

ULISSE COMPACT THERMAL

DUAL VISION PTZ WITH DAY/NIGHT AND THERMAL CAMERAS FOR MONITORING IN TOTAL DARKNESS



MAIN FEATURES

Dual independent video output

Complete control via RS485 of both cameras

Thermal camera:

- Sensor: Uncooled microbolometer (VOx)
- Lenses: 35mm or 25mm
- Resolution 336x256 or 640x512

Day/Night camera 36x or 28x

- True Progressive Scan (only 36x)
- High resolution: up to 550 TV Lines
- Advanced image stabiliser (Stable Zoom Mode)
- Day/Night (Auto ICR: automatic removal of IR filter)
- Dynamic video masking of different areas

Variable speed: 0.1°-200°/s Pan/Tilt

Horizontal continuous rotation, vertical -90°/+90°

Position accuracy: 0.05°

Up to 250 Presets

Integrated wiper

Power supply: 230Vac, 24Vac or 120Vac

DESCRIPTION

The PTZ ULISSE COMPACT THERMAL camera offers an exceptional integrated solution, for effective monitoring even in complete darkness or in extreme environmental conditions, fog, rain, smoke.

In fact, the unit incorporates an aligned visual camera and thermal camera, with independent management of the two video flows.

The Day/Night camera is able to clearly identify the target in normal light conditions, while the thermal vision detects people and events, in complete darkness, smoke or thick fog.

Constant and reliable non-stop monitoring of outdoor areas and infallible system for detecting events and presences.

The accurate top-mount configuration guarantees long-range vision and continuous horizontal axis rotation, combining high speed with absolute tracking accuracy, both in manual mode and in patrol mode.



ULISSE COMPACT THERMAL



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TECHNICAL DATA

GENERAL

Constructed from aluminium and tecnopolymer
Epoxypolyester powder painting, RAL9002 colour
Germanium window for thermal camera
Easy installation thanks to the self-centring connector
Zero backlash
Quick configuration and setup
Dynamic positioning control system
16-characters string for zone and preset titling
Functions: Autopan, Preset, Patrol, Tour (maximum 3), Autoflip

MECHANICAL

Cable glands: 2xM16, 2xM12
Horizontal rotation: 360°, continuous rotation
Vertical rotation: from -90° up to +90°
Horizontal speed (variable): from 0.1° up to 200°/s
Tilt speed (variable): from 0.1° up to 200°/s
Accuracy of preset positions: 0.05°
Unit weight: 12.5kg (28lb)

HOUSING'S WINDOW

Glass window extra clear
• Thick: 3mm (0.1in)
Germanium window
• Thick: 1.5mm (0,06in)
• 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): 91.2%
• Medium transmittance (from 11.5µm up to 14µm): 80.9%

ELECTRICAL

Supply voltage/Current consumption:
• 230Vac, 0.4A, 50/60Hz
• 24Vac, 4A, 50/60Hz
• 120Vac, 0.8A, 50/60Hz
Power consumption
• 40W: P&T static, heating switched off
• 60W: P&T in motion, heating switched off
• 125W: peak at start-up, heating switched on
Cables input section: from 1.5mm² (16AWG) up to 0.75mm² (19AWG)
Cables signal section: from 1.5mm² (16AWG) up to 0.14mm² (30AWG)
Video line: coaxial cable (1Vpp, 750hm)
I/O alarm card
• Alarm inputs: 6
• Relay outputs: 2 (2A, 30Vac/60Vdc max)

SERIAL COMMUNICATIONS

Configuration through OSM
Half-duplex serial RS-485 interface, full-duplex RS-422 and daisy-chain architecture
Firmware updating from console in remote mode (PELCO D, VIDEOTEC MACRO)
Up to 1023 units, addressable by means of dip-switches
Serial communication protocol: AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO D, VIDEOTEC MACRO

Maximum number of presets for protocol

- AMERICAN DYNAMICS: 95*
- ERNITEC: 250
- PANASONIC: 250
- PELCO D: 99*
- VIDEOTEC MACRO: 250

*250, from OSD only (On Screen Display)

ENVIRONMENT

For installation indoors and outdoors
Operating temperature
• Continuous working: from -40°C (-40°F) up to +60°C (140°F)
• Non continuous working (absolute maximum temperature for short periods): +65°C (149°F)
Wind resistance
• Operational: up to 160km/h
• Stationary: up to 210km/h
Surge immunity: up to 2kV line to line, up to 4kV line to earth (Class 4)
Relative humidity: from 10% up to 95% (no condensation)

CERTIFICATIONS

Electrical safety (CE): EN60950-1, IEC60950-1
Electromagnetic compatibility (CE): EN61000-6-4, EN50130-4, EN55022 (Class A), EN61000-6-4, FCC Part 15 (Class A)
Outdoor installation (CE): EN60950-22, IEC60950-22
IP protection degree: EN60529 (IP66)
UL certification: cULus Listed (TYPE 4X)
EAC certification

ACCESSORIES

UPTJBUL	Junction weatherproof box for cables connexion (according UL norm)
WASPTOV5L5M00	Water tank 5l (1 gal), pump with delivery up to 5m (16ft), IN 230Vac-24Vac-120Vac
WASPTOV23L5M00	Water tank 23l (6 gal), pump with delivery up to 5m (16ft), IN 230Vac-24Vac-120Vac
WASPTOV23L11M00	Water tank 23l (6 gal), pump with delivery up to 11m (36ft) with water floating, IN 230Vac-24Vac-120Vac
WASPT1V23L30M00	Water tank 23l (6 gal), pump with delivery up to 30m (98ft) with water floating, IN 230Vac
WASPT3V23L30M00	Water tank 23l (6 gal), pump with delivery up to 30m (98ft) with water floating, IN 120Vac

BRACKETS AND ADAPTORS

UPTWBA	Wall bracket with internal cable channel
UPTWBTAB	Parapet bracket with internal cable channel
UCCMA	Ceiling bracket for upside down mounting and working of ULISSE COMPACT

PACKAGE

Model Number	Weight	Dimensions (WxHxL)	Master carton
UCT1QAWA000A	16kg (35lb)	66x33x57cm (26x13x22in)	-

ULISSE COMPACT THERMAL - CONFIGURATION OPTIONS

	Voltage	Day/Night camera	Thermal camera		Video Output	Frequency
UCT	1 230Vac	P Day/Night camera 36x optical zoom lens, PAL	A Thermal camera 35mm - 336x256	W With integrated wiper	A 0 Analog control	00A - 7.5-8.3Hz
	2 24Vac	Q Day/Night camera 28x optical zoom lens, PAL	B Thermal camera 25mm - 336x256			H 25-30Hz
	3 120Vac	N Day/Night camera 36x optical zoom lens, NTSC	D Thermal camera 35mm - 640x512			
		M Day/Night camera 28x optical zoom lens, NTSC	E Thermal camera 25mm - 640x512			

ANALOGUE CAMERAS (DAY/NIGHT)

	Day/Night 36x		Day/Night 28x High sensitivity	
	PAL	NTSC	PAL	NTSC
Optical zoom	36x		28x	
Wide Dynamic Range (ON, OFF, Auto)	✓		-	
True progressive SCAN	✓		-	
Digital image stabilisation	✓		✓	
White balance	Auto, ATW, Indoor, Outdoor (Fix/Auto), Sodium Vapor Lamp (Fix/Auto), Manual		Auto, ATW, Indoor, Outdoor (Fix/Auto), Sodium Vapor Lamp (Fix/Auto), Manual	
High horizontal resolution	Up to 550 TV Lines		Up to 550 TV Lines	
Day/Night (Auto ICR)	✓		✓	
Image Sensor	1/4" EXView HAD CCD		1/4" Super HAD CCD II	
Number of effective Pixels	~ 440000 pixel	~ 380000 pixel	~ 440000 pixel	~ 380000 pixel
Min. Lighting Colour (IR-Cut Filter = OFF) (Interlace Mode)	1.4Lux / 1/50s 0.1 Lux / 1/3s	1.4Lux / 1/60s 0.1 Lux / 1/4s	0.25Lux / 1/50s 0.16 Lux / 1/3s	0.25Lux / 1/60s 0.16 Lux / 1/4s
Min. Lighting B/W (Interlace Mode)	0.01 Lux / 1/3s	0.01 Lux / 1/4s	0.0015 Lux / 1/3s	0.0015 Lux / 1/4s
"Shutter Time" automatic increase to improve the night surveillance	✓		✓	
S/N ratio	More than 50dB		More than 50dB	
AE control	Automatic, Shutter priority, Diaphragm priority, Brightness priority and Manual		Automatic, Shutter priority, Diaphragm priority, Brightness priority and Manual	
Back light compensation	On/Off		On/Off	
Spherical masking (3D) of Privacy zones with automatic upgrade	✓		✓	
Privacy Zone Masking	On/Off (24 positions)		On/Off (24 positions)	
Maximum number of masking blocks to be displayed	8		8	
Resolution of masking blocks	160x120 HxV		160x120 HxV	
Masking	Up to 15 different masking types: 14 colour types or mosaic		Up to 15 different masking types: 14 colour types or mosaic	
Focusing system	Auto (Sensitivity: Normal, Low), Trigger PTZ, Manual		Auto (Sensitivity: Normal, Low), Trigger PTZ, Manual	
"Smart" lens control	Automatic Lens Reset		Automatic Lens Reset	
High Zoom and Wide Horizontal Field of View Capability	✓		✓	
Optical zoom	36x, f=3.4 (wide) to 122.4mm (tele) / F1.6 to F4.5		28x, f=3.5 (wide) to 98mm (tele) / F1.35 to F3.7	
Digital Zoom	12x (432x with optical zoom)		12x (336x with optical zoom)	
Angle of view (A)	57.8 degrees (wide) to 1.7 degrees (tele)		55.8 degrees (wide) to 2.1 degrees (tele)	
Minimum object distance	10mm (0.4in) (wide) to 1500mm (59.1in) (tele)		10mm (0.4in) (wide) to 1500mm (59.1in) (tele)	
Electronic Iris Speed	1/1 ÷ 1/10000s		1/1 ÷ 1/10000s	

THERMAL CAMERAS (RESOLUTION 336X256)

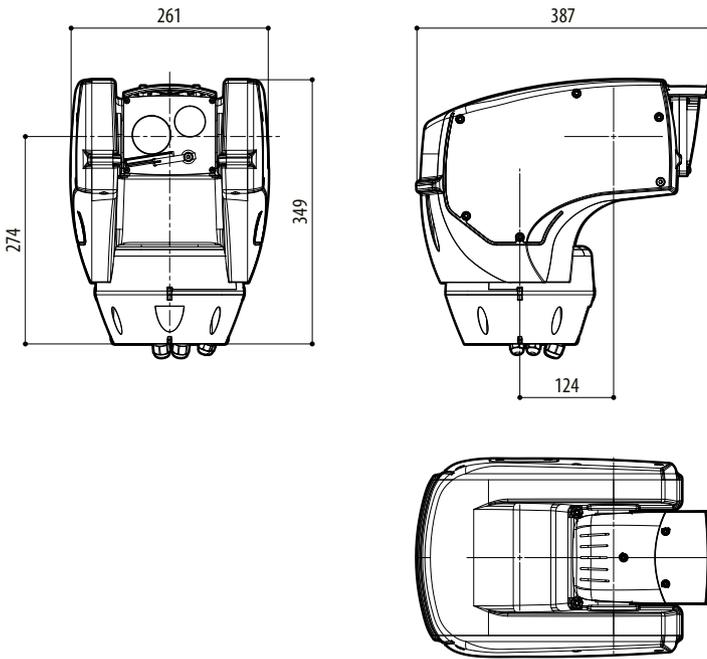
	Lens 25mm		Lens 35mm	
	PAL	NTSC	PAL	NTSC
Image sensor	Uncooled VOx microbolometer		Uncooled VOx microbolometer	
Interpolated resolution	640x512	640x480	640x512	640x480
Pixel dimensions	17µm		17µm	
Spectral response - long wave infrared (LWIR)	from 7.5µm to 13.5µm		from 7.5µm to 13.5µm	
Internal shutter (only for sensor compensation)	Video stop < 1sec.		Video stop < 1sec.	
Digital Detail Enhancement (DDE)	✓		✓	
Digital Zoom	2x, 4x		2x, 4x	
Image updating frequency	8.3fps	7.5fps	8.3fps	7.5fps
Image updating high frequency	25fps	30fps	25fps	30fps
Scene range (High Gain)	-40°C ÷ +160°C (-40°F ÷ +320°F)		-40°C ÷ +160°C (-40°F ÷ +320°F)	
Scene range (Low Gain)	-40°C ÷ +550°C (-40°F ÷ +1022°F)		-40°C ÷ +550°C (-40°F ÷ +1022°F)	
Horizontal field of view	13°		9,3°	
Vertical field of view	10°		7,1°	
F-number	F/1.1		F/1.2	
Thermal sensitivity (NEΔT)	< 50mK to f/1.0		< 50mK to f/1.0	
Person (detection / recognition / identification)	930m / 230m / 116m (3051ft / 754ft / 380ft)		1280m / 320m / 160m (4199ft / 1049ft / 525ft)	
Auto (detection / recognition / identification)	2800m / 710m / 360m (9186ft / 2329ft / 1181ft)		3850m / 950m / 295m (12631ft / 3116ft / 967ft)	

THERMAL CAMERAS (RESOLUTION 640X512)

	Lens 25mm		Lens 35mm	
	PAL	NTSC	PAL	NTSC
Image sensor	Uncooled VOx microbolometer		Uncooled VOx microbolometer	
Resolution	640x512	640x480	640x512	640x480
Pixel dimensions	17µm		17µm	
Spectral response - long wave infrared (LWIR)	from 7.5µm to 13.5µm		from 7.5µm to 13.5µm	
Internal shutter (only for sensor compensation)	Video stop < 1sec.		Video stop < 1sec.	
Digital Detail Enhancement (DDE)	✓		✓	
Digital Zoom	2x, 4x, 8x		2x, 4x, 8x	
Image updating frequency	8.3fps	7.5fps	8.3fps	7.5fps
Image updating high frequency	25fps	30fps	25fps	30fps
Scene range (High Gain)	-40°C ÷ +160°C (-40°F ÷ +320°F)		-40°C ÷ +160°C (-40°F ÷ +320°F)	
Scene range (Low Gain)	-40°C ÷ +550°C (-40°F ÷ +1022°F)		-40°C ÷ +550°C (-40°F ÷ +1022°F)	
Horizontal field of view	25°		18°	
Vertical field of view	20°		14°	
F-number	F/1.1		F/1.2	
Thermal sensitivity (NEΔT)	< 50mK to f/1.0		< 50mK to f/1.0	
Person (detection / recognition / identification)	820m / 210m / 104m (2690ft / 689ft / 341ft)		1140m / 280m / 142m (3740ft / 919ft / 466ft)	
Auto (detection / recognition / identification)	2200m / 580m / 290m (7218ft / 1903ft / 951ft)		3000m / 800m / 200m (9843ft / 2625ft / 656ft)	

TECHNICAL DRAWINGS

The dimensions of the drawings are in millimetres.



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