - Minidome wall mounting support

#### MAIN FEATURES

Camera sensor	1/3" CMOS
Camera lens	2.8-12mm motorized, autofocus
Horizontal FoV (°)	40-83
Vertical FoV (°)	30-62
Electronic shutter (s)	1/25-1/10000
Slow shutter	Yes
Camera optical zoom	4x
Sensitivity (lux)	0.5 (colour), 0 (B/W, led IR ON)
Signal/noise ratio (dB)	>35 (AGC OFF)
IR filter	Mechanical
Management software	Comelit View 100
Video resolution (H x V - pixel)	2592x1520 (4MP)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG (Dual streaming, Dual compression)
Frame rate	2592x1520@30fps/2560x1440@30fps (main) + VGA@30fps (sub)
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS, DHCP, HTTP
Updating firmware using network	Yes
Users connected at the same time	4 (Live)
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verify.
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Safari

#### FUNCTIONS

Main functions	Multicast, DST, Snapshot, Event notification via e-mail and FTP (MJPEG images)
Motion detection (zones)	Yes
Video analytics	Counting, object stolen/abandoned, area detection, virtual guard
Privacy zones	4
Digital effects	Corridor mode (90°/270° rotation), Anti-flicker (50/60Hz), Defog, Mirror (Horizontal, Vertical, 180° rotation), Tampering, Zone ROI
Wide Dynamic Range WDR (dB)	D-WDR
Enhanced DNR control	3DNR
Exposure control	Manual, Auto
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	2 led IR III / 30m (Smart IR)
IP protection rating	IP66
LAN output type	Ethernet 10/100 Mbit/s (RJ45)
Support SD card (card not included)	Micro-SD (128GB max)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	9
POE power supply	Standard IEEE 802.3af
Diameter (mm)	120
Height (mm)	97
Weight (g)	750
Type of finish	Die-cast aluminum
Housing type	Minidome
Colour	White
Operating temperature (°C)	-20 - 55
RH max operating humidity (%)	90





## 100 SERIES IP CAMERAS

### IPCAM1838A

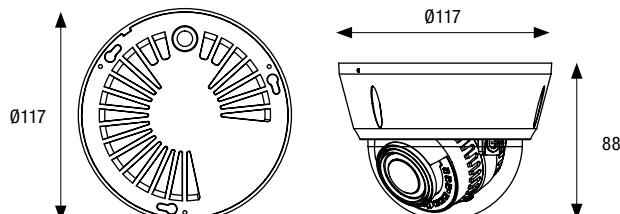
#### 3MP IP MINIDOME CAMERA, ZOOM 2.8-12MM, SMART IR



- 1/2.5" CMOS 8MP Progressive Scan sensor
- 3MP resolution
- Dual Streaming, Dual Compression
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- Video analytics
- 3x motorized optical zoom
- Video recording on micro-SD card (64 GB max)
- WDR (120 dB)
- 3DNR(Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- Smart IR
- IP66, IK10

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- JB-100SMD65W - Junction box, IP65
- PM100W - Pillar-mount bracket, white
- WL100SD - Wall-mount bracket

#### MAIN FEATURES

Camera sensor	1/2.8" CMOS Sony EXMOR Starvis Progressive scan
Effective pixels (H x V - pixels)	2048x1536
Camera lens	2.8-12mm motorized, autofocus
Horizontal FoV (°)	39-87
Vertical FoV (°)	21-64
Electronic shutter (s)	1/25-1/10000
Camera optical zoom	4x
Sensitivity (lux)	0.5 (colour), 0 (B/W, led IR ON)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Video resolution (H x V - pixel)	2048x1536 (3MP)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG (Dual streaming, Dual compression)
Frame rate	30fps
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTP/RTSP, SMTP, TCP/IP, UDP, UPnP, DHCP, HTTP
Updating firmware using network	Yes
Remote viewer from browser	Internet Explorer, Firefox, Chrome

#### FUNCTIONS

Main functions	Video analytics, Defog
Motion detection (zones)	1
Video analytics	Counting, object stolen/abandoned, area detection, virtual guard
Privacy zones	4
Wide Dinamic Range WDR (dB)	WDR (120dB)
Enhanced DNR control	3DNR
White balance control	AWB
Exposure control	AE, Manuale, Flickerless
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	12 led SMD / 30m (Smart IR)
Vandal Resistant rating (IK code)	IK10
3-axis adjustment	Yes
Alarm Inputs/Outputs	2/1
Audio Inputs/Outputs	1/1 (G.711A)
RS-485 control	Yes
Analogue Video output	CVBS (BNC)
Support SD card (card not included)	Micro-SD (64GB max)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	8
POE power supply	Standard IEEE 802.3af
Diameter (mm)	117
Height (mm)	88
Weight (g)	660
Type of finish	Die-cast aluminum
Housing type	Minidome
Colour	White
Operating temperature (°C)	-30 - 55
RH max operating humidity (%)	90





## IPCAM1848A

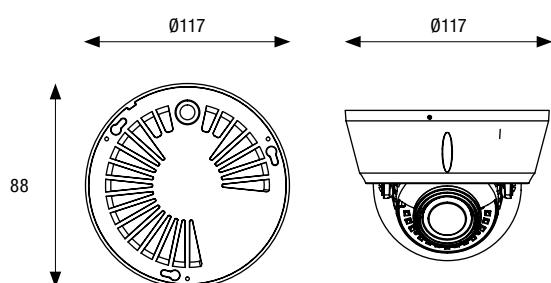
### 4MP IP VDOME CAMERA, 2.8-12MM, H265, DWDR, AIF, TF



- 1/3" CMOS Starvis sensor
- 4MP resolution
- Dual Streaming, Triple Compression
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- Video analytics
- 4x motorized optical zoom
- Video recording on micro-SD card (128 GB max)
- D-WDR
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- Smart IR
- IP66, IK09

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- JB-100SMD65W - Junction box, IP65
- PM100W - Pillar-mount bracket, white
- WL100SD - Wall-mount bracket

#### MAIN FEATURES

Camera sensor	1/3" CMOS
Camera lens	2.8-12mm motorized, autofocus
Horizontal FoV (°)	40-83
Vertical FoV (°)	30-62
Electronic shutter (s)	1/25-1/10000
Slow shutter	Yes
Camera optical zoom	4x
Sensitivity (lux)	0.5 (colour), 0 (B/W, led IR ON)
Signal/noise ratio (dB)	>35 (AGC OFF)
IR filter	Mechanical
Management software	Comelit View 100
Video resolution (H x V - pixel)	2592x1520 (4MP)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG
Frame rate	2592x1520@30fps/2560x1440@30fps (main) + VGA@30fps (sub)
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS, DHCP, FTP, HTTP
Updating firmware using network	Yes
Users connected at the same time	4 (Live)
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verify.
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Safari

#### FUNCTIONS

Main functions	ANR, Multicast, DST, Snapshot, Event notification via e-mail and FTP (MJPEG images)
Motion detection (zones)	Yes
Video analytics	Counting, object stolen/abandoned, area detection, virtual guard
Privacy zones	4
Digital effects	Corridor mode (90°/270° rotation), Anti-flicker (50/60Hz), Defog, Mirror (Horizontal, Vertical, 180° rotation), Tampering, Zone ROI
Enhanced DNR control	3DNR
Exposure control	Manual, Auto
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	12 led SMD / 30m (Smart IR)
IP protection rating	IP66
3-axis adjustment	Yes
Analogue Video output	CVBS (BNC - 1 Vpp/75 ohm)
LAN output type	Ethernet 10/100 Mbit/s (RJ45)
Support SD card (card not included)	Micro-SD (128GB max)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	8
POE power supply	Standard IEEE 802.3af
Diameter (mm)	117
Height (mm)	86
Weight (g)	660
Type of finish	Die-cast aluminum
Housing type	Minidome
Colour	White
Operating temperature (°C)	-30 - 55
RH max operating humidity (%)	90





## 100 SERIES IP CAMERAS

### IPCAM185B

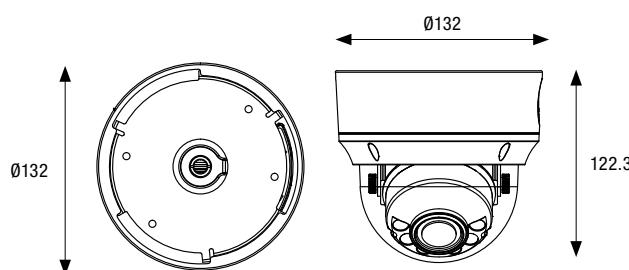
#### 5MP IP VANDALDOME CAMERA, ZOOM 3.6-10MM



- 1/1.8" CMOS Sony Starvis Progressive Scan sensor
- 5MP resolution
- Dual Streaming, Dual Compression
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- Video analytics
- 3x motorized optical zoom
- Video recording on micro-SD card (128 GB max)
- D-WDR
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- IP66, IK10

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- PM18X - Pole-mount support for ipcam183-185
- WM18X - Wall mounting support for ipcam183-185
- JB-100BDA - Junction box for vandaldome varifocal, IP65

#### MAIN FEATURES

Camera sensor	1/1.8" CMOS Sony EXMOR Starvis Progressive scan
Camera lens	3.6-10mm, motorized, autofocus
Horizontal Fov (°)	41-101
Vertical Fov (°)	26-60
Electronic shutter (s)	1/25-1/10000
Slow shutter	Yes
Camera optical zoom	3x
Sensitivity (lux)	0 (led IR ON)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Management software	Comelit View 100
Video resolution (H x V - pixel)	2592x1944 (5MP)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG (Dual streaming, Dual compression)
Frame rate	30fps
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS, DHCP, FTP, HTTP
Updating firmware using network	Yes
Users connected at the same time	4 (Live)
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verif.
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Safari

#### FUNCTIONS

Main functions	ANR, Multicast, DST, Snapshot, Event notification via e-mail and FTP (JPEG images)
Motion detection (zones)	Yes
Video analytics	Counting, object stolen/abandoned, area detection, virtual guard
Privacy zones	4
Digital effects	Corridor mode (90°/270° rotation), Anti-flicker (50/60Hz), Defog, Mirror (Horizontal, Vertical, 180° rotation), Tampering, Zone ROI
Wide Dynamic Range WDR (dB)	D-WDR
Enhanced DNR control	3DNR
Exposure control	Manual, Auto
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	6 led IRIII / 30m
Vandal Resistant rating (IK code)	IK10
IP protection rating	IP66
Alarm Inputs/Outputs	2/1
RS-485 control	Yes
Analogue Video output	CVBS (BNC - 1 Vpp/75 ohm)
LAN output type	Ethernet 10/100 Mbit/s (RJ45)
Support SD card (card not included)	Micro-SD (128GB max)

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	8
POE power supply	Standard IEEE 802.3af
Diameter (mm)	132
Height (mm)	122
Weight (g)	1120
Type of finish	Die-cast aluminum
Housing type	Minidome
Colour	White
Operating temperature (°C)	-20 - 55
RH max operating humidity (%)	90





## IPCAM184KA

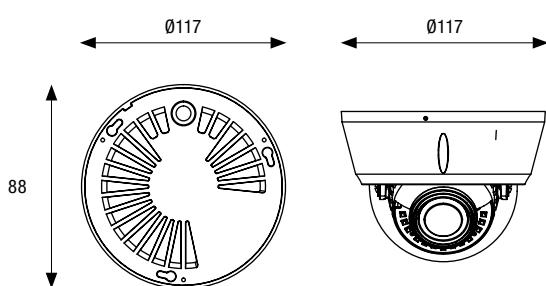
### 4K IP VANDALDOME CAMERA, 3-10MM, SMART IR



- 1/2.5" CMOS Sony Exmor Starvis Progressive Scan
- 4K (8MP) resolution
- Dual Streaming, Dual Compression
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- Video analytics
- 3x motorized optical zoom
- Registratore su scheda micro-SD (128 GB max)
- WDR (Wide Dynamic Range)
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones
- IP66, IK10

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- JB-100SMD65W - Junction box, IP65
- PM100W - Pillar-mount bracket, white
- WL100SD - Wall-mount bracket

#### MAIN FEATURES

Camera sensor	1/2.5" CMOS Progressive Scan
Effective pixels (H x V - pixels)	3840x2160
Camera lens	3.6-10mm, motorized, autofocus
Horizontal FoV (°)	41-101
Vertical FoV (°)	26-60
Electronic shutter (s)	1/25-1/10000
Slow shutter	Yes
Camera optical zoom	3x
Sensitivity (lux)	0.1 (colour), 0 (White and Black, led IR ON)
Video resolution (H x V - pixel)	4K (8MP)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG (Dual streaming, Dual compression)
Frame rate	3840x2160@30 fps (Main), D1@30 fps (Sub)
Protocols supported	HTTPS, NTP, ONVIF 2.2 Profile-S, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS, DHCP, HTTP
Updating firmware using network	Yes
Users connected at the same time	4 (Live)
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verif.
Remote viewer from browser	Internet Explorer

#### FUNCTIONS

Main functions	ANR, Multicast, DST, Snapshot, Event notification via e-mail and FTP (MJPEG images)
Video analytics	Counting, object stolen/abandoned, area detection, virtual guard
Privacy zones	4
Digital effects	Corridor mode (90°/270° rotation), Defog, Mirror (Horizontal, Vertical, 180° rotation), Tampering, ROI zones
Wide Dynamic Range WDR (dB)	WDR (120dB)
Enhanced DNR control	3DNR
Exposure control	Manual, Flickerless
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	12 led SMD / 30m (Smart IR)
IP protection rating	IP66
Alarm Inputs/Outputs	2/1
RS-485 control	Yes
Support SD card (card not included)	Micro-SD (128GB max)

#### GENERAL DATA

Power supply voltage (VAC)	24
Power supply voltage (VDC)	12
Max absorption (W)	9
Diameter (mm)	117
Height (mm)	88
Weight (g)	660
Type of finish	Die-cast aluminum
Housing type	Minidome
Colour	White
Operating temperature (°C)	-30 - 55
RH max operating humidity (%)	90





## 100 SERIES IP CAMERAS

### IPEYE104A

360° FISHEYE IP CAMERA, 4K POE, DWDR, TF



- 1/1.7" CMOS Progressive Scan sensor
- 12MP resolution
- Dual Streaming, Dual Compression
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- Various selectable views
- Video recording on micro-SD card (128 GB max)
- D-WDR
- 3DNR (Digital Noise Reduction)
- Motion Detection
- 4 Privacy zones

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Camera sensor	1/1.7" CMOS Progressive Scan
Horizontal FoV (°)	180
Vertical FoV (°)	180
Electronic shutter (s)	1/25-1/10000
Sensitivity (lux)	0.1 (colour), 0 (White and Black, led IR ON)
IR filter	Mechanical
Management software	Comelit View 100
Video resolution (H x V - pixel)	4000x3000 (12MP)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265 (Dual streaming)
Frame rate	15ips
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS, DHCP, FTP, HTTP
Updating firmware using network	Yes
Users connected at the same time	4 (Live)
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verif.
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Safari
Remote control by mobile	Comelit View 100 app (Android, iOS)

#### FUNCTIONS

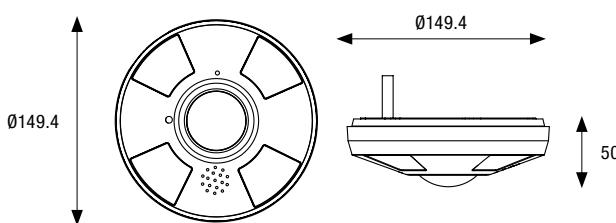
Main functions	ANR, Multicast, DST, Snapshot, Event notification via e-mail and FTP (MJPEG images)
Motion detection (zones)	Yes
Privacy zones	4
Digital effects	Anti-flicker (50/60Hz), Defog, Tampering
Enhanced DNR control	3DNR
Exposure control	Manual, Auto
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	4 led IRIII / 20m (Smart IR)
Alarm Inputs/Outputs	2/1
Audio Inputs/Outputs	1 Line In or 1 microphone / 1 Line Out+1 speaker (G.711u)
RS-485 control	Yes
Analogue Video output	CVBS (BNC - 1 Vpp/75 ohm)
LAN output type	Ethernet 10/100 Mbit/s (RJ45)
Support SD card (card not included)	Micro-SD (128GB max)

#### GENERAL DATA

Power supply voltage (VAC)	24
Power supply voltage (VDC)	12
Max absorption (W)	15
Diameter (mm)	150
Height (mm)	50
Weight (g)	900
Type of finish	Plastic
Housing type	Minidome
Colour	White
Operating temperature (°C)	-10 - 50
RH max operating humidity (%)	90



#### ACCESSORIES

- IPPT-1004W - Junction box for minidome, white





## ANPR922M3M

### LPR 3MP IP CAMERA, ZOOM 9-22MM, IP66



- 1/2.8" CMOS Sony Progressive Scan sensor
- 3MP resolution
- Dual Streaming
- Motorized zoom
- WDR
- DNR (Digital Noise Reduction)
- Motion Detection
- Smart IR
- IP66



#### MAIN FEATURES

Camera sensor	1/2.8" CMOS Sony Progressive scan
Effective pixels (H x V - pixels)	2048x1536
Camera lens	9-22mm, motorized
Electronic shutter (s)	1/50-1/2000
Camera optical zoom	2.5x
Sensitivity (lux)	0.5 (colour), 0 (B/W, led IR ON)
IR filter	Mechanical
Video resolution (H x V - pixel)	2048x1536 (3MP), 3MP

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265 (Dual streaming)
Frame rate	60fps@2MP/30fps@3MP
Protocols supported	HTTPS, IPv4, IPv6, Milestone, ONVIF 2.6 Profile S, PPPoE, RTSP, SMTP, SNTP, TCP/IP, UDP, UPnP, DHCP, FTP
Updating firmware using network	Yes
Users connected at the same time	10
Remote viewer from browser	Internet Explorer

#### FUNCTIONS

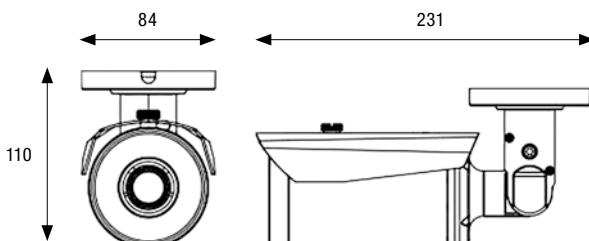
Motion detection (zones)	Yes
Digital effects	Mirror (Horizontal, Vertical, 180° rotation), OSD
Wide Dinamic Range WDR (dB)	WDR
Enhanced DNR control	3DNR
Camera titling	Yes

#### CARATTERISTICHE HARDWARE

No. IR LEDs / Max. distance (m)	30 led SMD / 15m
IP protection rating	IP66
Alarm Inputs/Outputs	1/1
LAN output type	Ethernet 10/100 Mbit/s (RJ45)
Support SD card (card not included)	Yes

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	9
Height (mm)	110
Width (mm)	84
Depth (mm)	231
Weight (g)	820
Type of finish	Die-cast aluminum
Colour	White
Operating temperature (°C)	-30 - 45
RH max operating humidity (%)	90



#### ACCESSORIES

- 43082 - Power supply, jack connector, 230VAC/12VDC, 1.33A





## 100 SERIES IP PTZ CAMERAS

### IPPTZ110IRA

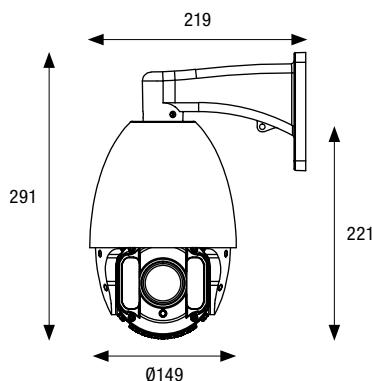
CAMERA IP PTZ FULL-HD, ZOOM 10X, IR 80M, IP66



- 1/2.8" CMOS Sony Exmor Starvis Technology sensor
- 10x optical zoom
- FULL-HD resolution
- Infrared leds with a range up to 120 meters (Smart IR)
- Dual Streaming
- Web visualization with Internet Explorer, Firefox, Chrome and Safari
- 256 Preset, 4 Tour, 4 Pattern, Home function
- 1 Inputs / 1 Alarm output
- Recording on micro-SD card (32 GB max)
- WDR
- 3DNR (Digital Noise Reduction)
- Motion Detection
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- IPPT-401 - Pole-mounted
- IPPT-402 - Corner-mounted

#### MAIN FEATURES

Camera sensor	1/2.8" CMOS Sony
Camera lens	4.7-47mm, autofocus
Horizontal Fov (°)	6.43-60.9
Vertical Fov (°)	4.1-40.1
Electronic shutter (s)	1/25-1/5000
Camera optical zoom	10x
Signal/noise ratio (dB)	50 (AGC OFF)
IR filter	Mechanical
Rimozione meccanica filtro IR	Yes
Video output	BNC
Video resolution (H x V - pixel)	1920x1080 (Full-HD 1080p)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, MJPEG (Dual streaming)
Frame rate	30fps
Protocols supported	HTTPS, IPv4, NTP, ONVIF 2.2, RTP, RTSP, SMTP, SNMP, TCP, UDP, Comelit DNS, DHCP, FTP, HTTP
Updating firmware using network	Yes
Network security	Autorizzazione multi-utente, filtraggio IP, HTTPS, SSL
Remote viewer from browser	Internet Explorer, Firefox, Chrome

#### FUNCTIONS

Main functions	255 Preset, 4 Pattern, 4 Tour, Defog
Motion detection (zones)	Yes
Back light compensation (BLC)	Yes
Wide Dynamic Range WDR (dB)	WDR
Enhanced DNR control	3DNR
White balance control	AWB, Nuvoloso, Lampade fluorescenti, Luce lampeggiante, Push, Luce solare, Water bottom, Lampada whitelow, 4000K, 5000K
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

Wall support	Included
Analogue Video output	CVBS (BNC)
LAN output type	Ethernet 10/100 Mbit/s (RJ45)

#### GENERAL DATA

Power supply voltage (VDC)	24
Max absorption (W)	25
POE power supply	0
Diameter (mm)	149
Height (mm)	291
Weight (g)	2700
Housing type	Speed dome
Colour	White
Operating temperature (°C)	-20 - 55
RH max operating humidity (%)	90
Supplied accessories	Power supply





## IPPTZ120IRE

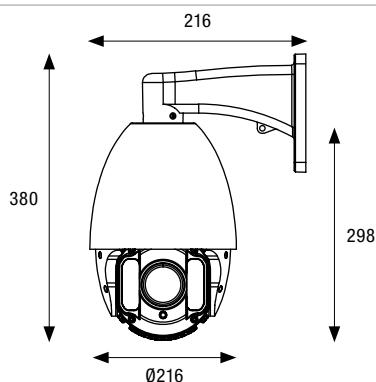
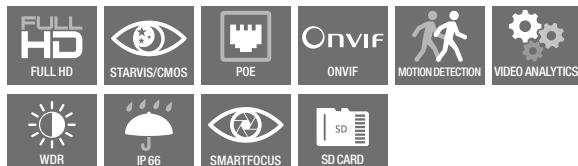
### FULL-HD IP PTZ CAMERA, 20X ZOOM, IR 150M, IP66



- 1/2.8" CMOS Sony Exmor Starvis Technology sensor
- 20x optical zoom
- FULL-HD resolution
- Infrared leds with a range up to 120 meters (Smart IR)
- Dual Streaming
- Web viewing with Internet Explorer
- 256 Preset, 8 Tour, 4 Pattern
- 8 Privacy mask
- 2 Inputs / 1 Alarm output
- WDR (Wide Dynamic Range)
- 3DNR (Digital Noise Reduction)
- Defog
- Motion Detection
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- IPPT-1201 - Pole-mounting
- IPPT-1202 - Corner-mounting
- IPPT-604 - Ceiling mount bracket

#### MAIN FEATURES

Camera sensor	1/2.8" CMOS Sony EXMOR Starvis Technology
Camera lens	4.7-94mm
Horizontal FoV (°)	3.2-55.8
Vertical FoV (°)	1.8-32.2
Electronic shutter (s)	1/5-1/5000
Slow shutter	Yes
Sensitivity (lux)	0.02 (colour), 0.002 (B/W), 0 (B/W, led IR ON)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Management software	Comelit View 100
Video resolution (H x V - pixel)	2° stream: 720x576 (D1) max, 3° stream: 1920x1080 (Full-HD 1080p) max, 1° stream: 1920x1080 (Full-HD 1080p) max

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG (Triple streaming, Dual compression)
Frame rate	30fps
Protocols supported	HTTPS, IPv4, NTP, PPPoE, RTCP, RTSP/RTP, SMTP, SNMP, TCP/IP, UDP, UPnP, Comelit DNS, ARP, IGMP, ICMP, SDK, API, DHCP, FTP, HTTP
Updating firmware using network	Yes
Users connected at the same time	4 (Live)
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verif.
Remote viewer from browser	Internet Explorer
Remote control by mobile	Comelit View 100 app (Android, iOS)

#### FUNCTIONS

Main functions	256 Preset, Scan 360°, 4 Pattern, 8 Tour, ANR, Multicast, DST, Snapshot, Event notification via e-mail and FTP (JPEG images), Posizionamento 3D
Motion detection (zones)	Yes
Privacy zones	8
Digital effects	Defog, Mirror (Horizontal, Vertical, 180° rotation), Tampering, ROI zones, Anti-shake
Enhanced DNR control	3DNR
White balance control	AWB, Indoor, Outdoor
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	6 + 2 laser led / 150m
Wall support	Included
IP protection rating	IP66
Alarm Inputs/Outputs	2/1
Audio Inputs/Outputs	1/1 (G.711u, 64Kbps), bidirezionale
RS-485 control	Yes
Analogue Video output	CVBS (BNC - 1 Vpp/75 ohm)
LAN output type	Ethernet 10/100 Mbit/s (RJ45)
Support SD card (card not included)	Micro-SD (128GB max)

#### GENERAL DATA

Power supply voltage (VDC)	24
Max absorption (W)	36
Diameter (mm)	216
Height (mm)	380
Weight (g)	7000
Type of finish	Die-cast aluminum
Housing type	Speed dome
Colour	White
Operating temperature (°C)	-30 - 60
RH max operating humidity (%)	90
Supplied accessories	Power supply





## 100 SERIES IP PTZ CAMERAS

### IPPTZ130IRC

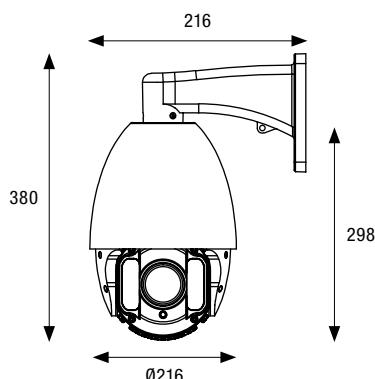
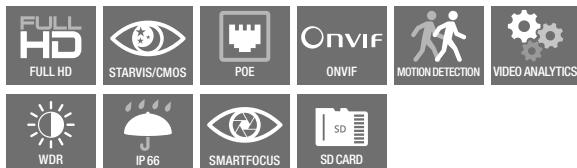
2MP IP PTZ CAMERA, 30X ZOOM, IR 150M, IP66



- 1/2.8" CMOS Sony Exmor Starvis Technology sensor
- 30x optical zoom
- 2MP resolution
- Infrared leds with a range up to 120 meters (Smart IR)
- Dual Streaming
- Web viewing with Internet Explorer
- 256 Preset, 8 Tour, 4 Pattern
- 8 Privacy mask 3D
- 2 Inputs / 1 Alarm output
- WDR (Wide Dynamic Range)
- 3DNR (Digital Noise Reduction)
- Defog
- Motion Detection
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- IPPT-604 - Ceiling mount bracket

#### MAIN FEATURES

Camera sensor	1/2.9" CMOS Sony
Camera lens	3.6mm
Horizontal FoV (°)	77
Vertical FoV (°)	50
Electronic shutter (s)	1/25-1/10000
Sensitivity (lux)	0.05 (colour), 0 (B/W, led IR ON)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Management software	Comelit View 100
Video resolution (H x V - pixel)	1920x1080 (Full-HD 1080p)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	H.264, H.265, MJPEG (Dual streaming, Dual compression)
Frame rate	30fps
Protocols supported	NTP, ONVIF 2.2, PPPoE, RTSP, SMTP, TCP/IP, UDP, UPnP, Comelit DNS, DHCP, HTTP
Updating firmware using network	Yes
Users connected at the same time	3
Network security	Multi-user authorization, HTTPS, AES encryption, RTSP verify.
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Safari
Remote control by mobile	Comelit View 100 app (Android, iOS)

#### FUNCTIONS

Main functions	Multicast, DST, Snapshot, Event notification via e-mail and FTP (JPEG images)
Motion detection (zones)	1
Privacy zones	4
Digital effects	Defog, Flip, Mirror (Horizontal, Vertical, 180° rotation), Tampering, ROI zones, Anti-shake
Enhanced DNR control	3DNR
Exposure control	Manual, Auto
Camera titling	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	6 + 2 laser led / 150m
Wall support	Included
IP protection rating	IP66
Alarm Inputs/Outputs	2/1
Audio Inputs/Outputs	1/1 (G.711u, 64Kbps), bidirezionale
Analogue Video output	CVBS (BNC - 1 Vpp/75 ohm)
LAN output type	Ethernet 10/100 Mbit/s (RJ45)
Support SD card (card not included)	Micro-SD (128GB max)

#### GENERAL DATA

Power supply voltage (VDC)	24
Max absorption (W)	36
POE power supply	Standard IEEE 802.3at (classe 0)
Diameter (mm)	216
Height (mm)	380
Weight (g)	7000
Type of finish	Die-cast aluminum
Housing type	Speed dome
Colour	White
Operating temperature (°C)	-30 - 60
RH max operating humidity (%)	90
Supplied accessories	Power supply







## SERIE IP NVR

Barebone version (no HDD) also available adding the suffix "SL" to the end of the part number.

### IPNVR104FPOE

#### NVR W/8 IP INPUTS 5MP (4 POE), 1TB HDD



- Up to 5MP resolution
- Video analysis management with dedicated cameras(target counting, object left/removed, enter area, line crossing, motion detection)
- Support dual password authentication
- Dual Streaming recording
- Single channel instant playback (30 minutes max)
- Real time event log display
- Support channels grouping and groups sequence
- S.M.A.R.T. function for checking the correct operation of the HDDs
- Saving recordings in anti-fake proprietary format

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Video inputs	8 (4 PoE 3/5MP+4 3/5MP)
Main Video output	1 (VGA), 1 (HDMI) - 1920x1080@60Hz, 1280x1024@60Hz
Alarm Inputs/Outputs	2/1
Video compression	H.264
Playback / recording frame rate	120fps@5MP real time
HDD supplied size	1TB (6TB max)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Operating system	Linux embedded
Recording methods	Auto, manual, scheduled, motion
Recording type	Dual streaming
Maximum number of channels being played simultaneously	1@5MP/3MP, 4@Full-HD, 8@sub stream
Protocols supported	HTTP, TCP/IP, DHCP, UPnP, SMTP, DDNS, Comelit DNS, ONVIF 2.2
IP assignment	Manual, DHCP
Max bandwidth (Mbps)	50
Remote control via browser	Internet Explorer, Firefox, Chrome, Safari
Remote control by software	Comelit View 100
Remote control by mobile	Comelit View 100 app (Android, iOS)
Main functions	Watermarking, Video analysis (only with dedicated cameras), Dual password authentication, Instant playback function
Video analytics	Target counting, object left/removed, enter area, line crossing

#### HARDWARE SPECIFICATIONS

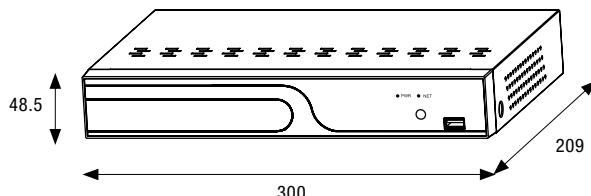
Type of connections/ports	1xEthernet 10/100 Mbit/s, 4xEthernet 10/100 Mbit/s PoE (IEEE 802.3af), 2xUSB 2.0, 1xRS485
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#### FUNCS

Motion detection (zones)	396
Anti-tampering	Yes
Loss of video signal	Yes
PTZ management by RS485 (Pelco-P, Pelco-D protocols)	Yes
E-mail notification	Yes
Pre-event recording	30s max

#### GENERAL DATA

Max absorption (W)	16
Supply voltage (VAC)	100-240V, 50-60Hz
Height (mm)	48.5
Width (mm)	300
Depth (mm)	209
Weight (g)	2600
Type of finish	Metallic
Colour	Black
Operating temperature (°C)	-10-55
RH max operating humidity (%)	90
Supplied accessories	Power supply, mouse





Barebone version (no HDD) also available adding the suffix "SL" to the end of the part number.

## IPNVR108FPOE

### NVR W/16 IP INPUTS 5MP (8 POE), 1TB HDD



- Up to 5MP resolution
- Video analysis management with dedicated cameras(target counting, object left/removed, enter area, line crossing, motion detection)
- Support dual password authentication
- Dual Streaming recording
- Single channel instant playback (30 minutes max)
- Real time event log display
- Support channels grouping and groups sequence
- S.M.A.R.T. function for checking the correct operation of the HDDs
- Saving recordings in anti-fake proprietary format

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Video inputs	8 (5MP, 3MP, Full-HD, HD, D1)
Main Video output	1 (VGA), 1 (HDMI) - 1920x1080@60Hz, 1280x1024@60Hz
Alarm Inputs/Outputs	2/1
Video compression	H.264
Playback / recording frame rate	240fps@5MP real time
HDD supplied size	1TB (6TB max)
Additional Hard Disks (SATA)	1 (6TB max)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Operating system	Linux embedded
Recording methods	Auto, manual, scheduled, motion
Recording type	Dual streaming
Maximum number of channels being played simultaneously	1@5MP/3MP, 4@Full-HD, 8@sub stream
Protocols supported	HTTP, TCP/IP, DHCP, UPnP, SMTP, DDNS, Comelit DNS, ONVIF 2.2
IP assignment	Manual, DHCP
Max bandwidth (Mbps)	50
Remote control via browser	Internet Explorer, Firefox, Chrome, Safari
Remote control by software	Comelit View 100
Remote control by mobile	Comelit View 100 app (Android, iOS)
Main functions	Watermarking, Video analysis (only with dedicated cameras), Dual password authentication, Instant playback function
Video analytics	Target counting, object left/removed, enter area, line crossing

#### HARDWARE SPECIFICATIONS

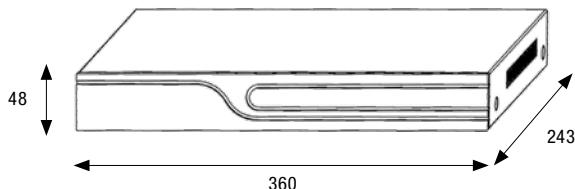
Type of connections/ports	1xEthernet 10/100 Mbit/s, 8xEthernet 10/100 Mbit/s PoE (IEEE 802.3af), 2xUSB 2.0, 1xRS485
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#### FUNCTIONS

Motion detection (zones)	396
Anti-tampering	Yes
Loss of video signal	Yes
PTZ management by RS485 (Pelco-P, Pelco-D protocols)	Yes
E-mail notification	Yes
Pre-event recording	30s max

#### GENERAL DATA

Max absorption (W)	18
Supply voltage (VAC)	100-240V, 50-60Hz
Height (mm)	48
Width (mm)	360
Depth (mm)	243
Weight (g)	2600
Type of finish	Metallic
Colour	Black
Operating temperature (°C)	-10-55
RH max operating humidity (%)	90
Supplied accessories	Power supply, mouse





## 100 SERIES IP NVR

Barebone version (no HDD) also available adding the suffix "SL" to the end of the part number.

### IPNVR116DPOE

#### NVR W/36 5MP IP INPUTS, 16 POE, 2TB HDD



- Up to 4K resolution
- 16 PoE inputs
- Local (8 channels max) and dedicated cameras video analysis management (target counting, object left/removed, enter area, line crossing, motion detection)
- Support dual password authentication
- Dual Streaming recording
- Single channel instant playback (30 minutes max)
- Real time event log display
- Bidirectional audio
- Support channels grouping and groups sequence
- Support 8 HDD
- S.M.A.R.T. function for checking the correct operation of the HDDs
- Possibility to connect external HDD via eSATA interface
- Saving recordings in anti-fake proprietary format

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Video inputs	36 (4K, 5MP, 3MP, Full-HD, HD, D1 / 16 PoE)
Main Video output	1(VGA, 1920x1080@60 Hz), 1(HDMI 1920x1080@60Hz, 4K@30Hz)
Audio Inputs/Outputs	1 (RCA) / 1 (RCA)
Alarm Inputs/Outputs	4/1
Video compression	H.264, H.265, MJPEG/16-16000 kbps
Playback / recording frame rate	1080fps@4K real time
HDD supplied size	2TB (6TB max)
Additional Hard Disks (SATA)	7 (7x6TB max, RAID0, RAID1, RAID5, RAID6, RAID10) + eSATA

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Operating system	Linux embedded
Recording methods	Auto, manual, scheduled, motion
Recording type	Dual streaming
Maximum number of channels being played simultaneously	4@4K/5MP, 9@3MP, 16@Full-HD
Protocols supported	HTTP, HTTPS, TCP/IP, DHCP, UPnP, SMTP (SSL), DDNS, NTP, RTSP, Comelit DNS, ONVIF 2.2
IP assignment	DHCP, manual
Max bandwidth (Mbps)	216
Remote control via browser	Internet Explorer, Firefox, Chrome, Safari
Remote control by software	Comelit View 100
Remote control by mobile	Comelit View 100 app (Android, iOS)
Main functions	Digital zoom 12x, Video analysis management (8 local + 28 with dedicated cameras), Dual password authentication, Instant playback function
Video analytics	Target counting, object left/removed, enter area, line crossing

#### HARDWARE SPECIFICATIONS

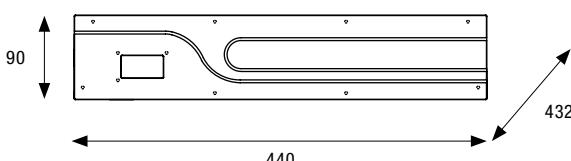
Type of connections/ports	1xEthernet 10/100 Mbit/s, 16xEthernet 10/100 Mbit/s PoE (IEEE 802.3af), 2xUSB 2.0, 1xUSB 3.0, 1xRS485, 1x Esata
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#### FUNCTIONS

Motion detection (zones)	396
Anti-tampering	Yes
Privacy zones	4
Loss of video signal	Yes
PTZ management by RS485 (Pelco-P, Pelco-D protocols)	Yes
E-mail notification	Yes
Pre-event recording	30s max

#### GENERAL DATA

Max absorption (W)	45
Supply voltage (VAC)	100-240V, 50-60Hz
Height (mm)	90
Width (mm)	440
Depth (mm)	432
Weight (g)	7600
Type of finish	Metallic
Colour	Black
Operating temperature (°C)	-10-55
RH max operating humidity (%)	90
Supplied accessories	Mouse





Barebone version (no HDD) also available adding the suffix "SL" to the end of the part number.

## IPNVR116E

### NVR W/16 IP INPUTS 4K, 1TB HDD



- Up to 4K resolution
- Local (4 channels max) and dedicated cameras video analysis management (target counting, object left/removed, enter area, line crossing, motion detection)
- Support dual password authentication
- Dual Streaming recording
- Single channel instant playback (30 minutes max)
- Real time event log display
- Bidirectional audio
- Support channels grouping and groups sequence
- S.M.A.R.T. function for checking the correct operation of the HDDs
- Saving recordings in anti-fake proprietary format

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Video inputs	16 (4K, 5MP, 3MP, Full-HD, HD, D1)
Main Video output	1 (VGA), 1 (HDMI) - 1920x1080@60Hz, 1280x1024@60Hz
Audio Inputs/Outputs	1 (RCA)/1 (RCA) (G.711A)
Alarm Inputs/Outputs	4/1
Video compression	H.264, H.265, MJPEG/16÷16000 kbps
Playback / recording frame rate	480fps@4K
HDD supplied size	1TB (8TB max)
Additional Hard Disks (SATA)	1 (8TB max)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Operating system	Linux embedded
Recording methods	Auto, manual, programmed, event
Recording type	Dual streaming
Maximum number of channels being played simultaneously	1@4K/5MP/4MP/3MP, 4@Full-HD, 16@sub stream
Protocols supported	HTTP, TCP/IP, UPnP, SMTP (SSL), DHCP, DDNS, PPPoE, NTP, P2P, RTSP, Comelit DNS, ONVIF 2.2
IP assignment	Manual, DHCP
Max bandwidth (Mbps)	80 Mbit/s
Remote control via browser	Internet Explorer, Firefox, Chrome, Safari
Remote control by software	Comelit View 100
Remote control by mobile	Comelit View 100 app (Android, iOS)
Main functions	Digital zoom 12x, Watermarking, Dual password authentication, Instant playback function
Video analytics	Target counting, object left/removed, enter area, line crossing

#### HARDWARE SPECIFICATIONS

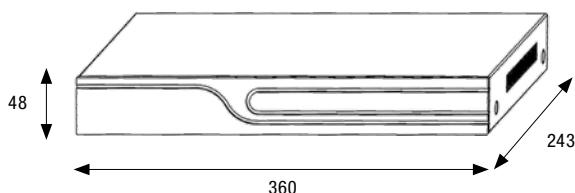
Type of connections/ports	1 x Ethernet 10/100/1000 Mbit/s, 2xUSB 2.0, 1xUSB 3.0, 1xRS485
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#### FUNCTIONS

Motion detection (zones)	396
Anti-tampering	Yes
Loss of video signal	Yes
System log	Yes
PTZ management by RS485 (Pelco-P, Pelco-D protocols)	Yes
E-mail notification	Yes
Pre-event recording	30s max

#### GENERAL DATA

Max absorption (W)	18W
Supply voltage (VAC)	100-240V / 50-60Hz
Height (mm)	48
Width (mm)	360
Depth (mm)	243
Weight (g)	2600
Type of finish	Metallic
Colour	Black
Operating temperature (°C)	-10-55
Operating humidity (%)	90 max
Supplied accessories	Power supply





## 100 SERIES IP NVR

Barebone version (no HDD) also available adding the suffix "SL" to the end of the part number.

### IPNVR136E

#### NVR W/36 4K IP INPUTS, 2TB HDD



- Up to 4K resolution
- Local (8 channels max) and dedicated cameras video analysis management (target counting, object left/removed, enter area, line crossing, motion detection)
- Support dual password authentication
- Dual Streaming recording
- Single channel instant playback (30 minutes max)
- Real time event log display
- 2 Gigabit network interfaces
- Bidirectional audio
- Support channels grouping and groups sequence
- Support 8 HDD
- S.M.A.R.T. function for checking the correct operation of the HDDs
- Possibility to connect external HDD via eSATA interface
- Saving recordings in anti-fake proprietary format
- Dual HDMI output

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Video inputs	36 (4K, 5MP, 3MP, FULL-HD, HD, D1)
Main Video output	1 (VGA), 1 (HDMI) - 3840x2160@30Hz, 1920x1080@60Hz, 1280x1024@60Hz
Audio Inputs/Outputs	1 (RCA)/1 (RCA) (G.711A)
Alarm Inputs/Outputs	16/4
Video compression	H.264, H.265 (High Profile@Level 4.2) / 16-8000 kbps
Playback / recording frame rate	1080 fps@4K Real time
HDD supplied size	2TB (6TB max)
Additional Hard Disks (SATA)	7 (7x6TB max, RAID0, RAID1, RAID5, RAID6, RAID10) + eSATA

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Operating system	Linux embedded
Recording methods	Auto, manual, scheduled, motion, Video analytics
Recording type	Dual streaming
Maximum number of channels being played simultaneously	4@4K/5MP/3MP/FULL-HD, 16@sub stream
Protocols supported	HTTP, TCP/IP, UPnP, SMTP (SSL), DHCP, DDNS, PPPoE, NTP, P2P, RTSP, Comelit DNS, ONVIF 2.2
IP assignment	Manual, DHCP
Max bandwidth (Mbps)	288 Mbit/s
Remote control via browser	Internet Explorer, Firefox, Chrome, Safari
Remote control by software	Comelit View 100
Remote control by mobile	Comelit View 100 app (Android, iOS)
Main functions	Digital zoom 12x, Watermarking, RAID (0, 1, 5, 6, 10), Video analysis management (8 local + 28 with dedicated cameras), Dual password authentication, Instant playback function, HDD grouping
Video analytics	Target counting, object left/removed, enter area, line crossing

#### HARDWARE SPECIFICATIONS

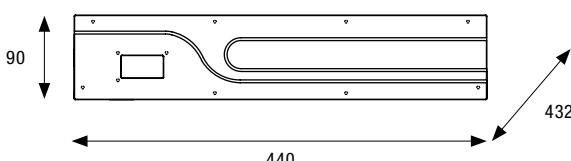
Type of connections/ports	2xUSB 2.0, USB 3.0, RS485, 2xEthernet 10/100/1000Mbit/s, eSATA
---------------------------	--

#### FUNCTIONS

Motion detection (zones)	396
Anti-tampering	Yes
Loss of video signal	Yes
System log	Yes
PTZ management by RS485 (Pelco-P, Pelco-D protocols)	Yes
E-mail notification	Yes
Pre-event recording	30s max

#### GENERAL DATA

Max absorption (W)	45W
Supply voltage (VAC)	100-240V, 47-63Hz
Height (mm)	90
Width (mm)	440
Depth (mm)	432
Weight (g)	7.6 kg
Type of finish	Metallic
Colour	Black
Operating temperature (°C)	-10-55
Operating humidity (%)	90 max
Supplied accessories	Mouse





Barebone version (no HDD) also available adding the suffix "SL" to the end of the part number.

## IPNVR164F

### NVR W/64 4K IP INPUTS, 8TB HDD



- Up to 4K resolution
- Local (8 channels max) and dedicated cameras video analysis management (target counting, object left/removed, enter area, line crossing, motion detection)
- Support dual password authentication
- Dual Streaming recording
- Single channel instant playback (30 minutes max)
- Real time event log display
- 2 Gigabit network interfaces
- Bidirectional audio
- Support channels grouping and groups sequence
- Support 8 HDD
- S.M.A.R.T. function for checking the correct operation of the HDDs
- Possibility to connect external HDD via eSATA interface
- Saving recordings in anti-fake proprietary format
- Dual HDMI output

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Video inputs	64 (4K, 5MP, 3MP, FULL-HD, HD, D1)
Main Video output	1 (VGA), 1 (HDMI) - 3840x2160@30Hz, 1920x1080@60Hz, 1280x1024@60Hz
Audio Inputs/Outputs	1 (RCA)/1 (RCA) (G.711A)
Alarm Inputs/Outputs	4/4
Video compression	H.264, H.265, MJPEG / 16-8000 kbps
Playback / recording frame rate	1920 fps@4K Real time
HDD supplied size	4x2TB (6TB max)
Additional Hard Disks (SATA)	4 (4x6TB max, RAID0, RAID1, RAID5, RAID6, RAID10) + eSATA

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Operating system	Linux embedded
Recording methods	Auto, manual, scheduled, motion, Video analytics
Recording type	Dual streaming
Maximum number of channels being played simultaneously	4@4K/5MP, 9@3MP, 16@FULL-HD
Protocols supported	HTTP, TCP/IP, UPnP, SMTP (SSL), DHCP, DDNS, PPPoE, NTP, P2P, RTSP, Comelit DNS, ONVIF 2.2
IP assignment	Manual, DHCP
Max bandwidth (Mbps)	512 Mbit/s
Remote control via browser	Internet Explorer, Firefox, Chrome, Safari
Remote control by software	Comelit View 100
Remote control by mobile	Comelit View 100 app (Android, iOS)
Main functions	Digital zoom 12x, Watermarking, RAID (0, 1, 5, 6, 10), Video analysis management (8 local + 56 with dedicated cameras), Dual password authentication, Instant playback function, HDD grouping
Video analytics	Target counting, object left/removed, enter area, line crossing

#### HARDWARE SPECIFICATIONS

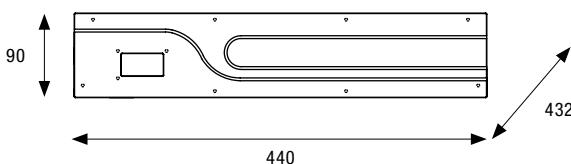
Type of connections/ports	2xUSB 2.0, USB 3.0, RS485, 2xEthernet 10/100/1000Mbit/s, eSATA
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#### FUNCTIONS

Motion detection (zones)	396
Anti-tampering	Yes
Loss of video signal	Yes
System log	Yes
PTZ management by RS485 (Pelco-P, Pelco-D protocols)	Yes
E-mail notification	Yes
Pre-event recording	30s max

#### GENERAL DATA

Max absorption (W)	45W
Supply voltage (VAC)	100-240V, 47-63Hz
Height (mm)	90
Width (mm)	440
Depth (mm)	432
Weight (g)	7.6 kg
Type of finish	Metallic
Colour	Black
Operating temperature (°C)	-10-55
Operating humidity (%)	90 max
Supplied accessories	Mouse





## 100 SERIES IP NVR

### IPNVR128DSL

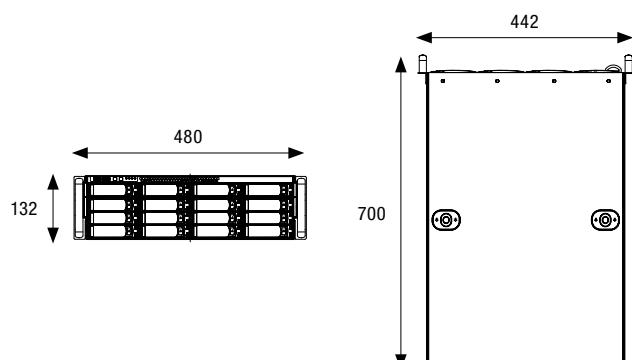
NVR W/128 IP INPUTS, 4K, NO HDD



- Up to 4K resolution
- Local (8 channels max) and dedicated cameras video analysis management (target counting, object left/removed, enter area, line crossing, motion detection)
- Support dual password authentication
- Dual Streaming recording
- Single channel instant playback (30 minutes max)
- Real time event log display
- 2 Gigabit network interfaces
- Bidirectional audio
- Support channels grouping and groups sequence
- Supports 16 HDD (RAID0, RAID1, RAID5, RAID6, RAID10, raggruppamento HDD)
- S.M.A.R.T. function for checking the correct operation of the HDDs
- Possibility to connect external HDD via eSATA interface
- Saving recordings in anti-fake proprietary format

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Video inputs	128 (4K, 5MP, 3MP, FULL-HD, HD, D1)
Main Video output	2 (VGA), 2 (HDMI) - 3840x2160@30Hz, 1920x1080@60Hz, 1280x1024@60Hz
Audio Inputs/Outputs	1 (RCA)/2 (RCA) (G.711U)
Alarm Inputs/Outputs	16/8
Video compression	H.264, H.265, MJPEG / 16-8000 kbps
Playback / recording frame rate	3840 fps@4K Real time
Additional Hard Disks (SATA)	16 (16x6TB max, RAID0, RAID1, RAID5, RAID6, RAID10) + 2xeSATA

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Operating system	Linux embedded
Recording methods	Auto, manual, scheduled, motion, Video analytics
Recording type	Dual streaming
Maximum number of channels being played simultaneously	4@4K/5MP, 9@3MP, 16@FULL-HD
Protocols supported	HTTP, TCP/IP, UPnP, SMTP (SSL), DHCP, DDNS, PPPoE, NTP, P2P, RTSP, Comelit DNS, ONVIF 2.2
IP assignment	Manual, DHCP
Max bandwidth (Mbps)	640 Mbit/s
Remote control via browser	Internet Explorer, Firefox, Chrome, Safari
Remote control by software	Comelit View 100
Remote control by mobile	Comelit View 100 app (Android, iOS)
Main functions	Digital zoom 12x, Watermarking, Instant playback, RAID (0, 1, 5, 6, 10), Dual password authentication, HDD grouping, Video analysis management
Video analytics	Target counting, object left/removed, enter area, line crossing

#### HARDWARE SPECIFICATIONS

Type of connections/ports	2xUSB 2.0, USB 3.0, RS422, RS232, 2xEthernet 10/100/1000Mbit/s, 2xeSATA
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#### FUNCTIONS

Motion detection (zones)	396
Anti-tampering	Yes
Loss of video signal	Yes
System log	Yes
E-mail notification	Yes
Pre-event recording	30s max

#### GENERAL DATA

Max absorption (W)	58W
Supply voltage (VAC)	100-240V, 50-60Hz
Height (mm)	132
Width (mm)	480
Depth (mm)	700
Weight (g)	14.6 kg
Type of finish	Metallic
Colour	Black
Operating temperature (°C)	-10-55
Operating humidity (%)	90 max
Supplied accessories	Mouse



**IPKYB100B****IP COMPACT CONTROL KEYBOARD**

IP control keyboard for PTZ 100 series camera management. Displaying live and playback images of the selected camera on the 7" colour LCD monitor in equipment, and on the monitor connected to the HDMI port. Complete with 3D joystick and port for mouse connection. Support 2 different user levels (administrator and operator).

**SKYB001A****RS485 PELCO PROTOC. CONTROL KEYBOARD FOR PTZ CAMERAS**

RS485, Pelco protocol, control keyboard for PTZ cameras. Power supply included.

**SW  
COMELIT-  
VIEW100****SW COMELIT VIEW 100 FOR SERIES 100****APP  
COMELIT-  
VIEW100****COMELIT VIEW 100 APP FOR CCTV PROD., IP 100 SERIES**

Comelit View 100 App for managing IP100 series CCTV systems. Available for iOS and Android.



# AHD SERIES

## VIDEO SURVEILLANCE

Cameras	56
PTZ cameras	62
DVR	64
Brackets / Junction Box	68

The icons legend is on the back of this flyer cover.



## AHD SERIES CAMERAS

### AHCAM105A

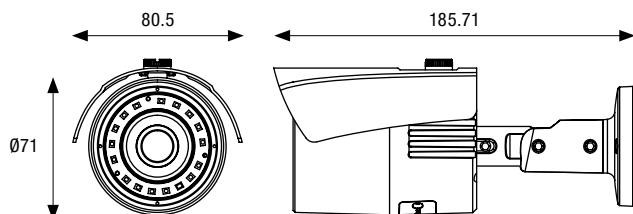
4-5MP AHD BULLET CAMERA, 3.6MM, IR 20M, IP66



- 1/2.7" CMOS sensor
- 4-5MP resolution
- Video output AHD/TVI/CVI
- Coaxial control
- D-WDR
- 3DNR
- Mirror mode
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- JB-100MBA - Junction box for mini bullet fix focal
- PM100B - Pillar-mount bracket, grey

#### MAIN FEATURES

Camera sensor	1/2.7" CMOS
Effective pixels (H x V - pixels)	2592x1944
Camera lens	3.6mm
Horizontal FoV (°)	79
Horizontal resolution (TVL)	1280H
Electronic shutter (s)	1/25-1/50000
Sensitivity (lux)	0 (led IR ON)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Video output	AHD/TVI/CVI
Video resolution (H x V - pixel)	AHD: 4/5MP; TVI: 5MP; CVI: 4MP

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Frame rate	2560x1440@30fps; 2592x1944@12.5fps
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#### FUNCTIONS

Back light compensation (BLC)	BLC
Digital effects	LSC, Anti-flicker (50/60Hz), Mirror (Horizontal, Vertical, 180° rotation), OSD
Wide Dinamic Range WDR (dB)	D-WDR
Enhanced DNR control	2DNR, 3DNR
White balance control	AWC, ATW
Automatic gain control (AGC)	1-15

#### HARDWARE SPECIFICATIONS

Maximum cable distance RG59 / UTP (m)	300 / 100
IP protection rating	IP66

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	5
Height (mm)	62
Width (mm)	71
Depth (mm)	185.5
Weight (g)	400
Type of finish	Die-cast aluminum
Housing type	Bullet
Colour	Dark grey
Operating temperature (°C)	-20 - 55
RH max operating humidity (%)	90





## AHCAM125A

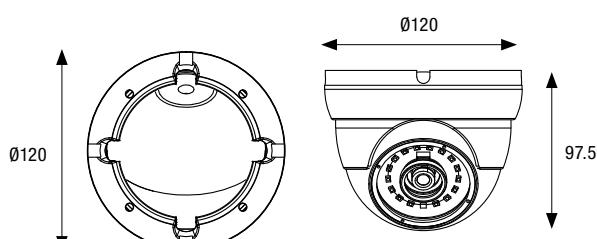
### 4-5MP AHD MINIDOME CAMERA, 3.6MM, IR 30M, IP65



- 1/2.7" CMOS sensor
- 4-5MP resolution
- Video output AHD/TVI/CVI
- Coaxial control
- D-WDR
- 3DNR
- Mirror mode
- IP65

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- JB-100MDA - Junction box for Minidome fix focal
- PM100W - Pillar-mount bracket, white
- WM100SD - Minidome wall mounting support

#### MAIN FEATURES

Camera sensor	1/2.7" CMOS
Effective pixels (H x V - pixels)	2592x1944
Camera lens	3.6mm
Horizontal FoV (°)	79
Horizontal resolution (TVL)	1280H
Electronic shutter (s)	1/25-1/50000
Sensitivity (lux)	0 (led IR ON)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Video output	AHD/TVI/CVI
Video resolution (H x V - pixel)	AHD: 4/5MP; TVI: 5MP; CVI: 4MP

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Frame rate	2560x1440@30fps; 2592x1944@12.5fps
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#### FUNCTIONS

Back light compensation (BLC)	BLC
Digital effects	LSC, Anti-flicker (50/60Hz), Mirror (Horizontal, Vertical, 180° rotation), OSD
Wide Dinamic Range WDR (dB)	D-WDR
Enhanced DNR control	2DNR, 3DNR
White balance control	AWC, ATW
Automatic gain control (AGC)	1-15

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	16 led SMD / 30m
Maximum cable distance RG59 / UTP (m)	300 / 100
IP protection rating	IP65
3-axis adjustment	Yes

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	5
Diameter (mm)	120
Height (mm)	97.5
Weight (g)	675
Type of finish	Die-cast aluminum
Housing type	Minidome
Colour	White
Operating temperature (°C)	-20 - 55
RH max operating humidity (%)	90





## AHD SERIES CAMERAS

### AHCAM175ZA

#### 4-5MP AHD MINIDOME CAMERA, MOTOR. ZOOM 2.8-12MM



- 1/2.7" CMOS sensor
- 4-5MP resolution
- Video output AHD/TVI/CVI
- Coaxial control
- D-WDR
- 3DNR
- Mirror mode
- IP65

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Camera sensor	1/2.7" CMOS
Effective pixels (H x V - pixels)	2592x1944
Camera lens	2.8-12mm, motorized, autofocus
Vertical FoV (°)	21-47
Horizontal resolution (TVL)	1280H
Electronic shutter (s)	1/25-1/50000
Camera optical zoom	4x
Sensitivity (lux)	0 (led IR ON)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Video output	AHD/TVI/CVI
Video resolution (H x V - pixel)	AHD: 4/5MP; TVI: 5MP; CVI: 4MP

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Frame rate	2560x1440@30fps; 2592x1944@12.5fps
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#### FUNCTIONS

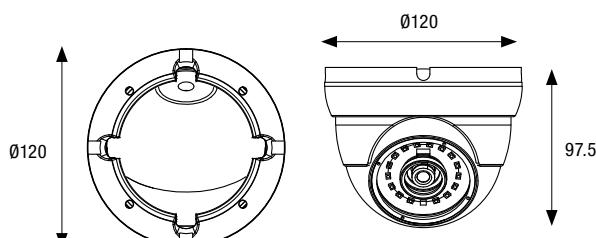
Back light compensation (BLC)	BLC
Digital effects	LSC, Anti-flicker (50/60Hz), Mirror (Horizontal, Vertical, 180° rotation), OSD
Wide Dynamic Range WDR (dB)	D-WDR
Enhanced DNR control	2DNR, 3DNR
White balance control	AWC, ATW
Automatic gain control (AGC)	1-15

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	16 led SMD / 30m
Maximum cable distance RG59 / UTP (m)	300 / 100
IP protection rating	IP65
3-axis adjustment	Yes

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	5
Diameter (mm)	120
Height (mm)	97.5
Weight (g)	675
Type of finish	Die-cast aluminum
Housing type	Minidome
Colour	White
Operating temperature (°C)	-20 - 55
RH max operating humidity (%)	90



#### ACCESSORIES

- JB-100MDA - Junction box for Minidome fix focal
- PM100W - Pillar-mount bracket, white
- WM100SD - Minidome wall mounting support





## AHCAM165ZA

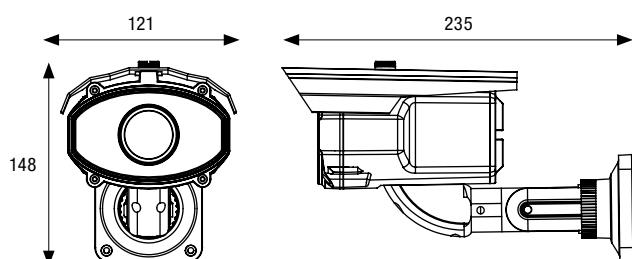
### 4-5MP AHD BULLET CAMERA, MOTOR. ZOOM 2.8-12MM



- 1/2.7" CMOS sensor
- 4-5MP resolution
- Video output AHD/TVI/CVI
- Coaxial control
- D-WDR
- 3DNR
- Mirror mode
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### ACCESSORIES

- JB-100BBA - Junction box for big bullet varifocal
- PM100B - Pillar-mount bracket, grey

#### MAIN FEATURES

Camera sensor	1/2.7" CMOS
Effective pixels (H x V - pixels)	2592x1944
Camera lens	2.8-12mm, motorized, autofocus
Vertical FoV (°)	21-47
Horizontal resolution (TVL)	1280H
Electronic shutter (s)	1/25-1/50000
Camera optical zoom	4x
Sensitivity (lux)	0 (led IR ON)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Video output	AHD/TVI/CVI
Video resolution (H x V - pixel)	AHD: 4/5MP; TVI: 5MP; CVI: 4MP

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Frame rate	2560x1440@30fps; 2592x1944@12.5fps
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#### FUNCTIONS

Back light compensation (BLC)	BLC
Digital effects	LSC, Mirror (Horizontal, Vertical, 180° rotation), OSD
Wide Dynamic Range WDR (dB)	D-WDR
Enhanced DNR control	2DNR, 3DNR
White balance control	AWC, ATW
Automatic gain control (AGC)	1-15

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	2 led arrays / 50m
Maximum cable distance RG59 / UTP (m)	300 / 100
IP protection rating	IP66

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	5
Height (mm)	148
Width (mm)	121
Depth (mm)	235
Weight (g)	1220
Type of finish	Die-cast aluminum
Housing type	Bullet
Colour	Dark grey
Operating temperature (°C)	-20 - 55
RH max operating humidity (%)	90





## AHD SERIES CAMERAS

### AHCAM1858ZA

#### 4-5MP AHD VANDALDOME CAMERA, MOTOR. ZOOM 2.8-12MM



- 1/2.7" CMOS sensor
- 4-5MP resolution
- Video output AHD/TVI/CVI
- Coaxial control
- D-WDR
- 3DNR
- Mirror mode
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Camera sensor	1/2.7" CMOS
Effective pixels (H x V - pixels)	2592x1944
Camera lens	2.8-12mm, motorized, autofocus
Vertical FoV (°)	21-47
Horizontal resolution (TVL)	1280H
Electronic shutter (s)	1/25-1/50000
Camera optical zoom	4x
Sensitivity (lux)	0 (led IR ON)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Video output	AHD/TVI/CVI
Video resolution (H x V - pixel)	AHD: 4/5MP; TVI: 5MP; CVI: 4MP

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Frame rate	2560x1440@30fps; 2592x1944@12.5fps
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#### FUNCTIONS

Back light compensation (BLC)	BLC
Digital effects	LSC, Anti-flicker (50/60Hz), Mirror (Horizontal, Vertical, 180° rotation), OSD
Wide Dinamic Range WDR (dB)	D-WDR
Enhanced DNR control	2DNR, 3DNR
White balance control	AWC, ATW
Automatic gain control (AGC)	1-15

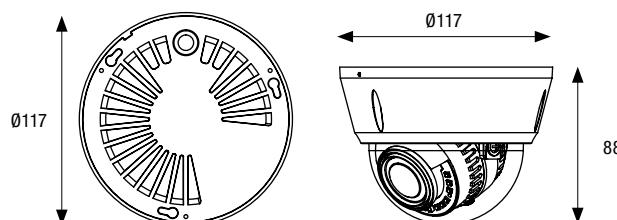
#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	12 led SMD / 30m
Maximum cable distance RG59 / UTP (m)	300 / 100
Vandal Resistant rating (IK code)	IK10
IP protection rating	IP66

3-axis adjustment	Yes
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#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	4
Diameter (mm)	117
Height (mm)	86
Weight (g)	675
Type of finish	Die-cast aluminum
Housing type	Minidome
Colour	White
Operating temperature (°C)	-20 - 55
RH max operating humidity (%)	90



#### ACCESSORIES

- JB-100SMD65W - Junction box, IP65
- PM100W - Pillar-mount bracket, white
- WL100SD - Wall-mount bracket





## AHCAM175A

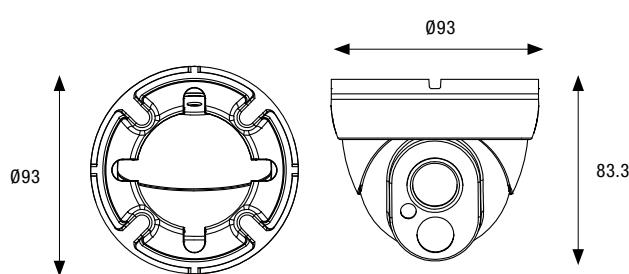
### 5MP AHD TURRET CAMERA, 3.6MM, ARRAY LED, IP65



- 1/2.7" CMOS sensor
- 4-5MP resolution
- Video output AHD/TVI/CVI
- Coaxial control
- D-WDR
- 3DNR
- Mirror mode
- IP65

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Camera sensor	1/2.7" CMOS
Effective pixels (H x V - pixels)	2592x1944
Camera lens	3.6mm
Horizontal FoV (°)	79
Horizontal resolution (TVL)	1280H
Electronic shutter (s)	1/25-1/50000
Sensitivity (lux)	0 (led IR ON)
Signal/noise ratio (dB)	>50 (AGC OFF)
IR filter	Mechanical
Video output	AHD/TVI/CVI
Video resolution (H x V - pixel)	AHD: 4/5MP; TVI: 5MP; CVI: 4MP

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Frame rate	2560x1440@30fps; 2592x1944@12.5fps
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#### FUNCTIONS

Back light compensation (BLC)	BLC
Digital effects	LSC, Anti-flicker (50/60Hz), Mirror (Horizontal, Vertical, 180° rotation), OSD
Wide Dinamic Range WDR (dB)	D-WDR
Enhanced DNR control	2DNR, 3DNR
White balance control	AWC, ATW
Automatic gain control (AGC)	1-15

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	1 led IR-III / 15m
Maximum cable distance RG59 / UTP (m)	300 / 100
IP protection rating	IP65

#### GENERAL DATA

Power supply voltage (VDC)	12
Max absorption (W)	6
Diameter (mm)	93
Height (mm)	83.3
Weight (g)	360
Type of finish	Die-cast aluminum
Housing type	Minidome
Colour	White
Operating temperature (°C)	-20 - 55
RH max operating humidity (%)	90





## AHD SERIES PTZ CAMERAS

### AHPTZ110A

#### FULL-HD AHD PTZ CAMERA, 10X ZOOM



- 1/2.8" CMOS 2.15M Sony Starvis Technology
- 10x optical zoom
- FULL-HD resolution
- Infrared illuminators with range up to 80 meters (Smart IR)
- WDR (Wide Dynamic Range)
- 3DNR (Digital Noise Reduction)
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Camera sensor	1/2.8" CMOS 2.15M Sony Starvis Technology
Camera lens	4.7-47mm, autofocus
Horizontal FoV (°)	6.43-60.9
Vertical FoV (°)	4.1-40.1
Camera optical zoom	10x
Signal/noise ratio (dB)	>55 (AGC OFF)
IR filter	Mechanical
Video output	AHD
Video resolution (H x V - pixel)	1920x1080 (Full-HD 1080p)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Frame rate	30fps
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#### FUNCTIONS

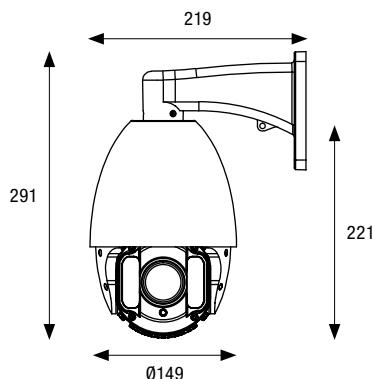
Main functions	256 Preset, Scan 360°, 4 Pattern, 8 Tour
Back light compensation (BLC)	BLC
Digital effects	Anti-flicker (50/60Hz), Mirror (Horizontal, Vertical, 180° rotation)
Wide Dinamic Range WDR (dB)	WDR
Enhanced DNR control	3DNR
White balance control	AWB, Indoor, Outdoor, ATW
Automatic gain control (AGC)	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	6 led / 80m (Smart IR)
IP protection rating	IP66
RS-485 control	Yes

#### GENERAL DATA

Power supply voltage (VDC)	24
Max absorption (W)	30
Diameter (mm)	149
Height (mm)	291
Weight (g)	4000
Type of finish	Die-cast aluminum
Housing type	Speed dome
Colour	White
Operating temperature (°C)	-30 - 50
RH max operating humidity (%)	90



#### ACCESSORIES

- IPPT-401 - Pole-mounted
- IPPT-402 - Corner-mounted





## AHPTZ120A

### FULL-HD AHD PTZ CAMERA, 20X ZOOM



- 1/2.8" CMOS 2.15M Sony Starvis Technology
- 20x optical zoom
- FULL-HD resolution
- Infrared leds with a range up to 150 meters (Smart IR)
- WDR (Wide Dynamic Range)
- 3DNR (Digital Noise Reduction)
- IP66

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Camera sensor	1/2.8" CMOS 2.15M Sony Starvis Technology
Camera lens	4.7-94mm, autofocus
Horizontal FoV (°)	3.2-55.8
Vertical FoV (°)	1.8-32.2
Camera optical zoom	20x
Signal/noise ratio (dB)	>55 (AGC OFF)
IR filter	Mechanical
Video output	AHD
Video resolution (H x V - pixel)	1920x1080 (Full-HD 1080p)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Frame rate	30fps
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#### FUNCTIONS

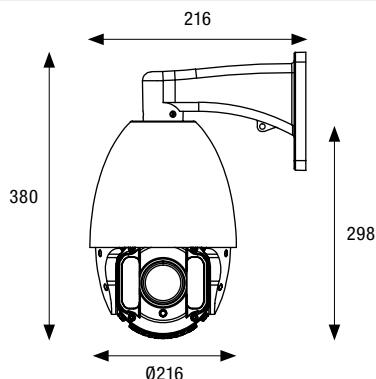
Main functions	256 Preset, Scan 360°, 4 Pattern, 8 Tour
Rotation speed	Manual: 0.1°-180°/s / Call Preset: 200°/s
Back light compensation (BLC)	BLC
Digital effects	Anti-flicker (50/60Hz), Mirror (Horizontal, Vertical, 180° rotation)
Wide Dinamic Range WDR (dB)	WDR
Enhanced DNR control	3DNR
White balance control	AWB, Indoor, Outdoor, ATW
Automatic gain control (AGC)	Yes

#### HARDWARE SPECIFICATIONS

No. IR LEDs / Max. distance (m)	2 x laser led + 6 led / 150m (Smart IR)
IP protection rating	IP66
RS-485 control	Yes

#### GENERAL DATA

Power supply voltage (VDC)	24
Max absorption (W)	36
Diameter (mm)	216
Height (mm)	380
Weight (g)	7000
Type of finish	Die-cast aluminum
Housing type	Speed dome
Colour	White
Operating temperature (°C)	-30 - 50
RH max operating humidity (%)	90



#### ACCESSORIES

- IPPT-1201 - Pole-mounting
- IPPT-1202 - Corner-mounting
- IPPT-604 - Ceiling mount bracket





## AHD SERIES DVR

Barebone version (no HDD) also available adding the suffix "SL" to the end of the part number.

### AHDVR104A

#### AHD DVR 4 CH 4MP / 8CH 3MP, 1TB HDD



- Stand-alone 5-hybrid DVR
- 4MP resolution
- Dual Streaming recording
- Smart search of recorded images
- S.M.A.R.T. function for checking the correct operation of the HDDs
- Saving recordings in anti-fake proprietary format
- Audio Inputs/Outputs: 4/1
- Alarm Inputs/Outputs 4/1

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Video inputs	8@3MP (BNC)+8@3MP (IP) / 4@4MP (BNC)+4@4MP (IP)
Main Video output	1 (HDMI), 1 (VGA), 1280x1024@60Hz, 1920x1080@60Hz
Audio Inputs/Outputs	4 / 1 (RCA)
Alarm Inputs/Outputs	4/1
Video compression	H.264
Playback / recording frame rate	BNC: 40fps@4MP / 48fps@3MP / 80fps@2MP; IP: Real time
Live view frame rate	BNC: 80fps@4MP / 120fps@2MP; IP: Real time
HDD supplied size	1TB (6TB max)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Operating system	Linux embedded
Recording methods	Auto, manual, scheduled, motion
Recording type	Dual streaming
Maximum number of channels being played simultaneously	4 (BNC)/1 (mix)@main stream / 4 (8)@sub stream
Protocols supported	Comelit DNS, DDNS, DHCP, HTTP, NTP, ONVIF, P2P, PPPoE, SMTP (SSL), TCP/IP, UPnP
IP assignment	DHCP, manual
Max bandwidth (Mbps)	21
Remote control via browser	Internet Explorer, Firefox, Chrome, Safari
Remote control by software	Comelit View 100 (Windows)
Remote control by mobile	Comelit View 100 app (Android, iOS)
Main functions	15x electronic zoom (preview and playback), UTC check

#### FUNCS

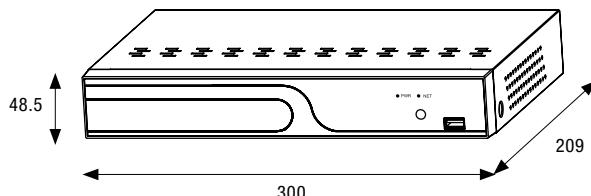
Motion detection (zones)	396
Anti-tampering	Yes
Loss of video signal	Yes
Maximum number of event log	9999

#### HARDWARE SPECIFICATIONS

Type of connections/ports	1xEthernet 10/100 Mbit/s, 2xUSB 2.0, 1xRS485
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#### GENERAL DATA

Max absorption (W)	10
Power supply voltage (VDC)	12
Power supply voltage (VAC)	100-240, 50-60Hz
Height (mm)	48.5
Width (mm)	300
Depth (mm)	209
Weight (g)	1600
Type of finish	Metallic
Colour	Black
Operating temperature (°C)	-10 - 55
RH max operating humidity (%)	90
Supplied accessories	Power supply, Mouse
System backup	USB 2.0





Barebone version (no HDD) also available adding the suffix "SL" to the end of the part number.

## AHDVR108A

### AHD DVR, 8 CHANNELS 4MP, 1TB HDD



- Stand-alone 5-hybrid DVR
- 4MP resolution
- Dual Streaming recording
- Smart search of recorded images
- S.M.A.R.T. function for checking the correct operation of the HDDs
- Saving recordings in anti-fake proprietary format
- Audio Inputs/Outputs: 4/1
- Alarm Inputs/Outputs 8/3

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Video inputs	8@4MP (BNC)+8@4MP (IP)
Main Video output	1 (VGA), 1 (HDMI) - 1920x1080@60Hz, 1280x1024@60Hz
Audio Inputs/Outputs	4 / 1 (RCA)
Alarm Inputs/Outputs	8/3
Video compression	H.264
Playback / recording frame rate	BNC: 80fps@4MP / 96fps@3MP / 160fps@2MP; IP: Real time
Live view frame rate	BNC: 160fps@4MP / 240fps@2MP; IP: Real time
HDD supplied size	1TB (8TB max)
Additional Hard Disks (SATA)	1 (8TB max)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Operating system	Linux embedded
Recording methods	Auto, manual, scheduled, motion
Recording type	Dual streaming
Maximum number of channels being played simultaneously	4 (BNC)/1 (mix)@main stream / 4 (8)@sub stream
Protocols supported	Comelit DNS, DDNS, DHCP, HTTP, NTP, ONVIF, P2P, PPPoE, SMTP (SSL), TCP/IP, UPnP
IP assignment	DHCP, manual
Max bandwidth (Mbps)	80
Remote control via browser	Internet Explorer, Firefox, Chrome, Safari
Remote control by software	Comelit View 100 (Windows)
Remote control by mobile	Comelit View 100 app (Android, iOS)
Main functions	15x electronic zoom (preview and playback), UTC check

#### FUNCTIONS

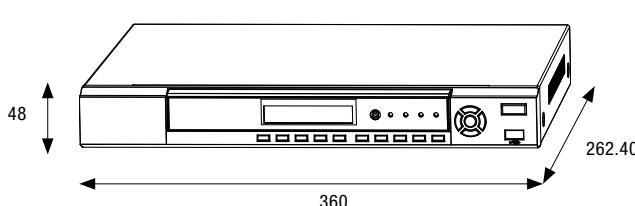
Motion detection (zones)	396
Anti-tampering	Yes
Loss of video signal	Yes
Maximum number of event log	9999

#### HARDWARE SPECIFICATIONS

Type of connections/ports	2xUSB 2.0, 1xRS485
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#### GENERAL DATA

Max absorption (W)	36
Power supply voltage (VDC)	12
Power supply voltage (VAC)	100-240, 50-60Hz
Height (mm)	48
Width (mm)	360
Depth (mm)	262
Weight (g)	1500
Type of finish	Metallic
Colour	Black
Operating temperature (°C)	-10 - 55
RH max operating humidity (%)	90
Supplied accessories	Power supply, Mouse
System backup	USB 2.0





## AHD SERIES DVR

Barebone version (no HDD) also available adding the suffix "SL" to the end of the part number.

### AHDVR106A

AHD DVR, 16 CHANNELS 4MP, HDD 2TB



- Stand-alone 5-hybrid DVR
- 4MP resolution
- Dual Streaming recording
- Smart search of recorded images
- S.M.A.R.T. function for checking the correct operation of the HDDs
- Saving recordings in anti-fake proprietary format
- Audio Inputs/Outputs: 4/1
- Alarm Inputs/Outputs 8/3

#### MANAGEMENT SOFTWARE

- Comelit View 100
- Comelit View 100 app (Android, iOS)



#### MAIN FEATURES

Video inputs	16@4MP (BNC)+8@4MP (IP)
Main Video output	1(VGA, 1920x1080@60 Hz), 1(HDMI 1920x1080@60Hz, 4K@30Hz)
Audio Inputs/Outputs	4 / 1 (RCA)
Alarm Inputs/Outputs	8/3
Video compression	H.264
Playback / recording frame rate	BNC: 128fps@4MP / 192fps@3MP / 400fps@2MP; 8 x IP: Real time
Live view frame rate	BNC: 320fps@4MP / 480fps@2MP; IP: Real time
HDD supplied size	2TB (8TB max)
Additional Hard Disks (SATA)	1 (8TB max)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Operating system	Linux embedded
Recording methods	Auto, manual, scheduled, motion
Recording type	Dual streaming
Maximum number of channels being played simultaneously	8x4MP@120fps (BNC)/8x3MP@144fps/8x2MP@Real time
Protocols supported	Comelit DNS, DDNS, DHCP, HTTP, NTP, ONVIF, P2P, PPPoE, SMTP (SSL), TCP/IP, UPnP
IP assignment	DHCP, manual
Remote control via browser	Internet Explorer, Firefox, Chrome, Safari
Remote control by software	Comelit View 100 (Windows)
Remote control by mobile	Comelit View 100 app (Android, iOS)
Main functions	15x electronic zoom (preview and playback), UTC check

#### FUNCTIONS

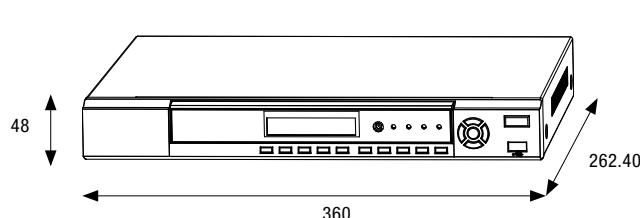
Motion detection (zones)	396
Anti-tampering	Yes
Loss of video signal	Yes
Maximum number of event log	9999

#### HARDWARE SPECIFICATIONS

Type of connections/ports	2xUSB 2.0, 1xRS485, 1 x Ethernet 10/100/1000 Mbit/s
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#### GENERAL DATA

Max absorption (W)	35
Power supply voltage (VDC)	12
Power supply voltage (VAC)	100-240, 50-60Hz
Height (mm)	48
Width (mm)	360
Depth (mm)	262
Weight (g)	1500
Type of finish	Metallic
Colour	Black
Operating temperature (°C)	-10 - 55
RH max operating humidity (%)	90
Supplied accessories	Power supply, Mouse
System backup	USB 2.0







## BRACKETS / JUNCTION BOX

**IPPT-1004W****JUNCTION BOX FOR MINIDOME, WHITE**

Junction box, suitable for minidome cameras art. IPCAM168A, IPCAM169A, IPCAM183A, IPCAM185A and IPEYE104A, suitable for indoor use, white colour.

**IPPT-1201****POLE-MOUNTING ACCESSORY FOR ART. IPPTZ120IR-130IR**

Pole-mounting accessory (pole diameter from 95 to 135 mm) for dome cameras art. IPPTZ120IR.

**IPPT-1202****CORNER-MOUNTING ACCESSORY FOR ART. IPPTZ120IR-130IR**

Corner installation accessory for cameras dome art. IPPTZ120IR.

**IPPT-401****POLE MOUNTING ACC. FOR CAMERA ART. IPPTZ110IRA**

Pole-mounting accessory for dome cameras art. IPPTZ110IRA. Pole diameter 92 to 143 mm.  
Dimensions: 107x132x35 mm

**IPPT-402****CORNER MOUNTING ACC. FOR CAMERA ART. IPPTZ110IRA**

Corner-mounting accessory for dome cameras art. IPPTZ110IRA.

**IPPT-604****CEILING MOUNT BRACKET ART. IPPTZ120IR-130IR**

Ceiling-mounting accessory for dome cameras art. IPPTZ120IRC, IPPTZ120IRD, IPPTZ130IRA and IPPTZ130IRB.

**WM100SD****MINIDOME WALL MOUNTING SUPPORT**

Support for wall mounting of minidome cameras art. IPCAM122A, IPCAM124A, IPCAM172A, IPCAM174A, IPCAM1838A, IPCAM1848A, IPCAM184KA, AHCAM634ZA, AHCAM637C, AHCAM638AWDR, AHCAM638B, AHCAM638ZA, AHCAM639ZB, AHCAM1858ZA, AHCAM175ZA, AHCAM125A and connection boxes art. JB-100MDA and JB-100SMDA, white colour.

**WM18X****WALL MOUNTING SUPPORT FOR IPCAM183-185**

Wall-mount support for cameras art. IPCAM168B, IPCAM183B and IPCAM185B.

**JB-100BBA****JUNCTION BOX FOR BIG BULLET VARIFOCAL**

Junction box for bullet cameras art. IPCAM161B, IPCAM161C, IPCAM162A, IPCAM162B, IPCAM162C, IPCAM1622A, IPCAM1622B, IPCAM1622C, IPCAM163A, IPCAM163B, IPCAM164A, IPCAM165A, IPCAM164KA and AHCAM165ZA, for indoor use, grey colour.

**JB-100BDA****JUNCTION BOX FOR VANDALDOME VARIFOCAL**

Junction box for vandaldome cameras art. IPCAM168B, IPCAM183B and IPCAM185B, grey colour.

**JB-100MBA****JUNCTION BOX FOR MINI BULLET FIX FOCAL**

Junction box for bullet cameras art. WICAM101A, IPCAM101C, IPCAM101D, IPCAM102B, IPCAM102C, IPCAM102D, IPCAM104A, IPCAM1638A, IPCAM1648A and AHCM105A, for indoor use, grey colour.

**JB-100BBAW****JUNCTION BOX FOR BIG BULLET WHITE**

Junction box for bullet cameras art. IPBCAMP02V01A, IPBCAMP02V02A and IPBCAMP04Z01A, for indoor use, white colour.

**JB-100MBAW****JUNCTION BOX FOR MINI BULLET WHITE**

Junction box for bullet cameras art. IPBCAMP02FA, IPBCAMP04FA and IPBCAMP04ZA, for indoor use, white colour.

**JB-100MDA****JUNCTION BOX FOR MINIDOME FIX FOCAL**

Junction box for Minidome cameras art. art. IPCAM122A, IPCAM124A, IPCAM166C, IPCAM166D, IPCAM167A, IPCAM167B, IPCAM172A, IPCAM174A, AHCM175ZA and AHCM125A, for indoor use, white colour.

**JB-100SM-D65W****IP65 SMALL MINIDOME JUNCTION BOX, WHITE**

Junction box for vandaldome cameras art. IPCAM168B, IPCAM183B and IPCAM185B, white colour.

**PM100B****SERIES 100 PILLAR-MOUNT BRACKET, GREY**

Pole mount support of bullet cameras art. IPCAM102D, IPCAM104A, IPCAM1638A, IPCAM1648A, IPCAM162C, IPCAM1622C, IPCAM163A, IPCAM164A, IPCAM165A, IPCAM164KA, AHCM165ZA, AHCM105A and connection boxes art. JB-100MDA, JB-100SMDA, JB-100MBA and JB-100BBA. Pole diameter from 110 to 140mm, dark grey colour.

**PM100W****SERIES 100 PILLAR-MOUNT BRACKET, WHITE**

Pole mount support of minidome cameras art. IPCAM122A, IPCAM124A, IPCAM172A, IPCAM174A, AHCM175ZA, AHCM125A and connection box art. JB-100SMDA. Through the connection box art. JB-100SMDA is also possible to install the cameras art. IPCAM1838A, IPCAM1848A, IPCAM184KA and AHCM1858ZA. Pole diameter from 110 to 140mm, white colour.

**PM18X****POLE-MOUNT SUPPORT FOR IPCAM183-185**

Pole-mount support for cameras art. IPCAM168B, IPCAM183B and IPCAM185B.

**FM168****IPCAM168A-169A FLUSH MOUNT SUPPORT**



# MONITORS

## VIDEO SURVEILLANCE



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## MONITORS

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**SMON185B** **18.5" LED MONITOR, VGA, AUDIO, HD**  
Colour monitor with 18.5" LED display, display ratio 16:9, HD resolution. Conversion cable from DVI to VGA in equipment.

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**MMON185A** **18.5" LED MONITOR, VGA, BNC, HDMI, AUDIO, HD**  
Colour monitor with 18.5" LED display, display ratio 16:9, HD resolution, 100/100 VESA mounting standard.

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**MMON024A** **24" LED MONITOR, VGA, HDMI, AUDIO**  
Colour monitor, 24 "LED display, 16: 9 aspect ratio, FULL-HD resolution, VESA 75/75 standard fixing, table base included.

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- HMON032B** **32" LED MONITOR, VGA, HDMI, BNC, AUDIO, FULL-HD**  
Colour monitor with 32" LED display, display ratio 16:9, FULL-HD resolution, 400/200 VESA mounting standard. Wall mount accessory in equipment, stand base NOT available.
- 

- HMON043B** **43" FULL-HD MONITOR, VGA, HDMI, BNC, AUDIO**  
Colour monitor with 43" LED display, display ratio 16:9, FULL-HD resolution, 400/200 VESA standard mounting. Wall mount accessory in equipment, desk stand NOT available.
- 

- HMON055B** **55" LED MONITOR, VGA, HDMI, BNC, AUDIO, FULL-HD**  
Colour monitor with 55" LED display, display ratio 16:9, FULL-HD resolution, 400/200 VESA mounting standard. Wall mount accessory in equipment, stand base NOT available.
-



# SWITCHES

## VIDEO SURVEILLANCE



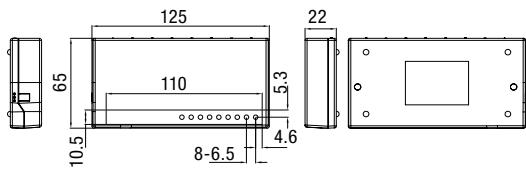
# SWITCHES

## IPSWC080A

### NETWORK SWITCH, GIGABIT, 8 PORTS



- Supports IEEE 802.3x flow control for full-duplex mode and back-pressure for half-duplex mode
- 9K Jumbo frame management
- MDI/MDIX ports auto-negotiation
- Speed and transmission auto-negotiation
- MAC address table with auto-learning and auto-aging functions
- Store-and-Forward transfer method



#### MAIN FEATURES

LAN ports	8 Gigabit (RJ-45, auto MDI/MDI-X function)
Standard/Protocols supported	IEEE802.3ab, IEEE802.3x (full-duplex)/back pressure (half-duplex)
Transfer method	Store and forward
Exchange capacity	16Gb/s
MAC address	Auto-learning, auto-aging
Frame Filtering e Forward Rate	1488000 pps max
Jumbo frame management 9K	Yes

#### GENERAL DATA

DC supply voltage	5V
Height (mm)	22
Width (mm)	125
Depth (mm)	65
Type of finish	Metallic
Colour	Black
Operating temperature (°C)	0-40
Operating humidity (%)	90 max

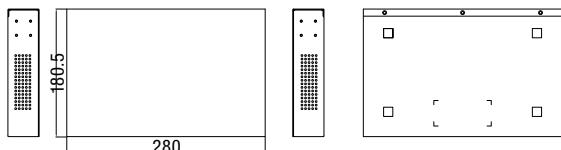


## IPSWC160A

### NETWORK SWITCH, GIGABIT, 16 PORTS



- Supports IEEE 802.3x flow control for full-duplex mode and back-pressure for half-duplex mode
- IEEE802.3az energy efficient Ethernet compliant
- 9K Jumbo frame management
- MDI/MDIX ports auto-negotiation
- Speed and transmission auto-negotiation
- MAC address table with auto-learning and auto-aging functions
- Store-and-Forward transfer method



#### MAIN FEATURES

LAN ports	16 Gigabit (RJ-45, auto MDI/MDI-X function)
Standard/Protocols supported	IEEE802.3ab, IEEE802.3x (full-duplex), IEEE802.3az
Transfer method	Store and forward
Exchange capacity	32Gb/s
MAC address	Auto-learning, auto-aging
Frame Filtering e Forward Rate	1488000pps max
Jumbo frame management 9K	Yes

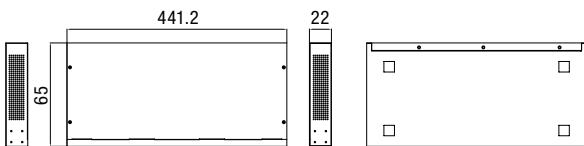
#### GENERAL DATA

Supply voltage (VAC)	100-240V / 50-60Hz
Height (mm)	44
Width (mm)	280
Depth (mm)	180
Type of finish	Metallic
Colour	Black
Operating temperature (°C)	0-40
Operating humidity (%)	90 max



**IPSWC162A****NETWORK SWITCH, 16 GIGABIT PORTS, 2 SFP, WEB-MANAGED**

- Complete control of the device from the web page
- Complete port management, VLAN setting, STP, QoS, mirroring ports, trunk ports, DoS and DHCP attack management, support ACL function and SNMP, RMON, TELNET protocols
- Supports IEEE 802.3x flow control for full-duplex mode and back-pressure for half-duplex mode
- MDI/MDIX ports auto-negotiation
- Speed and transmission auto-negotiation
- MAC address table with auto-learning and auto-aging functions
- Store-and-Forward transfer method

**MAIN FEATURES**

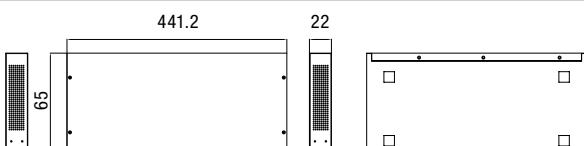
LAN ports	16 Gigabit (RJ-45, auto MDI/MDI-X function)
Standard/Protocols supported	IEEE802.3ab, IEEE802.3x (full-duplex)/back pressure (half-duplex), IEEE802.3ad, IEEE802.3u, IEEE802.3z
Porte SFP	2
Transfer method	Store and Forward
Exchange capacity	52Gb/s
MAC address	Auto-learning, auto-aging
Frame Filtering e Forward Rate	1488000pps max

**GENERAL DATA**

Supply voltage (VAC)	100-240V / 50-60Hz
Height (mm)	44
Width (mm)	441.2
Depth (mm)	65
Type of finish	Metallic
Colour	Black
Operating temperature (°C)	0-40
Operating humidity (%)	90 max

**IPSWC242A****NETWORK SWITCH 24 PORTS 1GB + 2 SFP WEB-MANAGED**

- Complete control of the device from the web page
- Complete port management, VLAN setting, STP, QoS, mirroring ports, trunk ports, DoS and DHCP attack management, support ACL function and SNMP, RMON, TELNET protocols
- Supports IEEE 802.3x flow control for full-duplex mode and back-pressure for half-duplex mode
- MDI/MDIX ports auto-negotiation
- Speed and transmission auto-negotiation
- MAC address table with auto-learning and auto-aging functions
- Store-and-Forward transfer method

**MAIN FEATURES**

LAN ports	24Gigabit, 2SFP
Standard/Protocols supported	IEEE802.3ab, IEEE802.3x, IEEE802.3ad, IEEE802.3u, IEEE802.3z
Transfer method	Store and Forward
Exchange capacity	52Gb/s
MAC address	Auto-learning, auto-aging
Frame Filtering e Forward Rate	1488000pps max

**GENERAL DATA**

Supply voltage (VAC)	100-240V, 50-60Hz
Height (mm)	44
Width (mm)	441.2
Depth (mm)	65
Type of finish	Metallic
Colour	Black
Operating temperature (°C)	0-40
Operating humidity (%)	90max





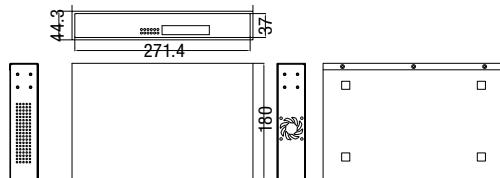
# SWITCHES

## IPSWP050A

### NETWORK SWITCH, GIGABIT, 5 PORTS (4 POE)



- Power supplied: 75W max total
- Support the PoE standard IEEE802.3at and IEEE802.3af
- Supports IEEE 802.3x flow control for full-duplex mode and back-pressure for half-duplex mode
- MDI/MDIX ports auto-negotiation
- Speed and transmission auto-negotiation
- MAC address table with auto-learning and auto-aging functions
- Store-and-Forward transfer method



#### MAIN FEATURES

LAN ports	5 Gigabit (RJ-45, auto MDI/MDI-X function)
Standard/Protocols supported	IEEE802.3af, IEEE802.3at, IEEE802.3x (full-duplex)/back pressure (half-duplex), IEEE802.3ab
LAN ports PoE	4 Gigabit
Transfer method	Store and Forward
Exchange capacity	10Gb/s
MAC address	Auto-learning, auto-aging
Frame Filtering e Forward Rate	1488000pps max

#### GENERAL DATA

Supply voltage (VAC)	100-240V / 50-60Hz
Height (mm)	44.3
Width (mm)	271.4
Depth (mm)	180
Type of finish	Metallic
Colour	Black
Operating temperature (°C)	0-40
Operating humidity (%)	90 max

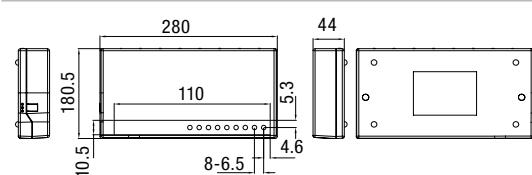


## IPSWP080A

### NETWORK SWITCH, GIGABIT, 8 PORTS POE



- Power supplied: 150W max total
- Support the PoE standard IEEE802.3at and IEEE802.3af
- Supports IEEE 802.3x flow control for full-duplex mode and back-pressure for half-duplex mode
- IEEE802.3az energy efficient Ethernet compliant
- Speed and transmission auto-negotiation
- MAC address table with auto-learning and auto-aging functions
- Store-and-Forward transfer method



#### MAIN FEATURES

LAN ports	8 Gigabit (RJ-45, auto MDI/MDI-X function)
Standard/Protocols supported	IEEE802.3af, IEEE802.3at, IEEE802.3x (full-duplex)/back pressure (half-duplex), IEEE802.3ab, IEEE802.3az
LAN ports PoE	8 Gigabit
Transfer method	Store and Forward
Exchange capacity	16Gb/s
MAC address	Auto-learning, auto-aging
Frame Filtering e Forward Rate	1488000pps max

#### GENERAL DATA

Supply voltage (VAC)	100-240V / 50-60Hz
Height (mm)	44
Width (mm)	280
Depth (mm)	180.5
Type of finish	Metallic
Colour	Black
Operating temperature (°C)	0-40
Operating humidity (%)	90 max

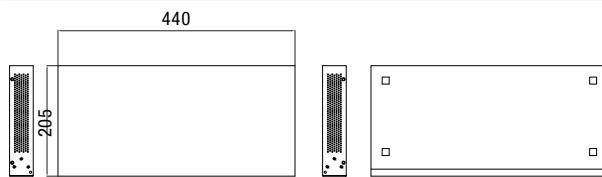


## IPSWP160A

### NETWORK SWITCH, GIGABIT, 16 PORTS POE



- Power supplied: 260W max total
- Support the PoE standard IEEE802.3at and IEEE802.3af
- Supports IEEE 802.3x flow control for full-duplex mode and back-pressure for half-duplex mode
- IEEE802.3az energy efficient Ethernet compliant
- MDI/MDX ports auto-negotiation
- Speed and transmission auto-negotiation
- MAC address table with auto-learning and auto-aging functions
- Store-and-Forward transfer method



#### MAIN FEATURES

LAN ports	16 Gigabit (RJ-45, auto MDI/MDI-X function)
Standard/Protocols supported	IEEE802.3af, IEEE802.3at, IEEE802.3x (full-duplex)/back pressure (half-duplex), IEEE802.3az
LAN ports PoE	16 Gigabit
Transfer method	Store and Forward
Exchange capacity	32Gb/s
MAC address	Auto-learning, auto-aging
Frame Filtering e Forward Rate	1488000pps max

#### GENERAL DATA

Supply voltage (VAC)	100-240V / 50-60Hz
Height (mm)	44
Width (mm)	440
Depth (mm)	205
Type of finish	Metallic
Colour	Black
Operating temperature (°C)	0-40
Operating humidity (%)	90 max



## IPSWR030A

### REPEATER, 3 POE GIGABIT PORTS



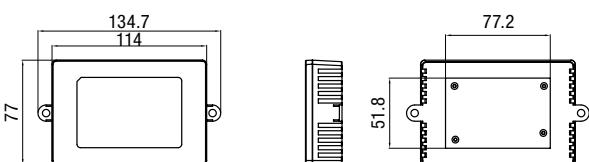
- Support the PoE standard IEEE802.3at and IEEE802.3af
- Supports IEEE 802.3x flow control for full-duplex mode and back-pressure for half-duplex mode
- 2 ports (PSE) to supply power to 2 PoE devices
- MAC address table with auto-learning and auto-aging functions
- Power supply via standard PoE cable (1 PD port)

#### MAIN FEATURES

LAN ports	3 PoE Gigabit [RJ-45, auto MDI/MDI-X function, 1 input (PD), 2 output (PSE - 30W max)]
Standard/Protocols supported	IEEE802.3af, IEEE802.3at, IEEE802.3x (full-duplex)/back pressure (half-duplex), IEEE802.3ab, IEEE802.3az
Transfer method	Store and forward
Exchange capacity	6Gb/s
MAC address	Auto-learning, auto-aging
Frame Filtering e Forward Rate	148800pps max

#### GENERAL DATA

Height (mm)	27
Width (mm)	134.7
Depth (mm)	114
Type of finish	Plastic
Colour	White
Operating temperature (°C)	0-40
Operating humidity (%)	90 max





# LICENSE PLATE READER CAMERAS

## VIDEO SURVEILLANCE

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The icons legend is on the back of this flyer cover.



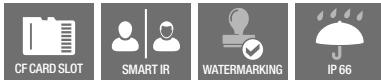
## LICENSE PLATE READER CAMERAS CAMERAS

### LPRCAM608A

#### ANPR FULL-HD IP CAMERA, 8MM, IR 2M, IP66



- OCR software for recognition of both front and rear license plates
- Reading accuracy greater than 95% with 30° angles (60° max)
- Sensor with high frame rate (60fps) and sensitivity, Global Shutter type
- Reading method "syntax free" without libraries but with neural network
- Magic Spot Light function
- Anti-glare function
- Anti-reflex function (anti-smeering o anti-blooming)
- Anti-dirty function
- Anti-shadow function
- Anti-overexposure function
- Virtual reconstruction of deteriorated characters
- Multi-Exposure function via pulsed illuminators
- Algorithm to eliminate symbols, emblems and advertising stickers
- Reading synchronism "free flow" type
- Compliance with specific rules: UNI 10772 A Class (Intelligent Transport System - Systems For The Processing Of Video Images For The Automatic Number Plate Recognition), EN62471:2008 (Photobiological safety)



#### ACCESSORIES

- BRK001 - Surface-mounting
- BRK002 - Surface-mount.+pole connection
- BRK003 - Ceiling bracket for LPR camera

#### MAIN FEATURES

Camera sensor	1/3" CMOS Global Shutter
Camera lens	8mm
Vehicle speed up to	40km/h (25mph)
Electronic shutter (s)	Auto
Sensitivity (lux)	0 (B/W, led IR ON)
IR filter	Mechanical
Video resolution (H x V - pixel)	1920x1080 (FULL-HD 1080p)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	MPEG4, JPEG
Frame rate	60fps
Protocols supported	TCP/IP, UDP, HTTP, RTP/RTSP, DHCP
Additional functions	SDK, can be integrated into Genetec and Milestone platforms
Users connected at the same time	4 (Live)
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Opera

#### FUNCTIONS

Main functions	Integrated OCR (free flow), double sensor, Magic Spot Light, UNI 10772 A Class and EN62471:2008 compliant
Motion detection (zones)	Yes
Digital effects	Anti-glare, Anti-reflex, Anti-dirty, Anti-shadow
Exposure control	Anti-overexposure, multi-exposure

#### CARATTERISTICHE HARDWARE

No. IR LEDs / Max. distance (m)	6 led high power / 10m
IP protection rating	IP66
Alarm Inputs/Outputs	2/1
Audio Inputs/Outputs	1/1 (G.711, G.723)
RS-485 control	Yes
LAN output type	Ethernet 10/100 Mbit/s
Support SD card (card not included)	CF card (12MB installed, 32GB max)

#### GENERAL DATA

Max absorption (W)	8W
DC supply voltage	12V
Height (mm)	250
Width (mm)	125
Depth (mm)	490
Weight (g)	3 kg
Type of finish	Die-cast aluminum
Housing type	Bullet
Colour	RAL 7035
Operating temperature (°C)	-25-50
Operating humidity (%)	95 max



**LPRCAM616A****ANPR FULL-HD IP CAMERA, 16MM, IR 2M, IP66**

- OCR software for recognition of both front and rear license plates
- Reading accuracy greater than 95% with 30° angles (60° max)
- Sensor with high frame rate (60fps) and sensitivity, Global Shutter type
- Reading method "syntax free" without libraries but with neural network
- Magic Spot Light function
- Anti-glare function
- Anti-reflex function (anti-smeering o anti-blooming)
- Anti-dirty function
- Anti-shadow function
- Anti-overexposure function
- Virtual reconstruction of deteriorated characters
- Multi-Exposure function via pulsed illuminators
- Algorithm to eliminate symbols, emblems and advertising stickers
- Reading synchronism "free flow" type
- Compliance with specific rules: UNI 10772 A Class (Intelligent Transport System - Systems For The Processing Of Video Images For The Automatic Number Plate Recognition), EN62471:2008 (Photobiological safety)

**ACCESSORIES**

- BRK001 - Surface-mounting
- BRK002 - Surface-mount.+pole connection
- BRK003 - Ceiling bracket for LPR camera

**MAIN FEATURES**

Camera sensor	1/3" CMOS Global Shutter
Camera lens	16mm
Vehicle speed up to	40km/h (25mph)
Electronic shutter (s)	Auto
Sensitivity (lux)	0 (B/W, led IR ON)
IR filter	Mechanical
Video resolution (H x V - pixel)	1920x1080 (FULL-HD 1080p)

**SOFTWARE/FIRMWARE SPECIFICATIONS**

Video compression	MPEG4, JPEG
Frame rate	60fps
Protocols supported	TCP/IP, UDP, HTTP, RTP/RTSP, DHCP
Additional functions	SDK, can be integrated into Genetec and Milestone platforms
Users connected at the same time	4 (Live)
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Opera

**FUNCTIONS**

Main functions	Integrated OCR (free flow), double sensor, Magic Spot Light, UNI 10772 A Class and EN62471:2008 compliant
Motion detection (zones)	Yes
Digital effects	Anti-glare, Anti-reflex, Anti-dirty, Anti-shadow
Exposure control	Anti-overexposure, multi-exposure

**CARATTERISTICHE HARDWARE**

No. IR LEDs / Max. distance (m)	6 led high power / 10m
IP protection rating	IP66
Alarm Inputs/Outputs	2/1
Audio Inputs/Outputs	1/1 (G.711, G.723)
RS-485 control	Yes
LAN output type	Ethernet 10/100 Mbit/s
Support SD card (card not included)	CF card (12MB installed, 32GB max)

**GENERAL DATA**

Max absorption (W)	8W
DC supply voltage	12V
Height (mm)	250
Width (mm)	125
Depth (mm)	490
Weight (g)	3 kg
Type of finish	Die-cast aluminum
Housing type	Bullet
Colour	RAL 7035
Operating temperature (°C)	-25-50
Operating humidity (%)	95 max





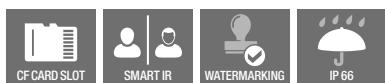
## LICENSE PLATE READER CAMERAS CAMERAS

### LPRCAM655A

#### ANPR FULL-HD IP CAMERA, 5-55MM, IR 10M, IP66



- OCR software for recognition of both front and rear license plates
- Reading accuracy greater than 95% with 30° angles (60° max)
- Sensor with high frame rate (60fps) and sensitivity, Global Shutter type
- Reading method "syntax free" without libraries but with neural network
- Magic Spot Light function
- Anti-glare function
- Anti-reflex function (anti-smeering o anti-blooming)
- Anti-dirty function
- Anti-shadow function
- Anti-overexposure function
- Virtual reconstruction of deteriorated characters
- Multi-Exposure function via pulsed illuminators
- Algorithm to eliminate symbols, emblems and advertising stickers
- Reading synchronism "free flow" type
- Compliance with specific rules: UNI 10772 A Class (Its Intelligent Transport System - Systems For The Processing Of Video Images For The Automatic Number Plate Recognition), EN62471:2008 (Photobiological safety)



#### MAIN FEATURES

Camera sensor	1/3" CMOS Global Shutter
Camera lens	5-55mm
Vehicle speed up to	40km/h (25mph)
Electronic shutter (s)	Auto
Sensitivity (lux)	0 (B/W, led IR ON)
IR filter	Mechanical
Video resolution (H x V - pixel)	1920x1080 (FULL-HD 1080p)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	MPEG4, JPEG
Frame rate	60fps
Protocols supported	TCP/IP, UDP, HTTP, RTP/RTSP, DHCP
Additional functions	Integrated OCR (free flow), double sensor, Magic Spot Light, UNI 10772 A Class and EN62471:2008 compliant
Users connected at the same time	4 (Live)
Remote viewer from browser	Internet Explorer, Firefox, Chrome, Opera

#### FUNCTIONS

Main functions	Integrated OCR (free flow), double sensor, Magic Spot Light, UNI 10772 A Class and EN62471:2008 compliant
Motion detection (zones)	Yes
Digital effects	Anti-glare, Anti-reflex, Anti-dirty, Anti-shadow
Exposure control	Anti-overexposure, multi-exposure

#### CARATTERISTICHE HARDWARE

No. IR LEDs / Max. distance (m)	6 led high power / 10m
IP protection rating	IP66
Alarm Inputs/Outputs	2/1
Audio Inputs/Outputs	1/1 (G.711, G.723)
RS-485 control	Yes
LAN output type	Ethernet 10/100 Mbit/s
Support SD card (card not included)	CF card (12MB installed, 32GB max)

#### GENERAL DATA

Max absorption (W)	8W
Supply voltage (VAC)	100-240V / 50-60Hz
Height (mm)	250
Width (mm)	125
Depth (mm)	580
Weight (g)	4.5 kg
Type of finish	Die-cast aluminum
Housing type	Bullet
Colour	RAL 7035
Operating temperature (°C)	-25-50
Operating humidity (%)	95 max

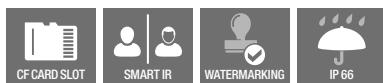
#### ACCESSORIES

- BRK001 - Surface-mounting
- BRK002 - Surface-mount.+pole connection
- BRK003 - Ceiling bracket for LPR camera



**LPRCAM750A****DUAL LANE ANPR CAMERA, 12-40MM, IR 25M**

- Software with triple OCR for license plates recognition
- OCR software for recognition of both front and rear license plates
- Reading accuracy greater than 95% with 30° angles (60° max)
- Sensor with high frame rate (60fps) and sensitivity, Global Shutter type
- Simultaneous recording of the license plate reading snapshot and of the context video stream, without interruption of the reading process
- Reading method "syntax free" without libraries but with neural network
- Magic Spot Light function
- Anti-glare function
- Anti-reflex function (anti-smeering or anti-blooming)
- Anti-dirty function
- Anti-shadow function
- Anti-overexposure function
- Virtual reconstruction of deteriorated characters
- Multi-Exposure function via pulsed illuminators
- Algorithm to eliminate symbols, emblems and advertising stickers
- Reading synchronism "free flow" type
- Compliance with specific rules: UNI 10772 A Class (ITS Intelligent Transport System - Systems For The Processing Of Video Images For The Automatic Number Plate Recognition), EN62471:2008 (Photobiological safety)

**ACCESSORIES**

- BRK001 - Surface-mounting
- BRK002 - Surface-mount.+pole connection
- BRK003 - Ceiling bracket for LPR camera

**MAIN FEATURES**

Camera sensor	1/1.8" CMOS Global Shutter Progressive Scan
Camera lens	12-40mm
Electronic shutter (s)	Auto
Video resolution (H x V - pixel)	2064x1544 (3.2MP)

**SOFTWARE/FIRMWARE SPECIFICATIONS**

Video compression	MPEG4, JPEG
Frame rate	60fps
Protocols supported	HTTPS, Milestone, RTP/RTSP, TCP/IP, UDP, DHCP, FTP, HTTP
Additional functions	SDK, can be integrated into Genetec and Milestone platforms
Remote viewer from browser	Internet Explorer

**FUNCTIONS**

Exposure control	Anti-overexposure, multi-exposure
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**CARATTERISTICHE HARDWARE**

No. IR LEDs / Max. distance (m)	12 led high power / 30m
IP protection rating	IP66
Alarm Inputs/Outputs	2/1
RS-485 control	Yes

LAN output type	Ethernet 10/100 Mbit/s
-----------------	------------------------

**GENERAL DATA**

Max absorption (W)	18W
Supply voltage (VAC)	100-240V / 50-60Hz
Height (mm)	122
Width (mm)	165
Depth (mm)	470
Weight (g)	3.2 kg
Type of finish	Die-cast aluminum
Housing type	Bullet
Colour	RAL 7035
Operating temperature (°C)	-40-65
Operating humidity (%)	95 max





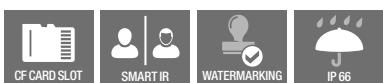
## LICENSE PLATE READER CAMERAS CAMERAS

### LPRCAM806A

#### IP ANPR CAMERA 5-55MM ILU-BIC CONTAINER



- OCR algorithm for the recognition of ILU-BIC codes of containers placed above, on the side, on the front and rear, both horizontal and vertical
- Field reading precision of type D1 (> 95%) with maximum angle of 30 ° horizontal and 20 ° vertical
- Sensor with high frame rate (60fps) and sensitivity, Global Shutter type
- Simultaneous recording of the license plate reading snapshot and of the context video stream, without interruption of the reading process
- Magic Spot Light function
- Anti-glare function
- Anti-reflex function (anti-smeering o anti-blooming)
- Anti-dirty function
- Anti-shadow function
- Anti-overexposure function t
- Multi-Exposure function via pulsed illuminators
- Algorithm to eliminate symbols, emblems and advertising stickers
- Reading synchronism "free flow" type
- Compliance with specific rules: EN62471:2008 (Photobiological safety)



#### MAIN FEATURES

Camera sensor	1/3" CMOS Global Shutter
Camera lens	5-55mm
Electronic shutter (s)	Auto
IR filter	Mechanical
Video resolution (H x V - pixel)	1920x1080 (FULL-HD 1080p)

#### SOFTWARE/FIRMWARE SPECIFICATIONS

Video compression	MPEG4, JPEG
Frame rate	60fps
Protocols supported	Milestone, RTP/RTSP, TCP/IP, UDP, DHCP, HTTP
Additional functions	SDK, can be integrated into Genetec and Milestone platforms
Remote viewer from browser	Internet Explorer

#### FUNCTIONS

Digital effects	Anti-glare, Anti-reflex, Anti-dirty, Anti-shadow
Exposure control	Anti-overexposure, multi-exposure

#### CARATTERISTICHE HARDWARE

No. IR LEDs / Max. distance (m)	14 led high power / 20m
IP protection rating	IP66
Alarm Inputs/Outputs	2/1
Audio Inputs/Outputs	1/1
LAN output type	Ethernet 10/100 Mbit/s

#### GENERAL DATA

Max absorption (W)	15W
Supply voltage (VAC)	100-240V / 50-60Hz
Height (mm)	122
Width (mm)	165
Depth (mm)	470
Weight (g)	4.5 kg
Type of finish	Die-cast aluminum
Housing type	Bullet
Colour	RAL 7035
Operating temperature (°C)	-25-50

#### ACCESSORIES

- BRK001 - Surface-mounting
- BRK002 - Surface-mount.+pole connection
- BRK003 - Ceiling bracket for LPR camera



**LPRCAM807A****IP ANPR CAMERA 5-55MM LIC.PLATES + HAZARD. GOODS**

- Triple OCR algorithm for the recognition of license plates and ADR tables (Kemler-Onu) for the transport of dangerous goods, both front and rear
- Reading accuracy greater than 100% with 60° angles max
- Sensor with high frame rate (60fps) and sensitivity, Global Shutter type
- Simultaneous recording of the license plate reading snapshot and of the context video stream, without interruption of the reading process
- Reading method "syntax free" without libraries but with neural network that allows the recognition of all types of fonts, also plates of special vehicles, motorcycles, foreign or off-axis
- Magic Spot Light function
- Anti-glare function
- Anti-reflex function (anti-smearing o anti-blooming)
- Anti-dirty function
- Anti-shadow function
- Anti-overexposure function
- Virtual reconstruction of deteriorated characters
- Multi-Exposure function via pulsed illuminators
- Algorithm to eliminate symbols, emblems and advertising stickers
- Reading synchronism "free flow" type
- Compliance with specific rules: UNI 10772 A Class (Its Intelligent Transport System - Systems For The Processing Of Video Images For The Automatic Number Plate Recognition), EN62471:2008 (Photobiological safety)

**ACCESSORIES**

- BRK001 - Surface-mounting
- BRK002 - Surface-mount.+pole connection
- BRK003 - Ceiling bracket for LPR camera

**MAIN FEATURES**

Camera sensor	1/3" CMOS Global Shutter
Camera lens	5-55mm
Electronic shutter (s)	Auto
IR filter	Mechanical
Video resolution (H x V - pixel)	1920x1080 (FULL-HD 1080p)

**SOFTWARE/FIRMWARE SPECIFICATIONS**

Video compression	MPEG4, JPEG
Frame rate	60fps
Protocols supported	Milestone, RTP/RTSP, TCP/IP, UDP, DHCP, FTP, HTTP
Additional functions	SDK, can be integrated into Genetec and Milestone platforms
Remote viewer from browser	Internet Explorer

**FUNCTIONS**

Digital effects	Anti-glare, Anti-reflex, Anti-dirty, Anti-shadow
Exposure control	Anti-overexposure, multi-exposure

**CARATTERISTICHE HARDWARE**

No. IR LEDs / Max. distance (m)	12 led high power / 20m
IP protection rating	IP66
Alarm Inputs/Outputs	2/1
RS-485 control	Yes
LAN output type	Ethernet 10/100 Mbit/s
Support SD card (card not included)	CF card (12MB installed, 32GB max)

**GENERAL DATA**

Max absorption (W)	10W
Supply voltage (VAC)	100-240V / 50-60Hz
Height (mm)	122
Width (mm)	165
Depth (mm)	470
Weight (g)	3 kg
Type of finish	Die-cast aluminum
Housing type	Bullet
Colour	RAL 7035
Operating temperature (°C)	-30-55
Operating humidity (%)	95 max





## LICENSE PLATE READER CAMERAS ACCESSORIES

### BRACKETS



**BRK001**

**SURFACE-MOUNTING ACCESSORY FOR CAMERAS LPRCAM**

Wall-mounting accessory for cameras LPRCAM608A, LPRCAM616A and LPRCAM655A.



**BRK002**

**SURFACE-MOUNT.+POLE JUNCTION ACC. FOR CAM.LPRCAM**

Wall-mounting accessory for cameras LPRCAM608A, LPRCAM616A and LPRCAM655A, complete with pole collar.



**BRK003**

**CEILING BRACKET FOR LPR CAMERA**

Ceiling-mounting accessory for cameras LPRCAM608A, LPRCAM616A and LPRCAM655A.



**POLE-LPR**

**POLE ADAPTER FOR NUMBER PLATE READER CAMERA**

### LICENSE PLATE READER CAMERAS

**MULTIPARK**

**SINGLE SW LIC. FOR PARK. MAN. FROM 10° LPR ONWARDS**



**PARK2**

**SW LICENSE FOR PARKING MANAGER 2 LPR CAMERAS**

**PARK3**

**SW LICENSE FOR PARKING MANAGER 3 LPR CAMERAS**

**PARK4**

**SW LICENSE FOR PARKING MANAGER 4 LPR CAMERAS**

**PARK9**

**SW LICENSE FOR PARKING MANAGER 9 LPR CAMERAS**

## HARDWARE AND SOFTWARE

**SPC-LPR01** IP SYSTEM ON PC BASE FOR 1 NUMBER PLATE READING ZONE

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**SPC-LPR02** IP SYSTEM ON PC BASE FOR 2 NUMBER PLATE READING ZONE

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**SPC-LPR03** IP SYSTEM ON PC BASE FOR 4 NUMBER PLATE READING ZONE

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**SWCPS8** LICENSE PLATE STATISTIC AND ARCHIVE SW FOR 8 LPRS

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**SWCPS16** LICENSE PLATE STATISTIC AND ARCHIVE SW FOR 16 LPRS

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**SWCPS2** LICENSE PLATE STATISTIC AND ARCHIVE SW FOR 2 LPRS

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**SWCPS25** LICENSE PLATE STATISTIC AND ARCHIVE SW FOR 25 LPRS

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**SWCPS36** LICENSE PLATE STATISTIC AND ARCHIVE SW FOR 36 LPRS

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**SWCPS4** LICENSE PLATE STATISTIC AND ARCHIVE SW FOR 4 LPRS

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**SWCPS49** LICENSE PLATE STATISTIC AND ARCHIVE SW FOR 49 LPRS

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# HARD DISKS

## VIDEO SURVEILLANCE



## HARD DISKS

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**WDSK324A** HARD DISK WITH 1 TB CAPACITY FOR DVR/NVR

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**WDSK325A** HARD DISK WITH 2 TB CAPACITY FOR DVR/NVR

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**WDSK327A** HARD DISK WITH 4 TB CAPACITY FOR DVR/NVR

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**WDSK328A** WD PURPLE HARD DISK, CAPACITY 6TB FOR CCTV

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**WDSK329A** WD PURPLE HARD DISK, CAPACITY 8TB FOR CCTV

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# WI-FI TRANSMISSION

## VIDEO SURVEILLANCE

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## WI-FI TRANSMISSION SELECTION GUIDE - 1 OF 2

### WI-FI PRODUCTS

WORK FREQUENCY		ARTICLE	DESCRIPTION	DEVICE TYPE	MAXIMUM TRANSMISSION DISTANCE(*)	BANDWIDTH LIMITATIONS	
<b>INTEGRATED ANTENNA</b>							
5 GHz		CPE115A	CPE 5GHZ, 3KM, SISO 802.11A/N, SINGLE POLARIZATION	CPE	3 Km	15 Mbps	
5 GHz		CPE135A	CPE 5GHZ, 3KM, MIMO 802.11A/N, DOUBLE POLARIZATION	CPE	3 Km	40 Mbps	
5 GHz		CPE155A	CPE 5GHZ, 3KM, MIMO 802.11A/N/AC, DOUBLE POLARIZATION	CPE	3 Km	50 Mbps	
5 GHz		PTP125A	POINT - POINT 5GHZ, 8KM, SISO 802.11A/N, SINGLE POLARIZATION	Point - Point	8 Km	70 Mbps	
5 GHz		PTP135A	POINT - POINT 5GHZ, 8KM, MIMO 802.11A/N, DOUBLE POLARIZATION	Point - Point	8 Km	190 Mbps	
5 GHz		PTP155A	POINT - POINT 5GHZ, 8KM, MIMO 802.11A/N, DOUBLE POLARIZATION	Point - Point	8 Km	500 Mbps	
<b>REPEATER 2 RADIO</b>							
5 GHz		RPT125A	REPEATER BRIDGE, 8KM, SISO 802.11A/N, DOUBLE POLARIZATION	Repeater Bridge	8 Km	70 Mbps	
<b>1 RADIO</b>							
5 GHz		BASE105A	BASE 1RADIO 5GHZ, 25KM, SISO 802.11A/N, SINGLE POLARIZATION1	Base Station	25 Km (min 8 Km)	70 Mbps	
5 GHz		BASE105EA	BASE 1RADIO 5GHZ, 25KM, SISO 802.11A/N, SINGLE POLARIZATION1	Base Station	25 Km (min 8 Km)	70 Mbps	
5 GHz		BASE135A	BASE 1RADIO 5GHZ, 25KM, MIMO 802.11A/N, DOUBLE POLARIZATION2	Base Station	25 Km (min 8 Km)	190 Mbps	
5 GHz		BASE135EA	BASE 1RADIO 5GHZ, 25KM, MIMO 802.11A/N, DOUBLE POLARIZATION2	Base Station	25 Km (min 8 Km)	100 Mbps	
5 GHz		BASE155A	BASE 1RADIO 5GHZ, 25KM, MIMO 802.11A/N, DOUBLE POLARIZATION2	Base Station	25 Km (min 8 Km)	500 Mbps	
5 GHz		BASE155EA	BASE 1RADIO 5GHZ, 25KM, MIMO 802.11A/N, DOUBLE POLARIZATION2	Base Station	25 Km (min 8 Km)	500 Mbps	

(\*) The actual transmission distance depends on factors such as environmental conditions, type of antennas used, system configuration, etc.

(1) The transmission distance in point-to-multipoint installations depends on the system configuration

	RF PROTOCOL	POLARIZATION TYPE	ANTENNA	RADIO N°	POWER SUPPLY	ETHERNET PORT (LAN)	GRADE IP	ESD PROTECTION
	IEEE 802.11a/n SISO	Single polarization (23dB/11°)	Integrated	1	POE 12/24V VDC (external power supply 110-230 VAC)	Gigabit	IP68	No
	IEEE 802.11a/n MIMO	Double polarization (23dB/11°)	Integrated	1	POE 12/24V VDC (external power supply 110-230 VAC)	Gigabit	IP68	Yes
	IEEE 802.11a/n/ac MIMO	Double polarization (23dB/11°)	Integrated	1	POE 12/24V VDC (external power supply 110-230 VAC)	10/100 Mbps	IP68	Yes
	IEEE 802.11a/n SISO	Single polarization (23dB/11°)	Integrated	1	POE802.3af/at 48VDC (external power supply 110-230 VAC)	10/100 Mbps	IP68	Yes
	IEEE 802.11a/n MIMO	Double polarization (26dB/11°)	Integrated	1	POE802.3af/at 48VDC (external power supply 110-230 VAC)	Gigabit	IP68	Yes
	IEEE 802.11a/n/ac MIMO	Double polarization (26dB/11°)	Integrated	1	POE802.3af/at 48VDC (external power supply 110-230 VAC)	Gigabit	IP68	Yes
	IEEE 802.11a/n SISO	Double polarization (23dB/9°)	Integrated + 1 N-type connector for antenna	2	POE802.3af/at 48VDC (external power supply 110-230 VAC)	Gigabit	IP68, vandal resistant	Yes
	IEEE 802.11a/n SISO	Single polarization	1 N-type connector for antenna	1	POE802.3af/at 48VDC (external power supply 110-230 VAC)	10/100 Mbps	IP68, vandal resistant	Yes
	IEEE 802.11a/n SISO	Single polarization	1 N-type connector for antenna	1	POE 12/24V VDC (external power supply 110-230 VAC)	10/100 Mbps	IP67	No
	IEEE 802.11a/n MIMO	Double polarization	2 N-type connectors for antenna	1	POE802.3af/at 48VDC (external power supply 110-230 VAC)	Gigabit	IP68, vandal resistant	Yes
	IEEE 802.11a/n MIMO	Double polarization	2 N-type connectors for antenna	1	POE 12/24V VDC (external power supply 110-230 VAC)	10/100 Mbps	IP67	No
	IEEE 802.11a/n/ac MIMO	Double polarization	2 N-type connectors for antenna	1	POE802.3af/at 48VDC (external power supply 110-230 VAC)	Gigabit	IP68, vandal resistant	Yes
	IEEE 802.11a/n/ac MIMO	Double polarization	2 N-type connectors for antenna	1	POE 12/24V VDC (external power supply 110-230 VAC)	10/100 Mbps	IP67	No



## WI-FI TRANSMISSION SELECTION GUIDE - 1 OF 2

### WI-FI PRODUCTS

WORK FREQUENCY		ARTICLE	DESCRIPTION	DEVICE TYPE	MAXIMUM TRANSMISSION DISTANCE(*)	BANDWIDTH LIMITATIONS	
<b>2 RADIO</b>							
5 GHz		BASE205A	BASE 2RADIO 5GHZ, SISO 802.11A/N, SINGLE POLARIZATION2	Base Station	(1)	140 Mbps	
5 GHz		BASE205EA	BASE 2RADIO 5GHZ, SISO 802.11A/N, SINGLE POLARIZATION2	Base Station	(1)	100 Mbps	
5 GHz		BASE235A	BASE 2RADIO 5GHZ, MIMO 802.11A/N, DOUBLE POLARIZATION4	Base Station	(1)	350 Mbps	
5 GHz		BASE235EA	BASE 2RADIO 5GHZ, MIMO 802.11A/N, DOUBLE POLARIZATION4	Base Station	(1)	100 Mbps	
<b>3 RADIO</b>							
5 GHz		BASE305A	BASE 3RADIO 5GHZ, SISO 802.11A/N, SINGLE POLARIZATION3	Base Station	(1)	140 Mbps	
5 GHz		BASE305EA	BASE 3RADIO 5GHZ, SISO 802.11A/N, SINGLE POLARIZATION3	Base Station	(1)	100 Mbps	

(\*) The actual transmission distance depends on factors such as environmental conditions, type of antennas used, system configuration, etc.  
(1) The transmission distance in point-to-multipoint installations depends on the system configuration

	RF PROTOCOL	POLARIZATION TYPE	ANTENNA	RADIO N°	POWER SUPPLY	ETHERNET PORT (LAN)	GRADE IP	ESD PROTECTION
	IEEE 802.11a/n SISO	Single polarization	2 N-type connectors for antenna	2	POE802.3af/at 48VDC (external power supply 110-230 VAC)	Gigabit	IP68, vandal resistant	Yes
	IEEE 802.11a/n SISO	Single polarization	2 N-type connectors for antenna	2	POE 12/24V VDC (external power supply 110-230 VAC)	10/100 Mbps	IP67	No
	IEEE 802.11a/n MIMO	Double polarization	4 N-type connectors for antenna	2	POE802.3af/at 48VDC (external power supply 110-230 VAC)	Gigabit	IP68, vandal resistant	Yes
	IEEE 802.11a/n MIMO	Double polarization	4 N-type connectors for antenna	2	POE 12/24V VDC (external power supply 110-230 VAC)	10/100 Mbps	IP67	No
	IEEE 802.11a/n SISO	Single polarization	3 N-type connectors for antenna	3	POE802.3af/at 48VDC (external power supply 110-230 VAC)	Gigabit	IP68, vandal resistant	Yes
	IEEE 802.11a/n SISO	Single polarization	3 N-type connectors for antenna	3	POE 12/24V VDC (external power supply 110-230 VAC)	10/100 Mbps	IP67	No



## WI-FI TRANSMISSION INTEGRATED ANTENNAS

CPE115A

CPE 5GHZ,3KM,SISO 802/11A/N, SINGLE POL.



- Hyperlan 5 GHz CPE, standard IEEE802.11a/n SISO - TDMA
- 1 radio module, Integrated single polarization antenna, high gain 23 dBi
- Transmission distance of up to 3 km
- Gigabit LAN interface
- Fixed technology: direct RF connection (+3dB Extra RX Signal)
- Available frequency band: 15 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: bridging/routing, firewall, QoS
- IP68

On request available the article "LICENSE" which implements the point-to-multipoint function in the CPEs.

### MAIN FEATURES

Max absorption (W)	4,5W
Type of power supply	POE 12-24Vdc (external power supply 110-230Vac)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85GHz
Bandwidth limitations	15Mb/s
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 16 QAM, 64 QAM, TDMA
Maximum transmission power	23dBm
Sensitivity@datarate	-93dBm @ 20MHz-MCS0, -68dBm @ 20MHz-MCS7
Coverage angle	11°
Transmission power management	Function TPC ERC/DEC(99)23
Channels management	DFS(Dynamic Frequency Selection), auto channel, selection, radar free, CEPT ERC 70-03
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge, RSTP/STP, Bridge firewall
Routing	RIP, OSPF, BGP, MPLS, MME, HWMP+ 802.1q, multiple VLAN interface, inter VLAN routing, QinQ, nesting VLAN
VLAN	IPSEC, EoIP, PPTP, VLAN, L2TP, PPPoE, IPIP, oVPN, SSTP
VPN	SNMP V1 client, MIB II, Bridge MIB
SNMP	WMM, 802.1p, IP ToS RFC791, CBQ Queueing; L7 traffic inspection; Hierarchical HTB; PCQ, RED, SFQ, FIFO queue with burst
QoS (p.1)	Firewall P2P limitation, Mac-address filtering L7 filtering, Radius server authentication(AAA)
Security	

### GENERAL DATA

Height (mm)	320
Width (mm)	320
Depth (mm)	65
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70



**CPE135A**

CPE 5GHZ,3KM,MIMO 802.11A/N, DUAL POL.



- Hyperlan 5 GHz CPE, standard IEEE802.11a/n MIMO - TDMA
- 1 radio module, Integrated dual polarization antenna, high gain 23 dBi
- Transmission distance of up to 3 km
- Gigabit LAN interface
- Integrated surge arrester on Ethernet side
- Fixed technology: direct RF connection (+3dB Extra RX Signal)
- Available frequency band: 40 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: bridging/routing, firewall, QoS
- IP68

**On request available the article "LICENSE" which implements the point-to-multipoint function in the CPEs.**

**MAIN FEATURES**

Max absorption (W)	4,5W
Type of power supply	POE 12-24Vdc (external power supply 110-230Vac)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85GHz
Bandwidth limitations	40Mb/s
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 16 QAM, 64 QAM, TDMA
Maximum transmission power	30dBm
Sensitivity@datarate	-96dBm@20MHz-MCS0, -78dBm@20MHz-MCS7
Coverage angle	11°
Transmission power management	Function TPC ERC/DEC(99)23
Channels management	DFS(Dynamic Frequency Selection), auto channel, selection, radar free, CEPT ERC 70-03
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge, RSTP/STP, Bridge firewall
Routing	RIP, OSPF, BGP, MPLS, MME, HWMP+ 802.1q, multiple VLAN interface, inter VLAN routing, QinQ, nesting VLAN
VLAN	802.1q, multiple VLAN interface, inter VLAN routing, QinQ, nesting VLAN
VPN	IPSEC, EoIP, PPTP, VLAN, L2TP, PPPoE, IPIP, oVPN, SSTP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	WMM, 802.1p, IP ToS RFC791, CBQ Queuing; L7 traffic inspection; Hierarchical HTB; PCQ, RED, SFQ, FIFO queue with burst
Security	Firewall P2P limitation, Mac-address filtering, L7 filtering, Radius server authentication(AAA)

**GENERAL DATA**

Height (mm)	320
Width (mm)	320
Depth (mm)	65
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70





## WI-FI TRANSMISSION INTEGRATED ANTENNAS

CPE155A

CPE 5GHZ,3KM,MIMO 802.11A/N/AC, DUAL POL.



- Hyperlan 5 GHz CPE, standard IEEE802.11a/n MIMO - TDMA
- 1 radio module, Integrated dual polarization antenna, high gain 23 dBi
- Transmission distance of up to 3 km
- 10/100 Mb/s LAN interface
- Integrated surge arrestor on Ethernet side
- Available frequency band: 50 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: bridging/routing, firewall, QoS
- IP68

On request available the article "LICENSE" which implements the point-to-multipoint function in the CPEs.

### MAIN FEATURES

Max absorption (W)	4,5W
Type of power supply	POE 12-24Vdc (external power supply 110-230Vac)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85GHz
Bandwidth limitations	50Mb/s
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 16 QAM, 64 QAM, TDMA
Maximum transmission power	30dBm
Sensitivity@datarate	-96dBm@20MHz-MCS0, -72dBm@20MHz-MCS7
Coverage angle	11°
Transmission power management	Function TPC ERC/DEC(99)23
Channels management	DFS(Dynamic Frequency Selection), auto channel, selection, radar free, CEPT ERC 70-03
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge, RSTP/STP, Bridge firewall
Routing	RIP, OSPF, BGP, MPLS, MME, HWMP+ 802.1q, multiple VLAN interface, inter VLAN routing, QinQ, nesting VLAN
VLAN	802.1q, multiple VLAN interface, inter VLAN routing, QinQ, nesting VLAN
VPN	IPSEC, EoIP, PPTP, VLAN, L2TP, PPPoE, IPIP, oVPN, SSTP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	WMM, 802.1p, IP ToS RFC791, CBQ Queuing; L7 traffic inspection; Hierarchical HTB; PCQ, RED, SFQ, FIFO queue with burst
Security	Firewall P2P limitation, Mac-address filtering L7 filtering, Radius server authentication(AAA)

### GENERAL DATA

Height (mm)	320
Width (mm)	320
Depth (mm)	65
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70



**PTP125A**

TRANSMITTER 5GHZ,8KM,SISO 802.11A/N, SINGLE POL.



- Multifunction Hyperlan 5 GHz Point-to-Point system, standard IEEE802.11a/n SISO - TDMA
- 1 radio module, integrated dual polarization antenna, high gain 23 dBi
- Transmission distance of up to 8 km
- 10/100 Mb/s LAN interface
- Integrated surge arrestor on Ethernet side
- Available frequency band: 70 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: dynamic Mesh, static WDS Mesh, bridging, routing, firewall, QoS
- IP68

**On request available the article "LICENSE" which implements the point-to-multipoint function in the CPEs.**

MAIN FEATURES	
Max absorption (W)	11W
Type of power supply	POE 802.3af, at 48Vdc (external power supply 110-230Vac)
Wireless security	Filtrage Mac, WPA2(EAP, AES, TKIP), DFS, TPC
Operating frequency	4.90-5.85GHz
Bandwidth limitations	70Mb/s
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 16 QAM, 64 QAM, TDMA
Maximum transmission power	25dBm
Sensitivity@datarate	-97dBm@20MHz-MCS0, -77dBm@20MHz MCS7
Coverage angle	11°
Transmission power management	Function TPC
Channels management	DFS(Dynamic Frequency Selection), radar free
Management mode	Telnet, client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge interfaces, MAC Address table monitored in real time, RSTP Rapid Spanning Tree Protocol
VLAN	802.1q, multiple VLAN interface, inter VLAN routing
VPN	IPSEC, EoIP, PPtP, VLAN, L2TP, PPPoE, IPIP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	802.1p(Layer2 traffic priority), IPToS, CBQ queuing, layer 4-7 traffic shaping, hierarchical HTB QoS system with bursts
QoS (p.2)	PCQ, RED, SFQ, FIFO queue, CIR, MIR Contention ratios
Security	Firewall P2P limitation, Mac-address filtering IP address & protocol filtering, Radius server Authentication(AAA)
GENERAL DATA	
Height (mm)	340
Width (mm)	340
Depth (mm)	90
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70





## WI-FI TRANSMISSION INTEGRATED ANTENNAS

### PTP135A

TRANSMITTER 5GHZ,8KM,MIMO 802.11A/N, DUAL POL.



- Multifunction Hyperlan 5 GHz Point-to-Point system, standard IEEE802.11a/n MIMO - TDMA
- 1 radio module, integrated dual polarization antenna, high gain 26 dBi
- Transmission distance of up to 8 km
- Gigabit LAN interface
- Integrated surge arrester on Ethernet side
- Available frequency band: 190 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: dynamic Mesh, static WDS Mesh, bridging, routing, firewall, QoS
- IP68

On request available the article "LICENSE" which implements the point-to-multipoint function in the CPEs.

MAIN FEATURES	
Max absorption (W)	11W
Type of power supply	POE 802.3af, at 48Vdc (external power supply 110-230Vac)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85GHz
Bandwidth limitations	190Mb/s
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 16 QAM, 64 QA, TDMA
Maximum transmission power	25dBm
Sensitivity@datarate	-97dBm@20MHz-MCS0, -77dBm@20MHz MCS7
Coverage angle	11°
Transmission power management	Function TPC
Channels management	DFS(Dynamic Frequency Selection), auto channel selection, radar free
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge interfaces, MAC Address table monitored in real time; RSTP Rapid Spanning Tree Protocol
VLAN	802.1q, multiple VLAN interface, inter VLAN routing
VPN	IPSEC, EoIP, PPtP, VLAN, L2TP, PPPoE, IPIP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	802.1p(Layer2 traffic priority), IPToS, CBQ queuing, layer 4-7 traffic shaping, hierarchical HTB QoS system with bursts
QoS (p.2)	PCQ, RED, SFQ, FIFO queue; CIR, MIR Contention ratios, dynamic client rate equalizing
Security	Firewall P2P limitation, Mac-address filtering L7 filtering, Radius server authentication(AAA)
GENERAL DATA	
Height (mm)	340
Width (mm)	340
Depth (mm)	90
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70



**PTP155A**

TRANSMITTER 5GHZ,8KM,MIMO 802.11A/N, DUAL POL.



- Multifunction Hyperlan 5 GHz Point-to-Point system, standard IEEE802.11a/n/ac MIMO - TDMA
- 1 radio module, integrated dual polarization antenna, high gain 26 dBi
- Transmission distance of up to 8 km
- Integrated surge arrestor on Ethernet side
- Available frequency band: 500 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: dynamic Mesh, static WDS Mesh, bridging, routing, firewall, QoS
- IP68

**On request available the article "LICENSE" which implements the point-to-multipoint function in the CPEs.**

MAIN FEATURES	
Max absorption (W)	11W
Type of power supply	POE 802.3af, at 48Vdc (external power supply 110-230Vac)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85GHz
Bandwidth limitations	500Mb/s
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 16 QAM, 64 QA, TDMA
Maximum transmission power	30dBm
Sensitivity@datarate	-96dBm@20MHz-MCS0, -72dBm@20MHz-MCS7
Coverage angle	11°
Transmission power management	Function TPC
Channels management	DFS(Dynamic Frequency Selection), auto channel selection, radar free
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge interfaces, MAC Address table monitored in real time; RSTP Rapid Spanning Tree Protocol
VLAN	802.1q, multiple VLAN interface, inter VLAN routing
VPN	IPSEC, EoIP, PPtP, VLAN, L2TP, PPPoE, IPIP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	802.1p(Layer2 traffic priority), IPToS, CBQ queuing, layer 4-7 traffic shaping, hierarchical HTB QoS system with bursts
QoS (p.2)	QoS system with bursts, PCQ, RED, SFQ, FIFO queue; CIR, MIR Contention ratios, dynamic client rate equalizing
Security	Firewall P2P limitation, Mac-address filtering L7 filtering, Radius server authentication(AAA)
GENERAL DATA	
Height (mm)	340
Width (mm)	340
Depth (mm)	90
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70





WI-FI TRANSMISSION

# REPEATERS DOUBLE RADIO MODULE

**RPT125A**

BRIDGE REPEATER, 8KM, SISO 802.11A/N



- Multifunction Hyperlan 5 GHz Repeater Bridge system, standard IEEE802.11a/n SISO - TDMA
- 2 radio modules, integrated dual polarization antenna, high gain 23 dBi, 1 N-type connector for antenna
- Transmission distance of up to 8 km
- Gigabit LAN interface
- Integrated surge arrestor on Ethernet side
- Available frequency band: 70 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: pure bridge, Mesh (static or dynamic), routing, firewall, QoS
- IP68 vandal resistant

## MAIN FEATURES

Max absorption (W)	11W
Type of power supply	POE 802.3af, at 48Vdc (external power supply 110-230Vac)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85GHz
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 16 QAM, 64 QAM, TDMA
Maximum transmission power	25dBm
Sensitivity@datarate	-97dBm@20MHz-MCS0, -77dBm@20MHz MCS7
Coverage angle	9°
Transmission power management	Function TPC
Channels management	DFS(Dynamic Frequency Selection), auto channel, selection, radar free
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge interfaces, Layer 2 Filtering and QoS, RSTP/STP Spanning Tree Protocol
VLAN	802.1q, multiple VLAN interface, inter VLAN routing
VPN	IPSEC, EoIP, PPtP, VLAN, L2TP, PPPoE, IPIP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	802.1p(Layer2 traffic priority), IPToS, CBQ queuing, layer 4-7 traffic shaping, hierarchical HTB
QoS (p.2)	QoS system with bursts, PCQ, RED, SFQ, FIFO queue, CIR, MIR Contention ratios
Security	Firewall P2P limitation, Mac-address filtering L7 filtering, Radius server authentication(AAA)

## GENERAL DATA

Height (mm)	470
Width (mm)	470
Depth (mm)	95
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70

## ACCESSORIES

- SETM090A - 90° MIMO sector antenna, dual polarization
- SETM120A - 120° MIMO sector antenna, dual polarization
- PAND010A - 10° directional panel antenna, dual polarization
- PARD060A - 6° parabolic antenna, dual polarization
- PARD040A - 4° parabolic antenna, dual polarization
- CAN001A - Antenna cable, length 1 m, N-type connectors
- CAN002A - Antenna cable, length 2 m, N-type connectors
- CAN003A - Antenna cable, length 3 m, N-type connectors
- SAN001A - Gas discharge tube surge arrester, N-type connector



# WI-FI TRANSMISSION BASES 1 RADIO MODULE

## BASE105A

1RADIO 5GHZ, 25KM, SISO 802.11A/N, POL. SING. 1



- Hyperlan multifunction 5 GHz Point-to-Point/Point-to-Multipoint Base station, standard IEEE802.11a/n SISO - TDMA
- 1 radio module, 1 N-type connector for antenna
- Transmission distance of up to 25 km
- 10/100 Mbit/s LAN interface
- Integrated surge arrestor on Ethernet side
- Available frequency band: 70 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: Dynamic Mesh, Static WDS Mesh, Bridging, Routing, firewall, QoS
- IP68, vandal resistant

### MAIN FEATURES

Max absorption (W)	11W
Type of power supply	POE 802.3af, at 48Vdc (external power supply 110-230Vac)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85GHz
Bandwidth limitations	70Mb/s
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 16 QAM, 64 QA, TDMA
Maximum transmission power	25dBm
Sensitivity@datarate	-97dBm@20MHz-MCS0, -77dBm@20MHz MCS7
Transmission power management	Function TPC
Channels management	DFS(Dynamic Frequency Selection), auto channel, selection, radar free
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge interfaces, MAC Address table monitored in real time; RSTP Rapid Spanning Tree Protocol
VLAN	802.1q, multiple VLAN interface, inter VLAN routing
VPN	IPSEC, EoIP, PPtP, VLAN, L2TP, PPPoE, IPIP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	802.1p(Layer2 traffic priority), IPToS RFC791(Layer3 traffic priority), CBQ queuing Layer 4-7 traffic shaping, hierarchical HTB
QoS (p.2)	QoS system with bursts, PCQ, RED, SFQ, FIFO queue; CIR, MIR contention ratios, dynamic client rate equalizing
Security	Firewall P2P limitation, Mac-address filtering L7 filtering, Radius server authentication(AAA)

### GENERAL DATA

Height (mm)	280
Width (mm)	190
Depth (mm)	110
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70

### ACCESSORIES

- SET090A - 90° sector antenna, vertical polarization
- SET120A - 120° sector antenna, vertical polarization
- OMNI360A - 360° omnidirectional antenna, vertical polarization
- OMNI360A - 360° omnidirectional antenna, vertical polarization
- PAR060A - 6° parabolic antenna, single polarization
- PAR040A - 4° parabolic antenna, single polarization
- CAN001A - Antenna cable, length 1 m, N-type connectors
- CAN002A - Antenna cable, length 2 m, N-type connectors
- CAN003A - Antenna cable, length 3 m, N-type connectors
- SAN001A - Gas discharge tube surge arrester, N-type connector





## WI-FI TRANSMISSION BASES 1 RADIO MODULE

### BASE105EA

1RADIO 5GHZ, 25KM, SISO 802.11A/N, SING. POL. 1



- Hyperlan multifunction 5 GHz Point-to-Point/Point-to-Multipoint Base station, standard IEEE802.11a/n SISO - TDMA
- 1 radio module, 1 N-type connector for antenna
- Transmission distance of up to 25 km
- 10/100 Mbit/s LAN interface
- Available frequency band: 70 Mb/s max
- OFDM or DSSS radio type with NLOS capacity
- Operating modes: Dynamic Mesh, Static WDS Mesh, Bridging, Routing, firewall, QoS
- IP67

#### MAIN FEATURES

Max absorption (W)	11W
Type of power supply	POE 12-24Vdc (external power supply 110-230Vac)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85GHz
Bandwidth limitations	70Mb/s
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 16 QAM, 64 QA, TDMA
Maximum transmission power	21dBm
Sensitivity@datarate	-95dBm @ 20MHz-MCS0, -77dBm @ 20MHz-MCS7
Transmission power management	Function TPC
Channels management	DFS(Dynamic Frequency Selection), auto channel, selection, radar free
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge interfaces, MAC Address table monitored in real time; RSTP Rapid Spanning Tree Protocol
VLAN	802.1q, multiple VLAN interface, inter VLAN routing
VPN	IPSEC, EoIP, PPtP, VLAN, L2TP, PPPoE, IPIP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	802.1p(Layer2 traffic priority), IPToS RFC791(Layer3 traffic priority), CBQ queuing Layer 4-7 traffic shaping, hierarchical HTB
QoS (p.2)	QoS system with bursts, PCQ, RED, SFQ, FIFO queue; CIR, MIR contention ratios, dynamic client rate equalizing
Security	Firewall P2P limitation, Mac-address filtering L7 filtering, Radius server authentication(AAA)

#### GENERAL DATA

Height (mm)	260
Width (mm)	200
Depth (mm)	90
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70

#### ACCESSORIES

- SET090A - 90° sector antenna, vertical polarization
- SET120A - 120° sector antenna, vertical polarization
- OMNI360A - 360° omnidirectional antenna, vertical polarization
- OMNI360A - 360° omnidirectional antenna, vertical polarization
- PAR060A - 6° parabolic antenna, single polarization
- PAR040A - 4° parabolic antenna, single polarization
- CAN001A - Antenna cable, length 1 m, N-type connectors
- CAN002A - Antenna cable, length 2 m, N-type connectors
- CAN003A - Antenna cable, length 3 m, N-type connectors
- SAN001A - Gas discharge tube surge arrester, N-type connector



**BASE135A**

## 1RADIO 5GHZ, 25KM, MIMO 802.11A/N, DUAL POL. 2



- Hyperlan multifunction 5 GHz Point-to-Point/Point-to-Multipoint Base Station, standard IEEE802.11a/n MIMO - TDMA
- 1 radio module, 2 N-type connectors for antenna
- Transmission distance of up to 25 km
- Gigabit LAN interface
- Integrated surge arrestor on Ethernet side
- Available frequency band: 190 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: Dynamic Mesh, Static WDS Mesh, Bridging, Routing, firewall, QoS
- IP68, vandal resistant

**MAIN FEATURES**

Max absorption (W)	11 W
Type of power supply	POE802.3af/at 48VDC (external power supply 110-230 VAC)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85 GHz
Modulation DSSS	DBPSK, DQPSK, CCK - TDMA
Modulation OFDM	BPSK, QPSK, 16 QAM, 64 QA - TDMA
Maximum transmission power	25 dBm
Sensitivity@datarate	-97dBm@20MHz-MCS0, -77dBm@20MHz-MCS7
Transmission power management	Function TPC
Channels management	DFS (Dynamic Frequency Selection), Auto Channel, Selection, Radar free
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge interfaces, MAC Address table monitored in real time; RSTP Rapid Spanning Tree Protocol
VLAN	802.1q, Multiple VLAN interface, inter VLAN routing
VPN	IPSEC, EoIP, PPtP, VLAN, L2TP, PPPoE, IPIP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	802.1p (Layer2 traffic priority), IPToS RFC791 (Layer3 traffic priority), CBQ Queuing Layer 4-7 traffic shaping, Hierarchical HTB
QoS (p.2)	QoS system with bursts PCQ, RED, SFQ, FIFO queue; CIR, MIR Contention ratios, dynamic client rate equalizing
Security	Firewall con P2P limitation, Mac-address filtering e L7 filtering; Radius server authentication (AAA)

**GENERAL DATA**

Height (mm)	280
Width (mm)	190
Depth (mm)	110
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40 - +70

**ACCESSORIES**

- SETM090A - 90° MIMO sector antenna, dual polarization
- SETM120A - 120° MIMO sector antenna, dual polarization
- PAND010A - 10° directional panel antenna, dual polarization
- PARD060A - 6° parabolic antenna, dual polarization
- PARD040A - 4° parabolic antenna, dual polarization
- CAN001A - Antenna cable, length 1 m, N-type connectors
- CAN002A - Antenna cable, length 2 m, N-type connectors
- CAN003A - Antenna cable, length 3 m, N-type connectors
- SAN001A - Gas discharge tube surge arrester, N-type connector





## WI-FI TRANSMISSION BASES 1 RADIO MODULE

### BASE135EA

1RADIO 5GHZ, 25KM, MIMO 802.11A/N, DUAL POL. 2



- Hyperlan multifunction 5 GHz Point-to-Point/Point-to-Multipoint Base station, standard IEEE802.11a/n SISO - TDMA
- 1 radio module, 2 N-type connectors for antenna, dual polarization
- Transmission distance of up to 25 km
- 10/100 Mbit/s LAN interface
- Available frequency band: 100 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: Dynamic Mesh, Static WDS Mesh, Bridging, Routing, firewall, QoS

#### MAIN FEATURES

Max absorption (W)	11W
Type of power supply	POE 12-24Vdc (external power supply 110-230Vac)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85GHz
Bandwidth limitations	100Mb/s
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 16 QAM, 64 QA, TDMA
Maximum transmission power	25dBm
Sensitivity@datarate	-97dBm@20MHz-MCS0, -77dBm@20MHz MCS7
Transmission power management	Function TPC
Channels management	DFS(Dynamic Frequency Selection), auto channel, selection, radar free
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge interfaces, MAC Address table monitored in real time; RSTP Rapid Spanning Tree Protocol
VLAN	802.1q, multiple VLAN interface, inter VLAN routing
VPN	IPSEC, EoIP, PPtP, VLAN, L2TP, PPPoE, IPIP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	802.1p(Layer2 traffic priority), IPToS RFC791(Layer3 traffic priority), CBQ queuing Layer 4-7 traffic shaping, hierarchical HTB
QoS (p.2)	QoS system with bursts, PCQ, RED, SFQ, FIFO queue; CIR, MIR contention ratios, dynamic client rate equalizing
Security	Firewall P2P limitation, Mac-address filtering L7 filtering, Radius server authentication(AAA)

#### GENERAL DATA

Height (mm)	260
Width (mm)	200
Depth (mm)	90
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70

#### ACCESSORIES

- SETM090A - 90° MIMO sector antenna, dual polarization
- SETM120A - 120° MIMO sector antenna, dual polarization
- PAND010A - 10° directional panel antenna, dual polarization
- PARD060A - 6° parabolic antenna, dual polarization
- PARD040A - 4° parabolic antenna, dual polarization
- CAN001A - Antenna cable, length 1 m, N-type connectors
- CAN002A - Antenna cable, length 2 m, N-type connectors
- CAN003A - Antenna cable, length 3 m, N-type connectors
- SAN001A - Gas discharge tube surge arrester, N-type connector



**BASE155A**

## 1RADIO 5GHZ, 25KM, MIMO 802.11A/N, DUAL POL. 2



- Hyperlan multifunction 5 GHz Point-to-Point/Point-to-Multipoint Base station, standard IEEE802.11a/n/ac MIMO - TDMA
- 1 radio module, 2 N-type connectors for antenna
- Transmission distance of up to 25 km
- Gigabit LAN interface
- Integrated surge arrestor on Ethernet side
- Available frequency band: 500 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: Dynamic Mesh, Static WDS Mesh, Bridging, Routing, firewall, QoS
- IP68 vandal resistant

**MAIN FEATURES**

Max absorption (W)	11W
Type of power supply	POE 802.3af, at 48Vdc (external power supply 110-230Vac)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85GHz
Bandwidth limitations	500Mb/s
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 256 QAM, TDMA
Maximum transmission power	30dBm
Sensitivity@datarate	-92dBm @ 20MHz-MCS0, -72dBm @ 20MHz-MCS9
Transmission power management	Function TPC
Channels management	DFS(Dynamic Frequency Selection), auto channel, selection, radar free
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge interfaces, MAC Address table monitored in real time; RSTP Rapid Spanning Tree Protocol
VLAN	802.1q, multiple VLAN interface, inter VLAN routing
VPN	IPSEC, EoIP, PPtP, VLAN, L2TP, PPPoE, IPIP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	802.1p(Layer2 traffic priority), IPToS RFC791(Layer3 traffic priority), CBQ queuing Layer 4-7 traffic shaping, hierarchical HTB
QoS (p.2)	QoS system with bursts, PCQ, RED, SFQ, FIFO queue; CIR, MIR contention ratios, dynamic client rate equalizing
Security	Firewall P2P limitation, Mac-address filtering L7 filtering, Radius server authentication(AAA)

**GENERAL DATA**

Height (mm)	280
Width (mm)	190
Depth (mm)	110
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70

**ACCESSORIES**

- SETM090A - 90° MIMO sector antenna, dual polarization
- SETM120A - 120° MIMO sector antenna, dual polarization
- PAND010A - 10° directional panel antenna, dual polarization
- PARD060A - 6° parabolic antenna, dual polarization
- PARD040A - 4° parabolic antenna, dual polarization
- CAN001A - Antenna cable, length 1 m, N-type connectors
- CAN002A - Antenna cable, length 2 m, N-type connectors
- CAN003A - Antenna cable, length 3 m, N-type connectors
- SAN001A - Gas discharge tube surge arrester, N-type connector





## WI-FI TRANSMISSION BASES 1 RADIO MODULE

### BASE155EA

1RADIO 5GHZ, 25KM, MIMO 802.11A/N, DUAL POL. 2



- Hyperlan multifunction 5 GHz Point-to-Point/Point-to-Multipoint Base station, standard IEEE802.11a/n/ac SISO - TDMA
- 1 radio module, 2 N-type connectors for antenna, dual polarization
- Transmission distance of up to 25 km
- 10/100 Mbit/s LAN interface
- Available frequency band: 500 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: Dynamic Mesh, Static WDS Mesh, Bridging, Routing, firewall, QoS
- IP67

#### MAIN FEATURES

Max absorption (W)	11W
Type of power supply	POE 12-24Vdc (external power supply 110-230Vac)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85GHz
Bandwidth limitations	500Mb/s
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 256 QAM, TDMA
Maximum transmission power	30dBm
Sensitivity@datarate	-92dBm @ 20MHz-MCS0, -72dBm @ 20MHz-MCS9
Transmission power management	Function TPC
Channels management	DFS(Dynamic Frequency Selection), auto channel, selection, radar free
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge interfaces, MAC Address table monitored in real time; RSTP Rapid Spanning Tree Protocol
VLAN	802.1q, multiple VLAN interface, inter VLAN routing
VPN	IPSEC, EoIP, PPtP, VLAN, L2TP, PPPoE, IPIP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	802.1p(Layer2 traffic priority), IPToS RFC791(Layer3 traffic priority), CBQ queuing Layer 4-7 traffic shaping, hierarchical HTB
QoS (p.2)	QoS system with bursts, PCQ, RED, SFQ, FIFO queue; CIR, MIR contention ratios, dynamic client rate equalizing
Security	Firewall P2P limitation, Mac-address filtering L7 filtering, Radius server authentication(AAA)

#### GENERAL DATA

Height (mm)	260
Width (mm)	200
Depth (mm)	90
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70

#### ACCESSORIES

- SETM090A - 90° MIMO sector antenna, dual polarization
- SETM120A - 120° MIMO sector antenna, dual polarization
- PAND010A - 10° directional panel antenna, dual polarization
- PARD060A - 6° parabolic antenna, dual polarization
- PARD040A - 4° parabolic antenna, dual polarization
- CAN001A - Antenna cable, length 1 m, N-type connectors
- CAN002A - Antenna cable, length 2 m, N-type connectors
- CAN003A - Antenna cable, length 3 m, N-type connectors
- SAN001A - Gas discharge tube surge arrester, N-type connector



## WI-FI TRANSMISSION BASES 2 RADIO MODULES

### BASE205A

2RADIO 5GHZ,SISO 802.11A/N, SING. POL. 2



- Hyperlan multifunction 5 GHz Point-to-Point/Point-to-Multipoint Base station, standard IEEE802.11a/n SISO - TDMA
- 2 radio modules, 2 N-type connectors for antenna, single polarization
- Gigabit LAN interface
- Integrated surge arrestor on Ethernet side
- Available frequency band: 140 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: Dynamic Mesh, Static WDS Mesh, Bridging, Routing, firewall, QoS
- IP68, vandal resistant

#### MAIN FEATURES

Max absorption (W)	11W
Type of power supply	POE 802.3af, at 48Vdc (external power supply 110-230Vac)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85GHz
Bandwidth limitations	140Mb/s
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 16 QAM, 64 QA, TDMA
Maximum transmission power	25dBm
Sensitivity@datarate	-97dBm@20MHz-MCS0, -77dBm@20MHz MCS7
Transmission power management	Function TPC
Channels management	DFS(Dynamic Frequency Selection), auto channel, selection, radar free
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge interfaces, MAC Address table monitored in real time; RSTP Rapid Spanning Tree Protocol
VLAN	802.1q, multiple VLAN interface, inter VLAN routing
VPN	IPSEC, EoIP, PPtP, VLAN, L2TP, PPPoE, IPIP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	802.1p(Layer2 traffic priority), IPToS RFC791(Layer3 traffic priority), CBQ queuing Layer 4-7 traffic shaping, hierarchical HTB
QoS (p.2)	QoS system with bursts, PCQ, RED, SFQ, FIFO queue; CIR, MIR contention ratios, dynamic client rate equalizing
Security	Firewall P2P limitation, Mac-address filtering L7 filtering, Radius server authentication(AAA)

#### GENERAL DATA

Height (mm)	280
Width (mm)	190
Depth (mm)	110
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70

#### ACCESSORIES

- SET090A - 90° sector antenna, vertical polarization
- SET120A - 120° sector antenna, vertical polarization
- OMNI360A - 360° omnidirectional antenna, vertical polarization
- OMNI360A - 360° omnidirectional antenna, vertical polarization
- PARS060A - 6° parabolic antenna, single polarization
- PARS040A - 4° parabolic antenna, single polarization
- CAN001A - Antenna cable, length 1 m, N-type connectors
- CAN002A - Antenna cable, length 2 m, N-type connectors
- CAN003A - Antenna cable, length 3 m, N-type connectors
- SAN001A - Gas discharge tube surge arrestor, N-type connector





## WI-FI TRANSMISSION BASES 2 RADIO MODULES

### BASE205EA

2RADIO 5GHZ, SISO 802.11A/N, SING. POL. 2



- Hyperlan multifunction 5 GHz Point-to-Point/Point-to-Multipoint Base station, standard IEEE802.11a/n SISO - TDMA
- 2 radio modules, 2 N-type connectors for antenna, single polarization
- 10/100 Mb/s LAN interface
- Available frequency band: 100 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: Dynamic Mesh, Static WDS Mesh, Bridging, Routing, firewall, QoS
- IP67

#### MAIN FEATURES

Max absorption (W)	11W
Type of power supply	POE 12-24Vdc (external power supply 110-230Vac)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85GHz
Bandwidth limitations	100Mb/s
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 16 QAM, 64 QA, TDMA
Maximum transmission power	21dBm
Sensitivity@datarate	-95dBm @ 20MHz-MCS0, -77dBm @ 20MHz-MCS7
Transmission power management	Function TPC
Channels management	DFS(Dynamic Frequency Selection), auto channel, selection, radar free
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge interfaces, MAC Address table monitored in real time; RSTP Rapid Spanning Tree Protocol
VLAN	802.1q, multiple VLAN interface, inter VLAN routing
VPN	IPSEC, EoIP, PPtP, VLAN, L2TP, PPPoE, IPIP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	802.1p(Layer2 traffic priority), IPToS RFC791(Layer3 traffic priority), CBQ queuing Layer 4-7 traffic shaping, hierarchical HTB
QoS (p.2)	QoS system with bursts, PCQ, RED, SFQ, FIFO queue; CIR, MIR contention ratios, dynamic client rate equalizing
Security	Firewall P2P limitation, Mac-address filtering L7 filtering, Radius server authentication(AAA)

#### GENERAL DATA

Height (mm)	260
Width (mm)	200
Depth (mm)	90
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70

#### ACCESSORIES

- SET090A - 90° sector antenna, vertical polarization
- SET120A - 120° sector antenna, vertical polarization
- OMNI360A - 360° omnidirectional antenna, vertical polarization
- OMNI360A - 360° omnidirectional antenna, vertical polarization
- PAR060A - 6° parabolic antenna, single polarization
- PAR040A - 4° parabolic antenna, single polarization
- CAN001A - Antenna cable, length 1 m, N-type connectors
- CAN002A - Antenna cable, length 2 m, N-type connectors
- CAN003A - Antenna cable, length 3 m, N-type connectors
- SAN001A - Gas discharge tube surge arrester, N-type connector



## BASE235A

### 2RADIO 5GHZ, MIMO 802.11A/N, DUAL. POL. 4



- Hyperlan multifunction 5 GHz Point-to-Point/Point-to-Multipoint Base station, standard IEEE802.11a/n MIMO - TDMA
- 2 radio modules, 4 N-type connectors for antenna, dual polarization
- Gigabit LAN interface
- Integrated surge arrestor on Ethernet side
- Available frequency band: 350 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: Dynamic Mesh, Static WDS Mesh, Bridging, Routing, firewall, QoS
- IP68 vandal resistant

MAIN FEATURES	
Max absorption (W)	11W
Type of power supply	POE 802.3af, at 48Vdc (external power supply 110-230Vac)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85GHz
Bandwidth limitations	350Mb/s
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 16 QAM, 64 QA, TDMA
Maximum transmission power	25dBm
Sensitivity@datarate	-97dBm@20MHz-MCS0, -77dBm@20MHz MCS7
Transmission power management	Function TPC
Channels management	DFS(Dynamic Frequency Selection), auto channel, selection, radar free
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge interfaces, MAC Address table monitored in real time; RSTP Rapid Spanning Tree Protocol
VLAN	802.1q, multiple VLAN interface, inter VLAN routing
VPN	IPSEC, EoIP, PPtP, VLAN, L2TP, PPPoE, IPIP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	802.1p(Layer2 traffic priority), IPToS RFC791(Layer3 traffic priority), CBQ queuing Layer 4-7 traffic shaping, hierarchical HTB
QoS (p.2)	QoS system with bursts, PCQ, RED, SFQ, FIFO queue; CIR, MIR contention ratios, dynamic client rate equalizing
Security	Firewall P2P limitation, Mac-address filtering L7 filtering, Radius server authentication(AAA)
GENERAL DATA	
Height (mm)	280
Width (mm)	190
Depth (mm)	110
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70

## ACCESSORIES

- SETM090A - 90° MIMO sector antenna, dual polarization
- SETM120A - 120° MIMO sector antenna, dual polarization
- PAND010A - 10° directional panel antenna, dual polarization
- PARD060A - 6° parabolic antenna, dual polarization
- PARD040A - 4° parabolic antenna, dual polarization
- CAN001A - Antenna cable, length 1 m, N-type connectors
- CAN002A - Antenna cable, length 2 m, N-type connectors
- CAN003A - Antenna cable, length 3 m, N-type connectors
- SAN001A - Gas discharge tube surge arrestor, N-type connector





## WI-FI TRANSMISSION BASES 2 RADIO MODULES

### BASE235EA

2RADIO 5GHZ, MIMO 802.11A/N, DUAL. POL. 4



- Hyperlan multifunction 5 GHz Point-to-Point/Point-to-Multipoint Base station, standard IEEE802.11a/n MIMO - TDMA
- 2 radio modules, 4 N-type connectors for antenna, dual polarization
- 10/100 Mb/s LAN interface
- Available frequency band: 100 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: Dynamic Mesh, Static WDS Mesh, Bridging, Routing, firewall, QoS
- IP67

#### MAIN FEATURES

Max absorption (W)	11W
Type of power supply	POE 12-24Vdc (external power supply 110-230Vac)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85GHz
Bandwidth limitations	100Mb/s
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 16 QAM, 64 QA, TDMA
Maximum transmission power	25dBm
Sensitivity@datarate	-97dBm@20MHz-MCS0, -77dBm@20MHz MCS7
Transmission power management	Function TPC
Channels management	DFS(Dynamic Frequency Selection), auto channel, selection, radar free
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge interfaces, MAC Address table monitored in real time; RSTP Rapid Spanning Tree Protocol
VLAN	802.1q, multiple VLAN interface, inter VLAN routing
VPN	IPSEC, EoIP, PPtP, VLAN, L2TP, PPPoE, IPIP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	802.1p(Layer2 traffic priority), IPToS RFC791(Layer3 traffic priority), CBQ queuing Layer 4-7 traffic shaping, hierarchical HTB
QoS (p.2)	QoS system with bursts, PCQ, RED, SFQ, FIFO queue; CIR, MIR contention ratios, dynamic client rate equalizing
Security	Firewall P2P limitation, Mac-address filtering L7 filtering, Radius server authentication(AAA)

#### GENERAL DATA

Height (mm)	260
Width (mm)	200
Depth (mm)	90
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70

#### ACCESSORIES

- SETM090A - 90° MIMO sector antenna, dual polarization
- SETM120A - 120° MIMO sector antenna, dual polarization
- PAND010A - 10° directional panel antenna, dual polarization
- PARD060A - 6° parabolic antenna, dual polarization
- PARD040A - 4° parabolic antenna, dual polarization
- CAN001A - Antenna cable, length 1 m, N-type connectors
- CAN002A - Antenna cable, length 2 m, N-type connectors
- CAN003A - Antenna cable, length 3 m, N-type connectors
- SAN001A - Gas discharge tube surge arrestor, N-type connector



## WI-FI TRANSMISSION BASES 3 RADIO MODULES

### BASE305A

3RADIO 5GHZ, SISO 802.11A/N, SING. POL. 3



- Hyperlan multifunction 5 GHz Point-to-Point/Point-to-Multipoint Base station, standard IEEE802.11a/n SISO - TDMA
- 3 radio modules, 3 N-type connectors for antenna, single polarization
- Gigabit LAN interface
- Integrated surge arrestor on Ethernet side
- Available frequency band: 140 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: Dynamic Mesh, Static WDS Mesh, Bridging, Routing, firewall, QoS
- IP68, vandal resistant

#### MAIN FEATURES

Max absorption (W)	11W
Type of power supply	POE 802.3af, at 48Vdc (external power supply 110-230Vac)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85GHz
Bandwidth limitations	140Mb/s
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 16 QAM, 64 QA, TDMA
Maximum transmission power	25dBm
Sensitivity@datarate	-97dBm@20MHz-MCS0, -77dBm@20MHz MCS7
Transmission power management	Function TPC
Channels management	DFS(Dynamic Frequency Selection), auto channel, selection, radar free
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge interfaces, MAC Address table monitored in real time; RSTP Rapid Spanning Tree Protocol
VLAN	802.1q, multiple VLAN interface, inter VLAN routing
VPN	IPSEC, EoIP, PPtP, VLAN, L2TP, PPPoE, IPIP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	802.1p(Layer2 traffic priority), IPToS RFC791(Layer3 traffic priority), CBQ queuing Layer 4-7 traffic shaping, hierarchical HTB
QoS (p.2)	QoS system with bursts, PCQ, RED, SFQ, FIFO queue; CIR, MIR contention ratios, dynamic client rate equalizing
Security	Firewall P2P limitation, Mac-address filtering L7 filtering, Radius server authentication(AAA)

#### GENERAL DATA

Height (mm)	280
Width (mm)	190
Depth (mm)	110
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70

#### ACCESSORIES

- SET090A - 90° sector antenna, vertical polarization
- SET120A - 120° sector antenna, vertical polarization
- OMNI360A - 360° omnidirectional antenna, vertical polarization
- OMNI360A - 360° omnidirectional antenna, vertical polarization
- PARS060A - 6° parabolic antenna, single polarization
- PARS040A - 4° parabolic antenna, single polarization
- CAN001A - Antenna cable, length 1 m, N-type connectors
- CAN002A - Antenna cable, length 2 m, N-type connectors
- CAN003A - Antenna cable, length 3 m, N-type connectors
- SAN001A - Gas discharge tube surge arrester, N-type connector





## WI-FI TRANSMISSION BASES 3 RADIO MODULES

### BASE305EA

3RADIO 5GHZ, SISO 802.11A/N, SING. POL. 3



- Hyperlan multifunction 5 GHz Point-to-Point/Point-to-Multipoint Base station, standard IEEE802.11a/n SISO - TDMA
- 3 radio modules, 3 N-type connectors for antenna, single polarization
- 10/100 Mb/s LAN interface
- Available frequency band: 100 Mb/s max
- OFDM or DSSS radio type with NLOS capability
- Operating modes: Dynamic Mesh, Static WDS Mesh, Bridging, Routing, firewall, QoS
- IP67

#### MAIN FEATURES

Max absorption (W)	11W
Type of power supply	POE 12-24Vdc (external power supply 110-230Vac)
Wireless security	Mac-filtering, WEP 64/128bit, WPA/WPA2 aes-ccm/tkip PSK/EAP, Radius Auth, Management Frame Encryption
Operating frequency	4.90-5.85GHz
Bandwidth limitations	100Mb/s
Modulation DSSS	DBPSK, DQPSK, CCK TDMA
Modulation OFDM	BPSK, QPSK, 16 QAM, 64 QA, TDMA
Maximum transmission power	25dBm
Sensitivity@datarate	-97dBm@20MHz-MCS0, -77dBm@20MHz MCS7
Transmission power management	Function TPC
Channels management	DFS (Dynamic Frequency Selection), auto channel, selection, radar free
Management mode	Telnet client, Telnet server, MAC Telnet server, SSH, SSH on GUI, HTTP
Bridge	Multiple bridge interfaces, MAC Address table monitored in real time; RSTP Rapid Spanning Tree Protocol
VLAN	802.1q, multiple VLAN interface, inter VLAN routing
VPN	IPSEC, EoIP, PPtP, VLAN, L2TP, PPPoE, IPIP
SNMP	SNMP V1 client, MIB II, Bridge MIB
QoS (p.1)	802.1p(Layer2 traffic priority), IPToS RFC791(Layer3 traffic priority), CBQ queuing Layer 4-7 traffic shaping, hierarchical HTB
QoS (p.2)	QoS system with bursts, PCQ, RED, SFQ, FIFO queue; CIR, MIR contention ratios, dynamic client rate equalizing
Security	Firewall P2P limitation, Mac-address filtering L7 filtering, Radius server authentication (AAA)

#### GENERAL DATA

Height (mm)	260
Width (mm)	200
Depth (mm)	90
Type of finish	Die-cast aluminum
Operating temperature (°C)	-40-70

#### ACCESSORIES

- SET090A - 90° sector antenna, vertical polarization
- SET120A - 120° sector antenna, vertical polarization
- OMNI360A - 360° omnidirectional antenna, vertical polarization
- OMNI360A - 360° omnidirectional antenna, vertical polarization
- PAR060A - 6° parabolic antenna, single polarization
- PAR040A - 4° parabolic antenna, single polarization
- CAN001A - Antenna cable, length 1 m, N-type connectors
- CAN002A - Antenna cable, length 2 m, N-type connectors
- CAN003A - Antenna cable, length 3 m, N-type connectors
- SAN001A - Gas discharge tube surge arrester, N-type connector



# ANTENNAS AND ACCESSORIES

**SET090A****90° SECTOR ANTENNA, VERTICAL POL., 5GHZ**

5 GHz sector antenna, horizontal aperture 90°, vertical aperture 7°, gain 17 dBi, maximum power 100W, vertical linear polarisation, impedance 50 Ohm, wind resistance up to 160 km/h, female N-type connector, operating temperature -45°C to +65°C, dimensions (W x H x D) 175 x 470 x 60 mm.

**SET120A****120° SECTOR ANTENNA, VERTICAL POL., 5GHZ**

5 GHz sectorial antenna, horizontal aperture 120°, vertical aperture 7°, gain 16 dBi, maximum power 100W, linear/vertical polarization, impedance 50 ohms, resistant to winds up to 160 km/h, female N-type connector, operating temperature range -45°C to +65°C, dimensions (L x H x D) 175 x 470 x 60 mm.

**OMNI360A****360° OMNIDIRECTIONAL ANTENNA, VERTICAL POL., 5GHZ**

5 GHz omnidirectional antenna, horizontal aperture 360°, vertical aperture 7°, gain 12 dBi, maximum power 100W, linear/vertical polarization, impedance 50 ohms, resistant to winds up to 160 km/h, female N-type connector, operating temperature range -45°C to +65°C, dimensions (Ø x H) 20 x 700 mm.

**SETM090A****90° SECTOR ANTENNA, VERTICAL POL., 5GHZ**

5 GHz sector antenna, horizontal aperture 90°, vertical aperture 7°, gain 17 dBi, maximum power 100W, vertical linear polarisation, impedance 50 Ohm, wind resistance up to 160 km/h, female N-type connector, operating temperature -45°C to +65°C, dimensions (W x H x D) 175 x 470 x 60 mm.

**SETM120A****120° SECTOR ANTENNA, VERTICAL POL., 5GHZ**

5 GHz sectorial antenna, horizontal aperture 120°, vertical aperture 7°, gain 16 dBi, maximum power 100W, linear/vertical polarization, impedance 50 ohms, resistant to winds up to 160 km/h, female N-type connector, operating temperature range -45°C to +65°C, dimensions (L x H x D) 175 x 470 x 60 mm.

**PANS010A****10° DIR. PANEL ANTENNA, SINGLE POL., 5GHZ**

5 GHz directional panel antenna, horizontal aperture 10°, vertical aperture 10°, gain 23 dBi, maximum power 100W, linear/vertical/horizontal polarization, impedance 50 ohms, resistant to winds up to 160 km/h, female N-type connector, operating temperature range -45°C to +65°C, dimensions (L x H x D) 338 x 338 x 43 mm.

**PAND010A****10° DIR. PANEL ANTENNA, DUAL POL., 5GHZ**

5 GHz directional panel antenna, horizontal aperture 10°, vertical aperture 10°, gain 23 dBi, maximum power 100W, linear/vertical/horizontal polarization, impedance 50 ohms, resistant to winds up to 160 km/h, female N-type connector, operating temperature range -45°C to +65°C, dimensions (L x H x D) 338 x 338 x 43 mm.



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WI-FI TRANSMISSION  
ANTENNAS AND ACCESSORIES

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**PARS060A** **6° PARABOLIC ANTENNA, SINGLE POL., 5GHZ**  
5 GHz parabolic antenna, horizontal aperture 6°, vertical aperture 6°, gain 28 dBi, maximum power 100W, linear/vertical/horizontal polarization, impedance 50 ohms, resistant to winds up to 200 km/h, female N-type connector, operating temperature range -45°C to +65°C, diameter 648 mm.



**PARD060A** **6° PARABOLIC ANTENNA, DUAL POL., 5GHZ**  
5 GHz parabolic antenna, horizontal aperture 6°, vertical aperture 6°, gain 28 dBi, maximum power 100W, linear/vertical/horizontal polarization, impedance 50 ohms, resistant to winds up to 200 km/h, female N-type connector, operating temperature range -45°C to +65°C, diameter 648 mm.

**PARS040A** **4° PARABOLIC ANTENNA, SINGLE POL., 5GHZ**  
5 GHz parabolic antenna, horizontal aperture 4°, vertical aperture 4°, gain 32 dBi, maximum power 100W, linear/vertical/horizontal polarization, impedance 50 ohms, resistant to winds up to 200 km/h, female N-type connector, operating temperature range -45°C to +65°C, diameter 900 mm.

**PARD040A** **4° PARABOLIC ANTENNA, DUAL POL., 5GHZ**  
5 GHz parabolic antenna, horizontal aperture 4°, vertical aperture 4°, gain 32 dBi, maximum power 100W, linear/vertical/horizontal polarization, impedance 50 ohms, resistant to winds up to 200 km/h, female N-type connector, operating temperature range -45°C to +65°C, diameter 900 mm.

**CAN001A** **ANTENNA CABLE, LENGTH 1M**  
RF cable with N-type connectors, length 1m.



**CAN002A** **ANTENNA CABLE, LENGTH 2M**  
RF cable with N-type connectors, length 2m.

**CAN003A** **ANTENNA CABLE, LENGTH 3M**  
RF cable with N-type connectors, length 3m.



**SAN001A** **SPARK GAP**  
Gas discharge tube surge arrester, N-type connectors, frequency 0-6 GHz.





# ACCESSORIES

## VIDEO SURVEILLANCE



## ACCESSORIES

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**1195**

**TRANSFORMER 60V 0-230/0-12-24V**

Transformer applicable to din rail (5 modules), input 230 VAC / 50-60 Hz, output 12/24 VAC with terminal strip.

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**43015**

**POWER SUPPLY FOR DIN RAIL, INPUT 230VAC, OUTPUT 12VDC/1.5A**

Power supply applicable to din rail (3 modules), input from 110 to 240 VAC/50-60 Hz, output 12 VDC / 1.5 A with screw terminals.

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**43025**

**POWER SUPPLY FOR DIN RAIL, INPUT 230VAC, OUTPUT 12VDC/2.5A**

Power supply unit for DIN rail mounting (6 modules), 110-254 Vac/50-60 Hz input, 12 Vdc/2.5A output with terminal board.

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**43082**

**POWER SUPPLY, JACK CONNECTOR, 230VAC/12VDC, 1.33A**

Plug power supply, input from 100 to 240 VAC/50-60 Hz, output 12 VDC/1.33A with jack connector.

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**43082UK**

**POWER SUPPLY, JACK CONN., OUTPUT 12VDC/1.5A, UK PLUG**

Plug power supply, input from 100 to 240 VAC/50-60 Hz, output 12 VDC/1.5A with jack connector, UK plug.

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**CONAL01A**

**POW.SUPP.CONNECTOR. MALE JACK TERMINAL**

Connector for power supply, 2 screw terminals, male jack type connector.

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**CONAL02A**

**POWER SUPPLY CONNECTOR. FEMALE TERMINALS/JACK**

Connector for power supply, 2 screw terminals, female jack type connector.

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**43970**

**FEMALE JACK CONNECTOR**

Female jack connector, body of nickel-plated brass, cable clamp to crimp.

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**43971**

**MALE JACK CONNECTOR**

Male jack connector, body of nickel-plated brass, cable clamp to crimp, diameter of central pin: 2.1 mm.

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**SCON752B****ACTIVE CONVERTER FROM RS232 TO RS485**

Active converter from RS232 to RS485 (PTZ and Dome cameras), 1 DB9-type connector for RS232 input, 1 screw terminal for RS485 output (32 ID max), half duplex, baud rate auto-configuration, 5 VDC power supply (power supply included), plastic case, grey colour.

**IPEOC001A****LAN/COAX AND VICE VERSA CONVERTER**

Active converter from LAN 10/100 Base/T to coaxial cable RG59 75 ohm and viceversa for signal transmission of IP equipment, included the PoE power supply. Maximum distance 125 metres, RJ45 connector for LAN, BNC connector for coaxial cable, power supply 48 VDC (power supply included). Tx dimensions (W x H x D): 130 x 27 x 67 mm. Rx dimensions (W x H x D): 117 x 33 x 75 mm.

**AHUTP610C****AHD PASSIVE TRANSCEIVERS KIT FOR UTP CABLE**

Passive kit for the conversion of the AHD video signal on the cable CAT5/UTP and vice-versa, BNC connectors for video signal input/output, screw terminals for connecting the cable CAT5/UTP, maximum distance 200 m (HD) or 100 m (FULL-HD), plastic cases, black colour.

**AHUTP611C****AHD PASSIVE TRANSCEIVER FOR UTP CABLE**

Passive transmitter/receiver of AHD video signal on CAT5/UTP cable and vice-versa, BNC-type connectors for video signal input/output, terminal screws for the connection of UTP/CAT 5 cable, maximum distance 200 m (HD) or 100 m (FULL-HD), plastic case, black colour.

**AHUTP61RC****AHD/TVI/CVI ACTIVE RECEIVER FOR UTP CABLE**

Active AHD/TVI/CVI video signal receiver on Cat5e/Cat6 UTP cable, BNC-type connector for video signal output, screw terminals for connection of UTP cable and power supply, maximum distance 600 meters (AHD/CVI)/500 meters (TVI) @ 1080p with active video signal transmitter art. AHUTP61TC, plastic case, black colour, power supply included.

**AHUTP61TC****AHD/TVI/CVI ACTIVE TRANSMITTER FOR UTP CABLE**

Active AHD/TVI/CVI video signal transmitter on Cat5e/Cat6 UTP cable, BNC-type connector for video signal input, screw terminals for connection of UTP cable and power supply, maximum distance 600 meters (AHD/CVI)/500 meters (TVI) @ 1080p with active video signal receiver art. AHUTP61RC, plastic case, black colour, power supply included.

**43202****PROTECTION AGAINST ELECTROSTATIC DISCHARGE ON COAX CABLE**

Protection against electrostatic discharge on the coaxial cable, metal case.

**43208****PROT. ELECTROSTATIC DISCHARGE ON COAX CABLE, DATA AND POWER**

Protection against electrostatic discharge on the coaxial cable, on the data cable and on the low-voltage power cable, black metal case.

**43212****PASSIVE CORRECTION FILTER FOR GROUND LOOP**

Passive filter corrector, eliminates the interference caused by different earth/ground potentials (ground loop).



## ACCESSORIES

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**4555/A****VIDEO DISTRIBUTOR, 1 INPUT, 4 OUTPUTS, 12V DC POWER SUPPLY**

Video distributor, 1 input, 4 outputs, 12v dc power supply, din plastic cladding (4 modules), white colour scheme.

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**43610****ULTRA-SENSITIVE MICROPHONE, 45 CM OF CABLE, 12VDC**

Ultra-sensitive microphone with 45 cm of cable, 12 VDC power supply.

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**43660****BNC CONNECTOR TO BE WELDED AND SCREWED**

BNC connector to be welded and screwed, body of nickel-plated brass with teflon insulation, appropriate for cable item 43751-RG/59U (box of 50 units).

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**43661****BNC CONNECTOR TO BE CRIMPED**

BNC connector to be crimped, body of nickel-plated brass with teflon insulation, appropriate for cable item 43751-RG59/U (box of 50 units).

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**43662****ADAPTER FROM SOCKET BNC TO SOCKET BNC**

Adapter from socket BNC to socket BNC, body of nickel-plated brass with polyester insulation, appropriate for connectors art. 43660, 43661, 43663 and art. 43665 (box of 10 units).

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**43663****BNC CONNECTOR TO BE CRIMPED**

BNC connector to be crimped, body of nickel-plated brass with teflon insulation, appropriate for cable RG174 and art. 43754 (box of 50 units).

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**43665****BNC PLUG WITH RIGHT-ANGLE BRACKET TO BE SCREWED**

BNC plug with right-angle bracket to be screwed, body of nickel-plated brass with polypropylene insulation, appropriate for cable art. 43751-RG59/U (box of 50 units).

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**43668****T ADAPTER FROM BNC PLUG TO DUAL BNC SOCKET**

T adapter from BNC plug to dual BNC socket, body of nickel-plated brass with polyester insulation, appropriate for connectors art. 43660, 43661, 43663 and art. 43665 (box of 10 units).

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**43950****ADAPTER FOR RCA MALE CONNECTOR TO BNC FEMALE CONNECTOR**

Adapter for RCA male connector to BNC female connector, body of nickel-plated brass with PTFE insulation.

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- 43960** **RCA CONNECTOR TO BE WELDED**  
RCA male connector, body of nickel-plated brass with bakelite insulation, terminals to be welded, cable clamp to crimp.



- 43751** **RG59/U COAXIAL CABLE, IMPEDANCE 75 OHM**  
RG59/U coaxial cable, impedance 75 ohm, copper shielding, solid polythene insulation, PVC sheath, black colour, suitable for medium lengths (300 m max at colour), 6 mm diameter.



- 43752** **RG11 COAXIAL CABLE, IMPEDANCE 75 OHM**  
RG11 coaxial cable, impedance 75 ohm, 0.6 mm wire, copper shielding, solid polythene insulation, PVC sheath, black colour, suitable for long lengths (600 m max at colour).



- 43753** **RG59-MICRO COAXIAL CABLE, IMPEDANCE 75 OHM**  
RG59-MICRO coaxial cable, impedance 75 ohm, copper shielding, solid polythene insulation, PVC sheath, black colour, 4 mm diameter.



- 43754** **RG174 MINIATURISED COAXIAL CABLE + 4 CONDUCTORS**  
RG174 miniaturised coaxial cable + 4 conductors (2x0.5 mm<sup>2</sup>, 2x0.25 mm<sup>2</sup>), impedance 75 ohm, conductor of 0.64 mm, copper screen, cellular polyethylene insulation, PVC sheath, black colour, appropriate for short lengths.



- 43670** **GRIPPER FOR BNC CONNECTORS**  
Gripper for BNC connectors, funicular action, appropriate for connectors art. 43661.



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 <p><b>STARVIS/CMOS:</b> ultra-sensitive CMOS image sensor with backlighting, capable of capturing images in difficult light conditions. The STARVIS sensor allows you to view perfect images, even in low light.</p>	 <p><b>SMARTFOCUS:</b> function providing automatic image focus, without the need for manual intervention.</p>	 <p><b>DEFOG:</b> function which uses an algorithm to offer a clean image, even in less than perfect climatic conditions such as fog or heavy rain.</p>
 <p><b>VIDEO ANALYTICS:</b> technology allowing IP cameras to digitally analyse the captured images for certain complex behaviour in the scene under surveillance.</p>	 <p><b>PRIVACY MASK:</b> function used to obscure zones that should not be shown.</p>	 <p><b>CORRIDOR MODE (AISLE):</b> function used to rotate the recording angle by 90° or 270°, useful in the case of cameras mounted in corridors. Eliminates side walls from the frame, leaving space for background details.</p>
 <p><b>COAXIAL CONTROL:</b> function allowing full camera management, including menu access and PTZ pan/tilt, via the coaxial cables.</p>	 <p><b>HLC:</b> function that detects and masks direct sources of light in order to reveal details in the image that would otherwise have been obscured by glare.</p>	 <p><b>WDR:</b> function for greater light balancing in the image when the camera frames strong light, for a balanced image even in situations with strong backlighting.</p>
 <p><b>LDC:</b> natural distortion of the captured image caused by the curvature of the lens is corrected to display a more realistic picture.</p>	 <p><b>FACE DETECTION:</b> function used to identify one or more faces within a frame, adjusting the image for optimal face display.</p>	 <p><b>POE:</b> technique used to power equipment using the same cable that connects them to the Ethernet data network.</p>
 <p><b>ONVIF:</b> organisation created to encourage compatibility between the equipment used in video surveillance and based on IP communication protocol.</p>	 <p><b>SMART IR:</b> intelligent function, depending on the scene captured by the camera the LED intensity decreases to provide optimal quality, regardless of the distance from the captured subject.</p>	 <p><b>IR SINCRONIZZATI:</b> mechanical function, the LED intensity adjusts depending on the zoom.</p>
 <p><b>AHD-TVI:</b> HD video transmission systems using an analogue coaxial cable which allows long-distance transmission in HD.</p>	 <p><b>MOTION DETECTION:</b> system used to analyse a video stream coming from a camera, to detect movement of a person or an object.</p>	 <p><b>S.M.A.R.T. HDD:</b> Hard Disk status checking system with reliability indicators, aimed at anticipating faults.</p>
 <p><b>WATERMARKING:</b> technique consisting of permanently marking a file to show that it is not forged.</p>	 <p><b>RAID:</b> installation technique grouping HDDs which ensures that those in the system appear and can be used as if they were a single storage volume.</p>	



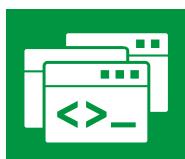
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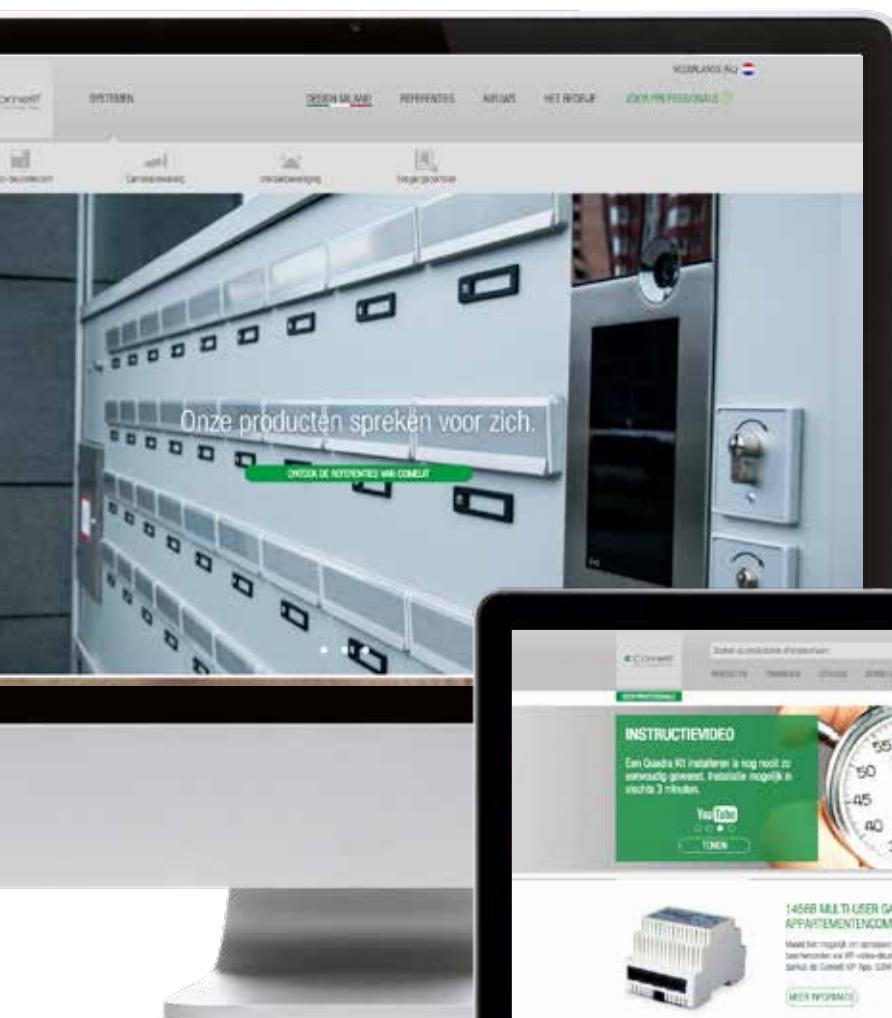
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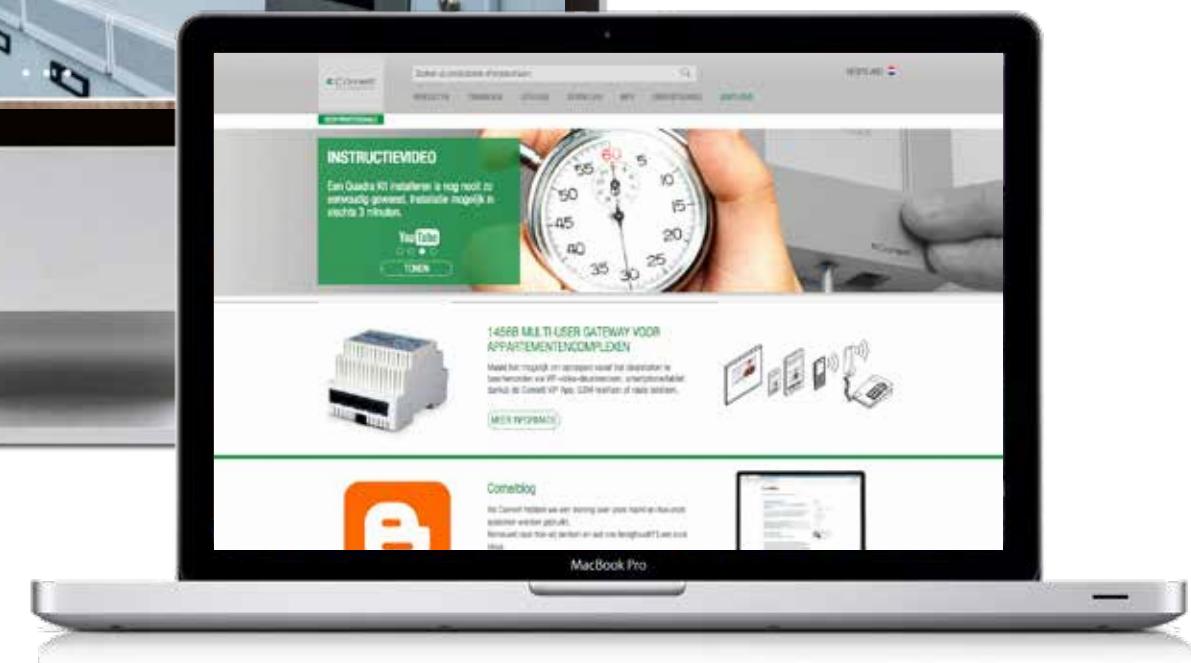
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