

# ULISSE2

UNIVERSAL FULL IP PTZ FOR IP CAMERAS



ULISSE2 + UPTIRNBKT + UPTIRN



## DESCRIPTION

ULISSE2 is an outdoor full IP PTZ unit for control and management of all third-party IP cameras and thermal imaging cameras (ONVIF-S or those equipped with an RS485 serial port), with direct access via a browser to the camera's interface for setup and diagnostics.

Thanks to ONVIF-S protocols, the Full IP connectivity of the ULISSE2 allows you to network-control P&T plus all camera functions, including the wiper, washer pump, pre-sets, illuminator activation and setup, using the most popular VMS' on the market.

The advanced protection technology used has allowed certain characteristics of the new PTZ to be enhanced, such as the temperature range of -40°C (-40°F) to +65°C (+149°F). The unit can be demisted with forced air and the temperature is constantly controlled, thus preventing condensation and guaranteeing an ideal operating temperature range for the camera.

The LED illuminators are easily integrated onto the P&T, even post-installation, without the need for additional power sources and independently of the unit's power supply. The second illuminator can be turned on at certain zoom parameters, pre-set positions or manually to avoid spotlighting a near-by subject or to control a floodlight.

The PTZ is equipped with a wiper that, with the help of the optional washer kit, always keeps the camera window clean for perfect visibility in all weathers.

The efficient automatic self-test rapidly detects the state of the system and all reported events are stored in the internal log. A complete system backup is possible via the Micro SD slot.

Improved accessibility to connections allows you to carry out wiring and diagnostics quickly and easily, without dismantling the product. ULISSE2 can be completely assembled using a single hex key (supplied)

## MAIN FEATURES

Full IP PTZ unit for complete management and control of IP ONVIF-S cameras

60 Mbit/s video stream for 4K cameras

Compatibility with motorised zoom lenses with common wire, polarity inversion, RS485 serial port and one push autofocus

Direct access to third-party cameras via a browser, for setup and diagnostics as a single IP address

Tested and certified from -40°C to +65°C (-40°F to +149°F), IP66 and NEMA TYPE 4X

Wind resistance: up to 220km/h (136mph)

Horizontal rotation: 360°, continuous rotation (horizontal speed: up to 100°/s)

Unbeatable positioning accuracy: 0.02°

Pre-arranged for the mounting of LED lights

Sophisticated temperature control and demisting system

Improved accessibility to connections for wiring and diagnostics

Complete installation made easier by a single key (supplied)

Maintenance free, 3 years warranty

Options:

- Anti-icing heated glass
- UPTIRN range of LED illuminators
- Versions with germanium windows for thermal cameras

## TECHNICAL DATA

### GENERAL

Installation made easier with a single hex key and captive screws

Top mount

Extremely smooth movement

Transmission through toothed belt with zero backlash

Reading via ONVIF of the pan/tilt/zoom position

Slip-ring

Electronic limit switches

Integrated wiper

Optional illuminators. The second illuminator can be turned on at certain zoom parameters, pre-set positions or manually

Micro SD slot for configuration and log storage

Housing equipped with forced-air ventilation

Zero compensation on mechanical horizontal axis (pan offset)

User configurable electronically limits for vertical and horizontal axis

### MECHANICAL

Constructed from aluminium and tecnopolymer

Epoxy polyester powder painting, RAL9002 colour

Horizontal rotation: 360°, continuous rotation

Vertical rotation: from -40° up to +90°

Horizontal speed (variable): from 0.02°/s up to 100°/s (from 0.02°/s up to 50°/s with illuminators)

Tilt speed (variable): from 0.02°/s up to 50°/s (from 0.02°/s up to 50°/s with illuminators)

The unit automatically reduces the speed according to zoom with Add-on camera and motorised lenses with potentiometer

Accuracy of preset positions: 0.02°

Internal usable area (WxHxL): 100x100/60x414mm (3.9x3.9/2.4x16.3in) (See drawings)

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

Unit weight: 20.4kg (45lb)

Housing with side-opening

### HOUSING'S WINDOW

Glass window extra clear:

- Dimensions (WxH): 125x91mm (4.9x3.6in)

Germanium window (usable diameter: 61mm (2.4in))

- Thick: 2mm (0.08in)
- External treatment: antiscratch (Hard Carbon Coating - DLC), antireflection
- Internal treatment: antireflection
- Spectral range: from 7.5µm up to 14µm
- Medium transmittance (from 7.5µm up to 11.5µm): 90%
- Medium transmittance (from 11.5µm up to 14µm): 77%

Germanium window (usable diameter: 66 mm (2.6in))

- Thick: 4mm (0.16in)
- External treatment: antiscratch (Hard Carbon Coating - DLC), antireflection
- Internal treatment: antireflection
- Spectral range: from 7.5µm up to 14µm
- Medium transmittance (from 7.5µm up to 11.5µm): 88.1%
- Medium transmittance (from 11.5µm up to 14µm): 77.7%

### ELECTRICAL

Supply voltage/Current consumption:

- 230Vac ±10%, 1.1A, 50/60Hz
- 24Vac ±10%, 10A, 50/60Hz
- 120Vac ±10%, 2A, 50/60Hz

Power consumption:

- 27W, P&T static, heating switched off, without camera
- 34W, P&T static, heating switched off, 30x camera
- 49W, P&T in motion, heating switched off, 30x camera
- 97W, P&T in motion, heating switched on, illuminators off
- 157W, P&T in motion, heating switched on, illuminators lit, 30x camera

Signal cable section: from 0.5mm<sup>2</sup> (20AWG) up to 1.5mm<sup>2</sup> (16AWG)

Self-powered alarm inputs: 4

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

Temperature-controlled forced air creates an anti-condensation system for the window  
De-icing system with self-heating glass, 7W max (optional)

## NETWORK

Ethernet connection: 100 Base-TX

- Network protocols: IPv4, HTTP, Bonjour, DNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, ONVIF profile S
- Supported protection systems: password protection (digest-authentication and ws-security)

## CAMERAS

### Specifications of the cameras that can be installed

Possible Modes of communication with the IP camera:

- camera controlled by P&T via ONVIF-S (PTZ Master)
- P&T controlled by camera via RS485 serial port (Camera Master)

Selection of the communication mode with the IP camera: via dip-switch

Nominal bitrate of the video stream (total of the whole camera stream) 60 Mbit/s, 4K ready

IP camera configuration via direct connection to the camera's web page

PTZ control (only with Camera Master mode)

- Serial line: RS485
- Protocol: Pelco-D, MACRO
- Baud rate: 2400baud, 4800baud, 9600baud

Camera power supply: 12Vdc, 1.5A max with de-icing function

Lens motor power supply: 6-9-12-15 Vdc, 200 mA max

Lens potentiometer power supply: 5 V, 15 mA max

Lens control: common ZF line, separate ZF line or RS485

Autofocus motorised lens trigger: relay

Autofocus lens trigger management: 500 m/s pulse, 15 s pulse, normally open, normally closed

Day/Night camera synchronisation: ONVIF or relay

Camera I/O export: 1 self-powered input, 1 relay output

Maximum weight of camera + lens: 2.3 kg

## ENVIRONMENT

For indoors and outdoors installation

Operating temperature: from -40°C (-40°F) up to +65°C (149°F)

De-icing function intervention: from -40°C (-40°F) up to -10°C (14°F)

Wind resistance

- P&T static: 220km/h (136mph) max
- P&T in motion, at the maximum speed, with LED illuminators: 140km/h (87mph) max

Relative humidity: from 10% up to 95% (no condensation)

## CERTIFICATIONS

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

Electromagnetic compatibility (CE): EN50130-4, EN61000-6-4, EN55022 (Class A), EN55032 (Class A), FCC Part 15 (Class A)

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

IP protection degree (EN60529):

- IP66

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

UL certification: cULus Listed, TYPE 4X (Only 24 Vac and 120 Vac versions)

EAC certification

Vibration test: EN50130-5 Cl. 22, Cl. 23 (EN60068-2-6)

NDAA compliant

**ACCESSORIES**

COMB100A	Communication box in polycarbonate, IN from 220Vac up to 230Vac, OUT 24Vac
COMB200A	Communication box in polycarbonate, IN 24Vac, OUT 24Vac
COMB300A	Communication box in polycarbonate, IN from 120Vac up to 127Vac, OUT 24Vac
UPTBKITVB770	Adapter module for ULISSE2 and Sony SNC-VB770 camera with Sony SELP28135G lens
UPTBVTR	ULISSE2 housing upper part with anti-ice glass and wiper
UPTIRNBKT	Support for mounting of UPTIRN range of LED illuminators
UPTIRN108A00	LED illuminator for ULISSE, 10°, 850nm, 24Vac - 12/24Vdc
UPTIRN308A00	LED illuminator for ULISSE, 30°, 850nm, 24Vac - 12/24Vdc
UPTIRN608A00	LED illuminator for ULISSE, 60°, 850nm, 24Vac - 12/24Vdc
UPTIRN109A00	LED illuminator for ULISSE, 10°, 940nm, 24Vac - 12/24Vdc
UPTIRN309A00	LED illuminator for ULISSE, 30°, 940nm, 24Vac - 12/24Vdc
UPTIRN10WA00	LED illuminator for ULISSE, 10°, white light, 24Vac - 12/24Vdc
UPTIRN30WA00	LED illuminator for ULISSE, 30°, white light, 24Vac - 12/24Vdc
UPTIRN60WA00	LED illuminator for ULISSE, 60°, white light, 24Vac - 12/24Vdc
UPTJBUL	Junction weatherproof box for cables connexion (according UL norm)
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, IN 230Vac, delivery head up to 30m (98ft), with 20m (66ft) antistatic water delivery pipe
WASN2V10L20M00	Tank 10l (2.6gal) with integrated manual pump, controlled by solenoid valve, IN 24Vac, delivery head up to 30m (98ft), with 20m (66ft) antistatic water delivery pipe
WASN3V10L20M00	Tank 10l (2.6gal) with integrated manual pump, controlled by solenoid valve, IN 120Vac, delivery head up to 30m (98ft), with 20m (66ft) antistatic water delivery pipe

**BRACKETS AND ADAPTORS**

UPTWBA	Wall bracket with internal cable channel
UPTWBTAB	Parapet bracket with internal cable channel
PTCC1	Pole mount adaptor
WCWGC	Corner mount adaptor

**PACKAGE**

Model Number	Weight	Dimensions (WxHxL)	Master carton
UPTB1SWA00A	26kg (57lbs)	59x78x42cm (23x31x17in)	-

**ULISSE2 - BEAM PATTERN AND ACHIEVABLE DISTANCES FOR TWO ILLUMINATORS**

Beam patterns	850nm - Maximum distance	White light - Maximum distance
10°	340m (1115.5ft)	-
30°	180m (590.5ft)	170m (558ft) <sup>1</sup>
60°	110m (361ft)	125m (410ft) <sup>1</sup>

<sup>1</sup> Achievable distances with camera in Day mode (colour image)

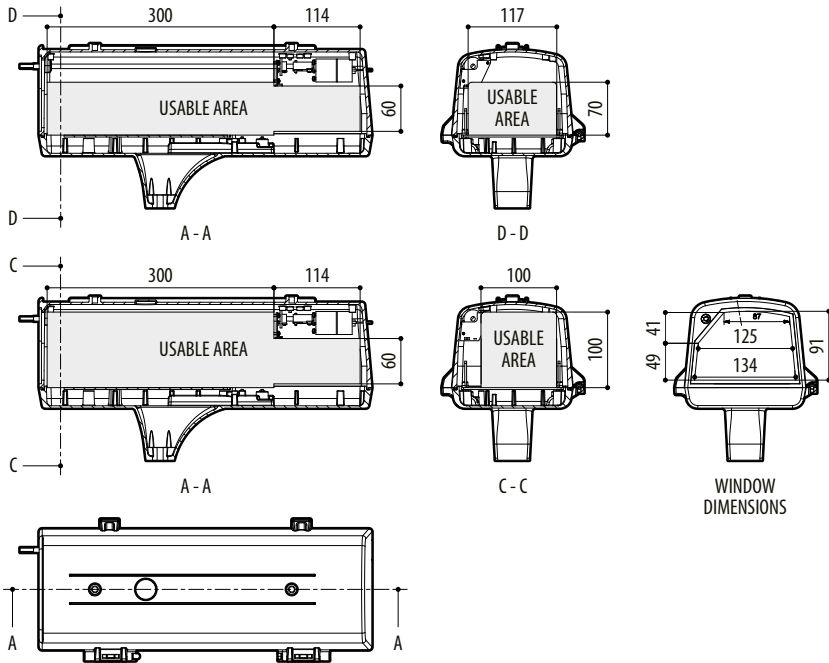
The distances and the performance depend on the environmental light conditions.

## ULISSE2 - CONFIGURATION OPTIONS

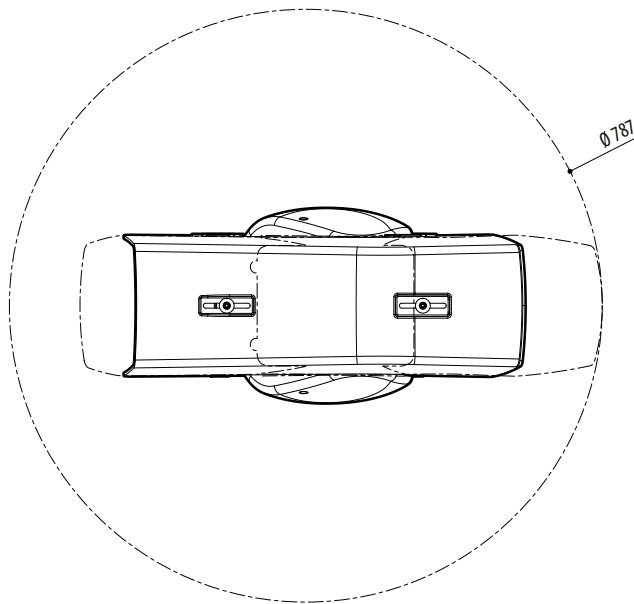
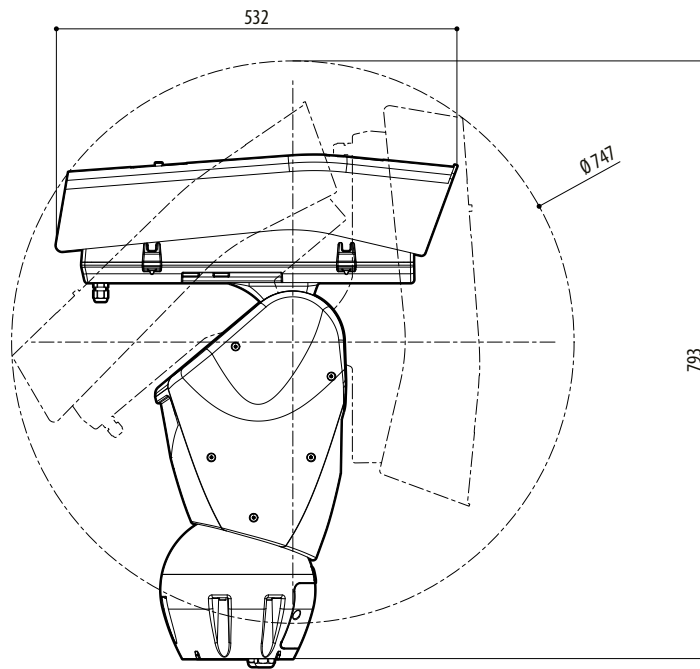
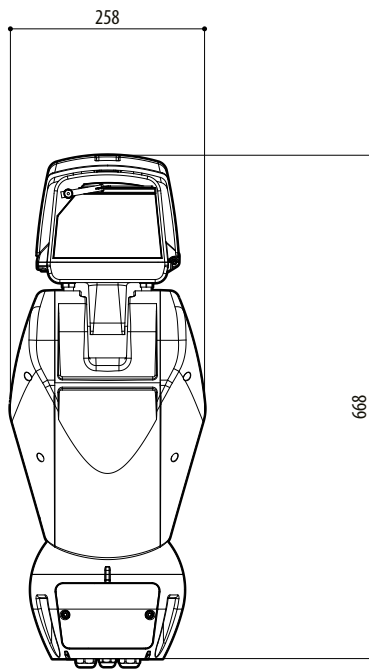
	Voltage	Camera	Options		
<b>UPTB</b>	<b>1</b> 230Vac	<b>S</b> Without camera	<b>W</b> With wiper	<b>A</b>	<b>00A</b>
	<b>2</b> 24Vac		<b>G</b> With Ø66mm germanium window for thermal cameras		
	<b>3</b> 120Vac		<b>T</b> With Ø61mm germanium window for thermal cameras		

## TECHNICAL DRAWINGS

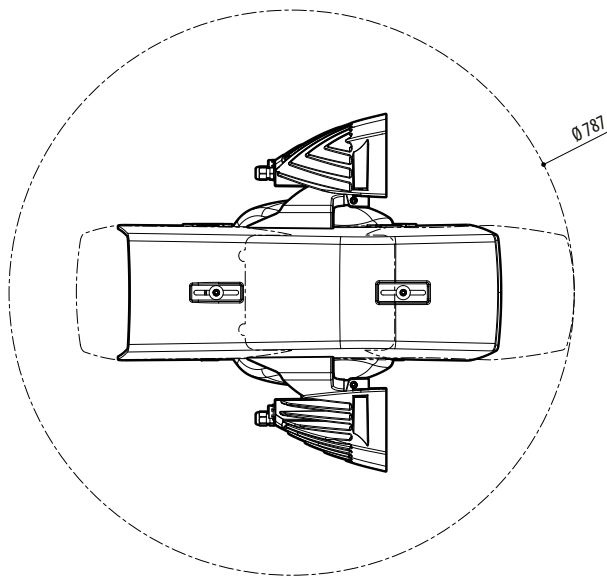
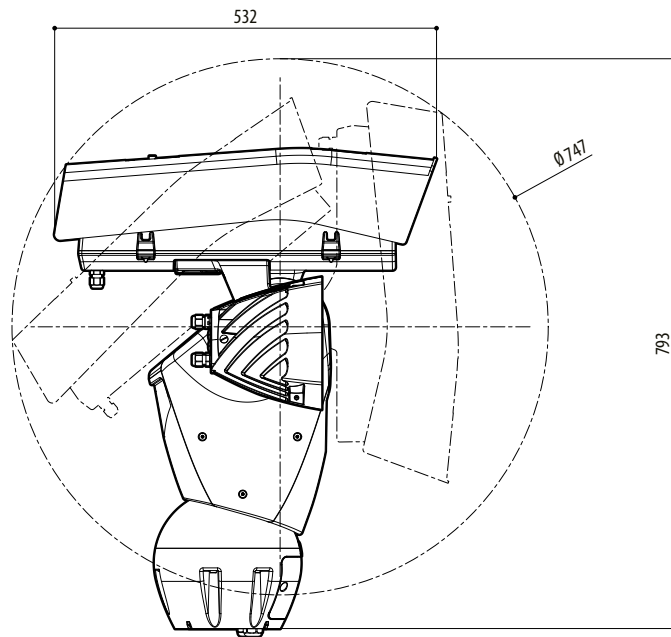
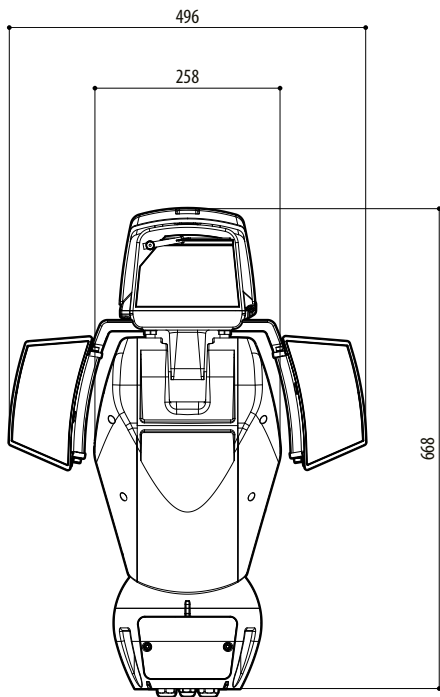
The indicated measurements are expressed in millimetres.



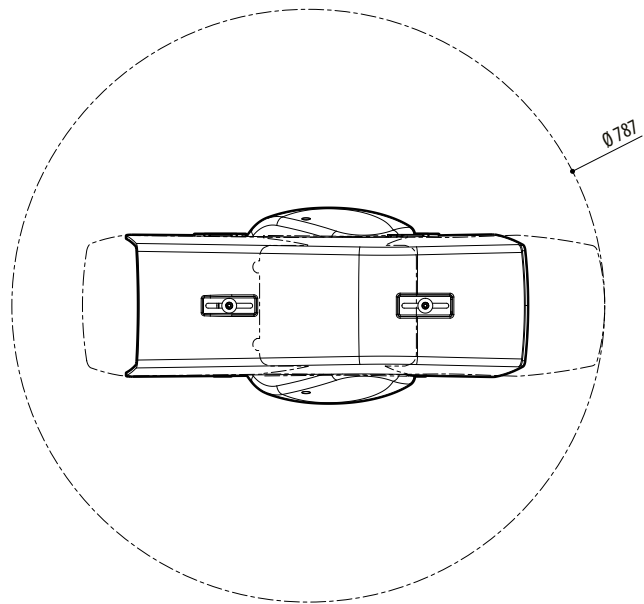
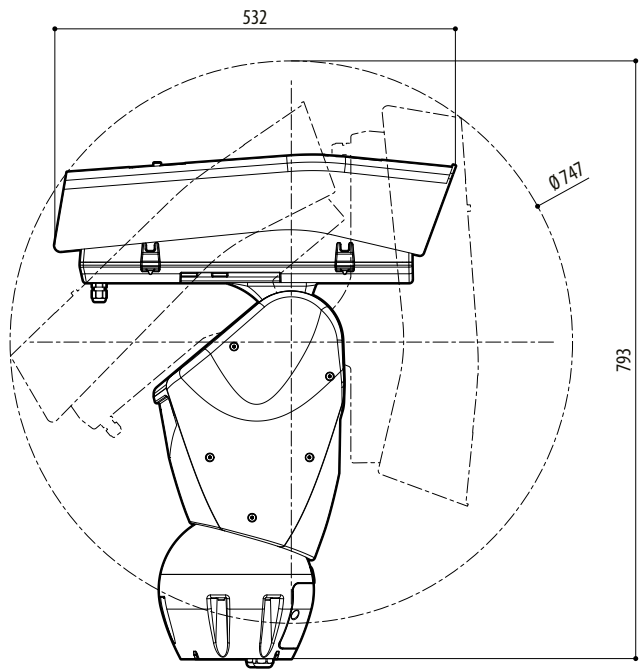
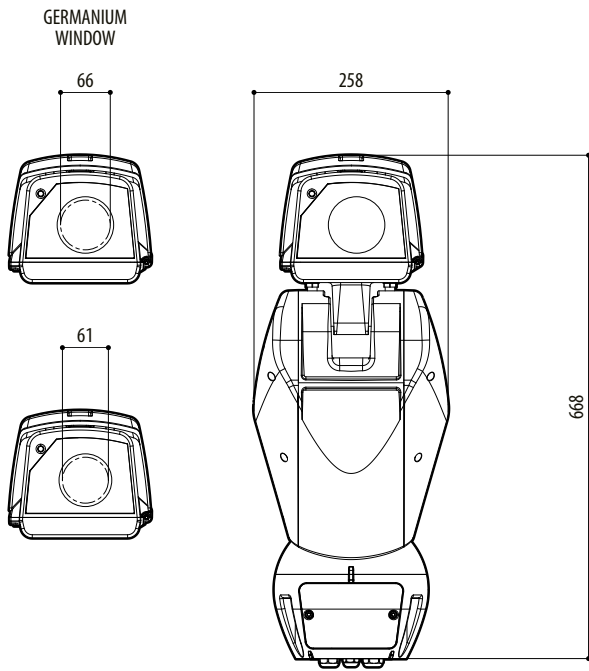
ULISSE2, HOUSING



ULISSE2



ULISSE2, VERSION WITH TWO LED ILLUMINATORS



ULISSE2, VERSION FOR THERMAL CAMERAS