

# ULISSE RADICAL THERMAL

THERMAL PTZ CAMERA WITH UP TO 24X CONTINUOUS ZOOM



## DESCRIPTION

ULISSE RADICAL THERMAL is the first Videotec ready-to-use thermal PTZ camera system that integrates exceptional factory-assembled combinations of lens and thermal camera for unsurpassed intrusion detection and visual awareness in total darkness or extreme environmental conditions.

The lens system features a continuous zoom up to 24x and an amazing AUTO FOCUS that allow quick and effective focus on targets while retaining flawless images.

ULISSE RADICAL THERMAL is provided with Analogue control or IP, certified ONVIF Profile S, and is compatible with most VMS on the market .

The Videotec's PTZ ASSISTANT plug-in software supports any VMS with the control of all special functions such as the Auto Focus.

Depending on temperature, the contrast of a scene can be adjusted dynamically by the ACE (Active Contrast Enhancement) function, while the Digital Detail Enhancement (DDE) allows more detailed and crisp images.

The STR (Spot Temperature Reading) function detects the temperature reading of a specific point of the monitored scene.

Due to its accuracy, reliability and robustness, this thermal PTZ camera is the ideal solution for the visual control of demanding outdoor areas, such as: fire detection, military installations, border patrol, harbour surveillance, perimeter surveillance, traffic, railways and highways control and industrial monitoring.

## MAIN FEATURES

- PTZ unit with factory-assembled and pre-configured thermal camera and lens
- Continuous zoom lens, 3x thermal optics, 35-105mm and digital zoom up to 8x, 24x total zoom
- Sensor: Uncooled Microbolometer (VOx), 17µm pixel dimension
- Resolution 336x256 or 640x512, 7.5-8.3Hz or 25-30Hz
- Analogue or IP (ONVIF S) versions
- Advanced Autofocus system
- Advanced Thermographic Function (STR, Spot Temperature Reading)
- DDE, Digital Detail Enhancement
- Dynamic adjustment of contrast (ACE, Active Contrast Enhancement)
- Pre-wired camera and lens through snap-on connector for easy installation and maintenance
- Total control of the auxiliary functions through the Videotec PTZ ASSISTANT (IP-based version)
- Horizontal continuous rotation up to 100°/sec
- Position accuracy: 0.02°
- Up to 250 Presets
- Operating temperature: -40°C / +65°C (-40°F / +149°F)
- Power supply: 230Vac, 24Vac or 120Vac

## TECHNICAL DATA

### GENERAL

Constructed from aluminium and tecnopolymer  
Epoxy polyester powder painting, RAL9002 colour  
Top mount (OTT)  
Transmission through toothed belt  
Slip-ring  
Electronic limit switches  
Zero backlash  
Pre-installed camera and lens

### MECHANICAL

Cable glands: 3xM16  
Horizontal rotation: 360°, continuous rotation  
Vertical rotation: from -40° to +90°  
Horizontal speed (variable): from 0.02°/s to 100°/s  
Tilt speed (variable): from 0.02°/s to 50°/s  
Internal usable area (WxHxL): 90x115x325mm (3.5x4.5x13in)  
Accuracy of preset positions: 0.02°  
Unit weight: 17kg (37lb)

### HOUSING'S WINDOW

Germanium window

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

### ELECTRICAL

Supply voltage/Current consumption:

- 230Vac, 0.4A, 50/60Hz
- 120Vac, 0.8A, 50/60Hz
- 24Vac, 4A, 50/60Hz

Power consumption:

- 100W max
- 28.5W, P&T static, heating switched off

4 self-powered alarm inputs  
2 dry contacts: 30Vdc max o 30Vac, @ 1A

### NETWORK

Connector: RJ45, 10BASE-T/100BASE-T  
Protocol: ONVIF, Profile S (TCP/IPv4, UDP/IPv4, HTTP, NTP, DHCP, WS-DISCOVERY, QoS, RTSP, RTCP, RTP)

### SERIAL COMMUNICATIONS

Configuration through OSM  
2 half-duplex serial RS-485 interfaces or full-duplex RS-422  
Firmware updating from console in remote mode (PELCO D, MACRO)  
Up to 999 units, addressable by means of dip-switches  
Protocols supported: AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO D, MACRO

### VIDEO

Compression: H.264/AVC, JPEG  
Independent video streams: 2

- Image resolution: from Full D1 (720x576 for PAL, 720x480 for NTSC) to 352x240 in 18 steps

### CAMERAS

Thermal camera (336x256):

- Pixel dimension: 17µm
- Digital Zoom: 4x
- Thermal sensitivity (NEdT): < 50mK at f/1.0
- Spectral response - long wave infrared (LWIR): from 7.5µm to 13.5µm
- Internal shutter (only for sensor compensation): Video stop < 1sec.
- Scene range (High Gain): -40°C ÷ +160°C (-40°F ÷ +320°F)
- Scene range (Low Gain): -40°C ÷ +550°C (-40°F ÷ +1022°F)

Thermal camera (640x512):

- Pixel dimension: 17µm
- Digital Zoom: 8x
- Thermal sensitivity (NEdT): < 50mK at f/1.0
- Spectral response - long wave infrared (LWIR): from 7.5µm to 13.5µm
- Internal shutter (only for sensor compensation): Video stop < 1sec.
- Scene range (High Gain): -40°C ÷ +160°C (-40°F ÷ +320°F)
- Scene range (Low Gain): -40°C ÷ +550°C (-40°F ÷ +1022°F)

### LENSES

3x optical zoom, 35-105mm, F1.6  
Minimum focusing distance: 7m (23ft)  
Field of view (640x512 pixel):

- Wide: 17.97°H, 14.33°V
- Zoom tele: 5.93°H, 4.75°V

Field of view (336x256 pixel):

- Wide: 8.98°H, 7.15°V
- Zoom tele: 2.97°H, 2.38°V

### ENVIRONMENT

For installation indoors and outdoors  
Operating temperature: from -40°C (-40°F) to +65°C (149°F)\*  
Cold start: -40°C (-40°F)  
Surge immunity: up to 1kV line to line, up to 2kV line to earth (Class 4)  
\* *peak temperature*  
Relative humidity: from 10% 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), 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)  
EAC certification  
NDAA-compliant

## ACCESSORIES

UPTJBUL Junction weatherproof box for cables connexion (according UL norm)

## BRACKETS AND ADAPTORS

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

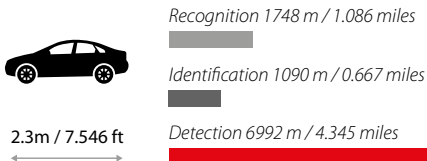
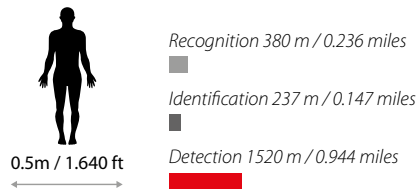
## PACKAGE

Model Number	Weight	Dimensions (WxHxL)	Master carton
UPKT1AFSAN00A	20kg (44lb)	66x33x57cm (26x13x22in)	-

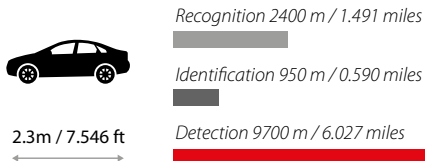
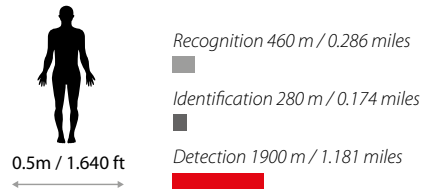
## ULISSE RADICAL THERMAL - CONFIGURATION OPTIONS

	Voltage	Thermal camera	Lens			Video Output	Frequency
<b>UPKT</b>	<b>1</b> 230Vac	<b>A</b> 640X512 pixel	<b>F</b> Thermal zoom 3x	<b>S</b>	<b>A</b>	<b>O</b> Analog control	<b>00A</b> - 7.5-8.3Hz
	<b>2</b> 24Vac	<b>B</b> 336x256 pixel				<b>N</b> IP H.264/AVC control, Protocol ONVIF Profile S	<b>H</b> 25-30Hz
	<b>3</b> 120Vac						

### ULISSE RADICAL THERMAL (640x512)



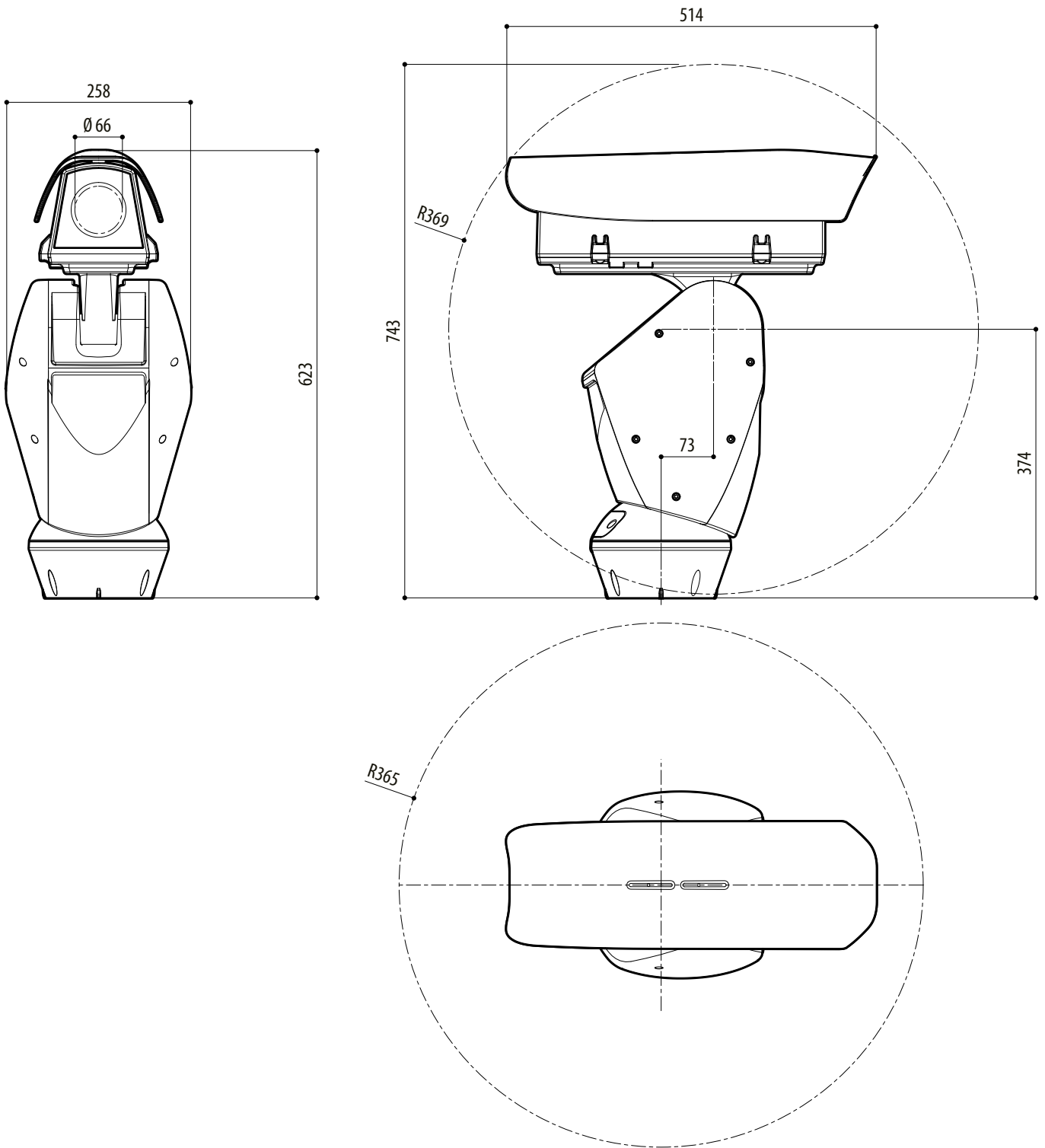
### ULISSE RADICAL THERMAL (336x256)



## PERFORMANCES ACCORDING TO JOHNSON'S CRITERIA

**TECHNICAL DRAWINGS**

The indicated measurements are expressed in millimetres.



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