

# ULISSE EVO with DELUX technology

PTZ CAMERA WITH DELUX TECHNOLOGY, WITH HIGH PERFORMANCE AND EXTREME RELIABILITY



**deLux**  
technology



ULISSE EVO + UEBP0FA



ULISSE EVO + UEI8AA + UEBP0AA + UEAU



## DESCRIPTION

ULISSE EVO is a PTZ camera that combines high technology, competitiveness and design and guarantees the maximum level of security for monitoring urban areas, critical infrastructures, transport, traffic and railways (it complies with the standards for railway applications)

The Super low-light, Full HD, 1080p, 60 fps IP camera with 30x optical zoom and integrated Delux technology offers unbeatable clear and detailed images with vivid colours, day or night. The camera's motion detection function, with privacy masking feature, allows intelligent management and immediate raising of alarms if an unwanted intrusion is detected.

ULISSE EVO maintains maximum operating efficiency with temperatures from -40°C (-40°F) to +65°C (149°F), while the levels of protection IK10, IP66/IP67/IP68, NEMA Type 4X and Type 6P guarantee maximum resistance against dust and bad weather, strong impact and vandalism.

ULISSE EVO offers an unrivalled corrosion resistance, thanks to the special aluminum surface treatments and the technopolymer used for its construction.

ULISSE EVO is also equipped with a wiper to ensure a clear view in any environmental conditions. An LED illuminator (850nm, 940nm or white light) is available to give visibility even in total darkness. This comes as a separate accessory that can be integrated directly into the unit. The camera will automatically recognise the type of illuminator installed and calibrate the light beam accordingly.

The modern, linear design of ULISSE EVO combines maximum strength and operational reliability with greatly reduced weight. This means easy and quick assembly and therefore lower installation costs and zero maintenance.

ULISSE EVO can be installed in different ways, even in the inverted position typical of the speed domes, using the large variety of brackets and adaptors available to satisfy every installation need. The brackets are also available with quick connectors for Ethernet/PoE, for power and I/O, which allow fast and easy installation and maintenance.

ULISSE EVO is available in two standard colours gray-white (RAL9002) or black (RAL9005) to suit specific application requirements.

## MAIN FEATURES

- Super low-light Day/Night camera, FULL HD 1080p, 30x, with DELUX technology
- Privacy zone masking: 8 settable zones
- Power supply: 24Vac, 24Vdc, PoE 90W
- Video compression H.264/AVC, MJPEG, JPEG and MPEG4
- Up to 3 simultaneous video streams in FULL HD
- Complies with ONVIF, Profile Q, Profile S and Profile T
- Digitally signed firmware
- Complies with ONVIF Security Service specifications
- Day/Night (Auto ICR: automatic removal of IR filter)
- De-fog function
- Two alarm inputs and two relay outputs
- Variable speed: from 0.1°/s up to 250°/s horizontal and vertical movement
- Horizontal continuous rotation, vertical from -90° up to +90°
- Position accuracy: 0.05°
- Up to 250 Presets
- Speed proportional to Zoom
- Can be also installed in upside-down position (in speed-dome mode)
- Integrated wiper
- Optional washer system with pump for front window cleaning
- Optional illuminator chosen from 850nm, 940nm and white light
- Compliance to railway applications standard EN50121-4

## TECHNICAL DATA

### GENERAL

Easy installation thanks to the self-centring connector

Zero backlash

Quick configuration and setup

Dynamic positioning control system

Functions: Preset, Preset Tour (Patrol), Autoflip, Autopan via Preset Tour

Maximum number of presets: 250

### MECHANICAL

Constructed from aluminium and tecnopolymer

Epoxy-polyester powder painted, standard colours grey-white (RAL9002) or black (RAL9005)

Horizontal rotation: 360°, continuous rotation

Vertical rotation: from -90° up to +90° (with ceiling installation, from -40° up to +90°)

Horizontal speed (variable): from 0.1°/s up to 250°/s

Tilt speed (variable): from 0.1°/s up to 250°/s

Accuracy of preset positions: 0.05°

Cable glands: 2xM16 + 1xM20 + special gasket for RJ45 cables

Unit weight: 7.1kg (15.6lb) (7.4kg (16.3lb) with LED illuminator)

Glass window

- Thick: 6mm (0.24in)

### ELECTRICAL

Supply voltage/Current consumption:

- 24Vac  $\pm$ 20%, 5A, 50/60Hz
- 24Vdc  $\pm$ 10%, 5A
- PoE 90W (only with OHEP90INJ or OHEP90INJO accessories)

ECO-MODE function for energy saving: 21W, P&T static

Power consumption:

- 27W, P&T static, heating switched off
- 27W, P&T in motion, heating switched off
- 57W, peak at start-up, heating on and de-icing function

Power consumption with illuminator on:

- 40W, P&T static, heating switched off
- 40W, P&T in motion, heating switched off
- 70W, peak at start-up, heating on and de-icing function

Cables input section: from 0.75mm<sup>2</sup> (18AWG) up to 2.5mm<sup>2</sup> (13AWG)

Cables signal section: from 0.14mm<sup>2</sup> (26AWG) up to 1mm<sup>2</sup> (17AWG)

Alarm inputs: 2 (auto-powered from 12Vdc up to 18Vdc)

Relay outputs: 2 (1A, 30Vac/30Vdc max)

## NETWORK

Ethernet connection: 100 Base-TX

Connector: RJ45

## CYBERSECURITY

Digitally signed firmware

Password restricted access (HTTP digest)

Support of various user access levels

Control of accesses IEEE 802.1X

HTTPS cryptography using TLS1.0, TLS1.1, TLS1.2 and TLS1.3

Centralised certificate management

Complies with ONVIF Security Service specifications

## VIDEO

Video encoder

- Communication protocol: ONVIF, Profile T, Profile S and Profile Q
- Device configuration: TCP/IPv4-IPv6, UDP/IPv4-IPv6, HTTP, HTTPS, NTP, DHCP, WS-DISCOVERY, DSCP, IGMP (Multicast), SOAP, DNS
- Streaming: RTSP, RTCP, RTP/IPv4-IPv6, HTTP, Multicast
- Video compression: H.264/AVC, MJPEG, JPEG, MPEG4
- 3 independent video streams Full HD
- Image resolution: from 320x180pixel up to 1920x1080pixel in 6 steps
- Selectable frame rate from 1 to 60 images per second (fps)
- Web Server
- Directional OSD (maximum 4 settable areas)
- Motion Detection
- QoS: Differentiated DSCPs for streaming and device management
- SNMP and NTCIP protocols

## ILLUMINATORS

### LED illuminator

Wide beam: 40° (horizontal), 16° (vertical)

Spot beam: 14° (horizontal), 14° (vertical)

Wavelength: 850nm, 940nm, white light

Wide beam activation: based on the scene brightness, from alarm input or manually

Spot beam activation (can be activated only when the wide beam is active): can be activated on preset, based on the zoom factor or with the wide beam

Automatic and remote switching on

No calibration required for light beam alignment with the camera

The illuminator does not slow down the P&T's rotation speed

Automatic recognition of the type of illuminator installed

## CAMERAS

### Day/Night Full HD 30x DeLux

Resolution: Full HD 1080p (1920x1080pixel)

Image Device: 1/2.8" Exmor™ R CMOS sensor

Effective Pixels: approx. 2.38 Megapixels

Minimum Illumination:

- Colour: 0.006lx (F1.6, 30 IRE)
- B/W: 0.0006lx (F1.6, 30 IRE)

Focal length: from 4.5mm (wide) up to 135mm (tele)

Zoom: 30x (480x with digital zoom)

Iris: from F1.6 up to F9.6 (Auto, Manual)

Horizontal Viewing Angle: from 61.6° (wide end) up to 2.50° (tele end)

Vertical Viewing Angle: from 37.07° (wide end) up to 1.44° (tele end)

Shutter speed: from 1/1s up to 1/10000s (Auto, Manual)

White balance: Auto, Manual

Gain: from 0dB up to 36dB (Auto, Manual)

Wide Dynamic Range: 120dB

Focus System: Auto, Manual, Trigger

Picture Effects: E-flip, Color enhancement

Noise removal: 2D (3 levels), 3D (3 levels)

Exposure Control: Auto, Manual, Priority (Iris Priority, Shutter Priority), Brightness, Custom

De-fog: On/Off

Privacy zones masking (maximum 8 settable masks)

## ENVIRONMENT

For indoors and outdoors installation

Operating temperature

- Continuous functioning: from -40°C (-40°F) up to +65°C (149°F) (+50°C (122°F) for versions painted black)
- Temperature test complies with NEMA-TS 2-2003 (R2008) par. 2.1.5.1, test profile fig. 2-1 (from -34°C (-29.2°F) to +74°C (165.2°F))
- De-icing function intervention: from -40°C (-40°F) up to -10°C (14°F)

Wind resistance

- PTZ static: 230km/h (143mph) max.
- PTZ in motion at the maximum speed with LED illuminator: 230km/h (143mph) max.

Relative humidity: from 5% up to 95%

## CERTIFICATIONS

Electrical safety (CE): EN60950-1, IEC60950-1, EN62368-1, IEC62368-1

Electromagnetic compatibility (CE): EN61000-6-4, EN50130-4, EN55032 (Class A)

Outdoor installation (CE): EN60950-22, IEC60950-22

Photobiological safety (CE): EN62471, IEC62471

IP protection degree (EN60529): IP66, IP67, IP68

Salty fog resistance: EN50130-5, EN60068-2-52

IK protection degree: IK10

UL certification (UL60950-1, CAN/CSA C22.2 No. 60950-1-07, UL62368-1 CAN/CSA C22.2 No. 62368-1-14): cULus Listed

Electromagnetic compatibility (North America): FCC part 15 (Class A), ICES-003 (Class A)

Level of protection Type (UL50E): 4X, 6P

EAC certification

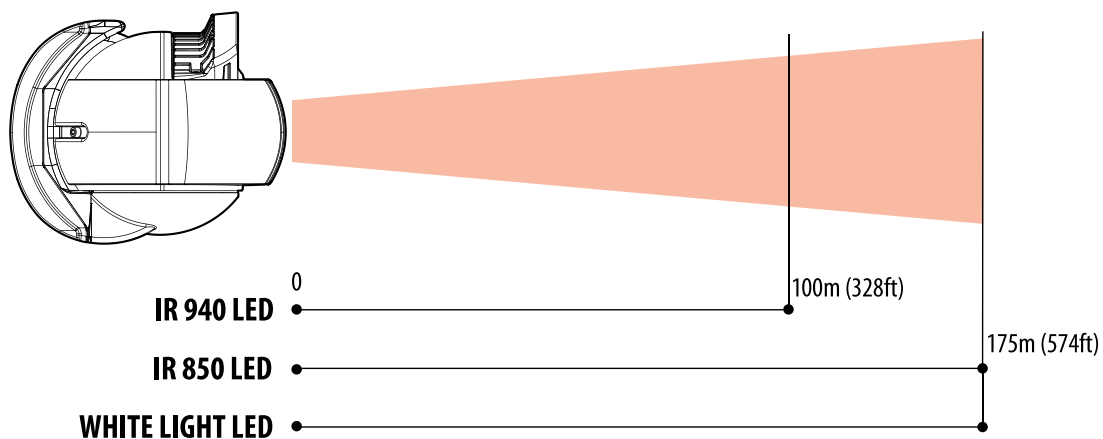
## CERTIFICATIONS - RAILWAY APPLICATIONS

Compliance to railway application standard: EN50121-4 (the product requires the filter accessory SURGEPR)

| BRACKETS AND ADAPTORS |                                                                                                                                                           |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| UEBP0AA               | Parapet bracket with internal cable channel for ULISSE EVO, grey-white (RAL9002)                                                                          |
| UEBP4AA               | Parapet bracket with quick connectors RJ45 (Ethernet and PoE) + 4 poles with screw terminal (power supply and I/O) for ULISSE EVO grey-white (RAL9002)    |
| UEBP7AA               | Parapet bracket with quick connectors RJ45 (Ethernet and PoE) + 7 poles to weld (power supply and I/O) for ULISSE EVO, grey-white (RAL9002)               |
| UEBP0FA               | Parapet bracket with internal cable channel for ULISSE EVO, black colour (RAL9005)                                                                        |
| UEBP4FA               | Parapet bracket with quick connectors RJ45 (Ethernet and PoE) + 4 poles with screw terminal (power supply and I/O) for ULISSE EVO, black colour (RAL9005) |
| UEBP7FA               | Parapet bracket with quick connectors RJ45 (Ethernet and PoE) + 7 poles to weld (power supply and I/O) for ULISSE EVO, black colour (RAL9005)             |
| UEBWAA                | Wall bracket fo ULISSE EVO, grey-white (RAL9002)                                                                                                          |
| UEBWFA                | Wall bracket fo ULISSE EVO, black colour (RAL9005)                                                                                                        |
| UEAP                  | Pole adaptor in stainless steel AISI 316L                                                                                                                 |
| UEAC                  | Corner adaptor in stainless steel AISI 316L                                                                                                               |
| UEAW                  | Counter-plate in stainless steel AISI 316L                                                                                                                |

| ACCESSORIES     |                                                                                                                           |
|-----------------|---------------------------------------------------------------------------------------------------------------------------|
| UEI8AA          | Infrared illuminator 850nm for ULISSE EVO, grey-white (RAL9002)                                                           |
| UEI9AA          | Infrared illuminator 940nm for ULISSE EVO, grey-white (RAL9002)                                                           |
| UEIWAA          | Infrared illuminator white-light for ULISSE EVO, grey-white (RAL9002)                                                     |
| UEI8FA          | Infrared illuminator 850nm for ULISSE EVO, black colour (RAL9005)                                                         |
| UEI9FA          | Infrared illuminator 940nm for ULISSE EVO, black colour (RAL9005)                                                         |
| UEIWFA          | Infrared illuminator white-light for ULISSE EVO, black colour (RAL9005)                                                   |
| OHEP90INJ       | Power Injector PoE (90W), 1 channel, for indoor installations                                                             |
| OHEP90INJO      | Power Injector PoE (90W), 1 channel, for outdoor installations                                                            |
| SURGEPR         | Lightning surge protection device                                                                                         |
| UPTIRPS100N     | External power supply for ULISSE series, IN 100Vac, in weatherproof box                                                   |
| UPTIRPS120UL    | External power supply for ULISSE series, IN 120Vac, in weatherproof box                                                   |
| UPTIRPS230N     | External power supply for ULISSE series, IN 230Vac, in weatherproof box                                                   |
| WASPT0V5L5M00   | Water tank 5l (1.3gal), pump with delivery up to 5m (16ft), IN 230Vac-24Vac-120Vac                                        |
| WASPT0V23L5M00  | Water tank 23l (6gal), pump with delivery up to 5m (16ft), IN 230Vac-24Vac-120Vac                                         |
| WASPT0V23L11M00 | Water tank 23l (6gal), pump with delivery up to 11m (36ft) with water floating, IN 230Vac-24Vac-120Vac                    |
| WASPT1V23L30M00 | Water tank 23l (6gal), pump with delivery up to 30m (98ft) with water floating, IN 230Vac                                 |
| WASPT3V23L30M00 | Water tank 23l (6gal), pump with delivery up to 30m (98ft) with water floating, IN 120Vac                                 |
| WASN1V10L20M00  | Tank 10l (2.6gal) with integrated manual pump controlled by solenoid valve, delivery head up to 20m (66ft) max, IN 230Vac |
| WASN2V10L20M00  | Tank 10l (2.6gal) with integrated manual pump controlled by solenoid valve, delivery head up to 20m (66ft) max, IN 24Vac  |
| WASN3V10L20M00  | Tank 10l (2.6gal) with integrated manual pump controlled by solenoid valve, delivery head up to 20m (66ft) max, IN 120Vac |

| PACKAGE      |                |                               |               |
|--------------|----------------|-------------------------------|---------------|
| Model Number | Weight         | Dimensions (WxHxL)            | Master carton |
| UE21A000A    | 9.2kg (20.3lb) | 27x30x50cm (10.6x11.8x19.6in) | -             |



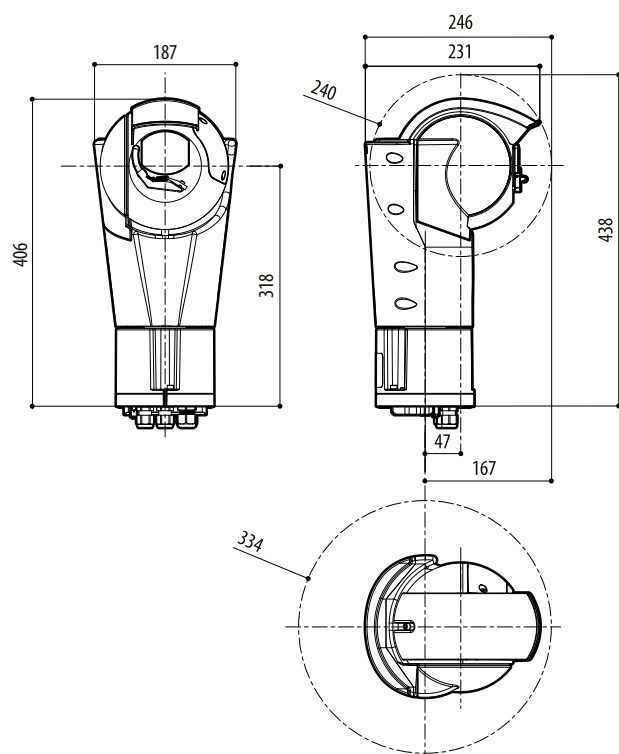
*Special versions of white light illuminator and IR 850 LED illuminator with spot beams for distances up to 270m are available upon request.*

*The distances and the performance depend on the environmental conditions.*

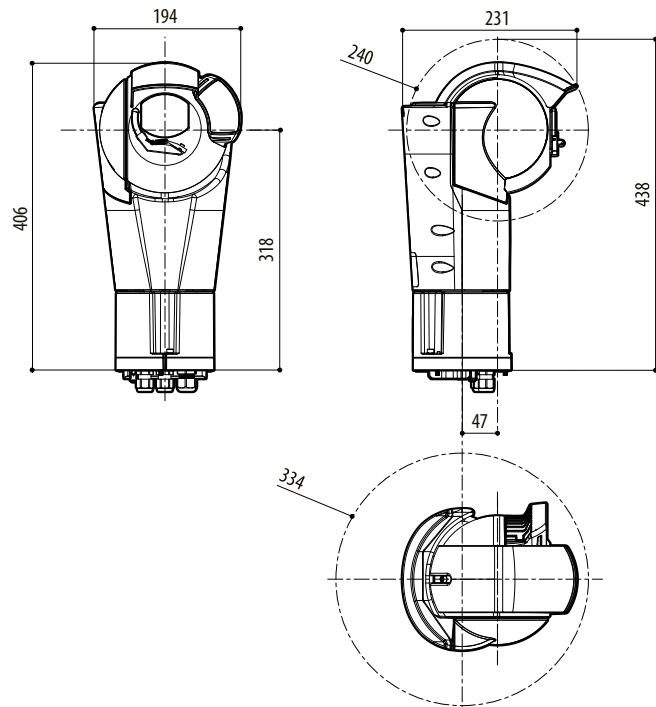
| ULISSE EVO WITH DELUX TECHNOLOGY - CONFIGURATION OPTIONS |                                |                                                                                                |                               |                       |          |
|----------------------------------------------------------|--------------------------------|------------------------------------------------------------------------------------------------|-------------------------------|-----------------------|----------|
|                                                          | Voltage                        | Camera                                                                                         | Colour                        |                       |          |
| <b>UE</b>                                                | <b>2</b> 24Vac, 24Vdc, PoE 90W | <b>1</b> Super low-light Day/<br>Night camera, FULL<br>HD 1080p, 30x, with<br>DELUX technology | <b>A</b> Grey-white (RAL9002) | <b>000</b> With wiper | <b>A</b> |
|                                                          |                                |                                                                                                | <b>F</b> Black (RAL9005)      |                       |          |

## TECHNICAL DRAWINGS

The indicated measurements are expressed in millimetres.



ULISSE EVO



ULISSE EVO WITH LED ILLUMINATOR