ULISSE COMPACT THERMAL

DUAL CAMERA POSITIONING UNIT FOR THERMAL IMAGING

REVISION 1135

MAIN FEATURES

Positioning unit with integrated Day/Night camera, thermal camera, P&T head and telemetry receiver

Thermal camera image sensor: uncooled VOx microbolometer

35mm, 25mm and 9mm lens for thermal camera

Dual independent video output

Variable speed: 0.1°-200°/s Pan and 0.1°-200°/s Tilt

Pan rotation: continuous; Tilt rotation -90°/+90°

36x or 28x optical zoom for color camera

Wiper for cleaning both viewing windows

DESCRIPTION

ULISSE COMPACT THERMAL offers an integrated solution for vision even in total darkness, fog, rain, heavy smoke.

This integrated P&T unit combines an advanced thermal imaging camera and an optical day/night zoom module, factory-aligned and installed within the same enclosure.

ULISSE COMPACT THERMAL features two independent video outputs and allows dual real-time vision on monitors for an optimal monitoring of the area.

The thermal camera is an Uncooled Vanadium Oxide microbolometer (VOx) with spectral band 7.5-13.5 μm; it delivers a thermal video of 320x256 (PAL) and 320x240 (NTSC), with an image frequency of 8.3fps or 25 fps (PAL) and 7.5 or 30fps (NTSC). The high sensitivity NEdT 50mK at f/1.0 ensures an optimal thermal imaging. It supports 2x or 4x digital zoom. A choice of lens sizes is offered between 35mm, 25mm and 9mm, depending on the detection distance required.

The thermal camera parameters are easily configurable on OSD. The setup interface offers typical pre-set configurations or complete customization of the system.

The camera also has functions such as the Isothermal analysis (special colors of the objects that fall within the parameters set by the operator), base thermography and other colors of the scene.

The integrated day/night SONY camera offers a 28x or 36x zoom lenses which allow the recording with exceptional precision of both close-by and far away objects, as well as dynamic privacy zone masking. Furthermore, the Super HAD CCD II™ guarantees an excellent sensitivity in poorly lit environments.

This solution is particularly suited for round-the-clock video surveillance in a wide range of high security environments such as perimeter protection, airports, coastlines, prisons and harbours.

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TECHNICAL DATA

GENERAL

Constructed from aluminium and tecnopolymer

Epoxypolyester powder painting, RAL9002 colour

Germanium glass window for thermal camera

Easy installation thanks to the self-centring connector

Zero backlash

Dynamic positioning control system

MECHANICAL

2 cable glands M16 and 2 cable glands M12

Horizontal continuous rotation

Vertical rotation -90° to +90°

Variable pan speed: from 0.1° up to 200°/s

Variable tilt speed: from 0.1° up to 200°/s

Preset accuracy: 0.05°

ELECTRICAL/VIDEO

Input voltage:
- 230Vac, 50/60Hz,
- 24Vac, 50/60Hz
- 120Vac, 50/60Hz

Current consumption:
- 230Vac, 0.4A
- 24Vac, 4A
- 120Vac, 0.8A

Power consumption:
- 40W with pan-and-tilt stopped and heating switched off
- 60W in motion, with heating switched off
- 125W peak at start-up, with heating switched on

Input cables size: AWG 16-19

Signal cables size: AWG 16-30

Video lines: coaxial cable (1Vpp, 75Ohm)

Functions: Autopan, Preset, Patrol, Tour (max 3), Autoflip

Maximum number of presets:
- AMERICAN DYNAMICS protocol: 95*
- ERNITEC protocol: 250
- PANASONIC protocol: 250
- PELCO D protocol: 99*
- VIDEOTEC MACRO protocol: 250
- *250 from OSD (On Screen Display) only

16-characters string for zone and preset titling

I/O alarm card (option):
- 6 alarm inputs
- 2 relais outputs (2A 30Vac/60Vdc max)

COMMUNICATIONS

Configuration through OSD

Half-duplex serial RS485 interface, full-duplex RS422 and daisy-chain architecture

Firmware updating from console in remote mode (only VIDEOTEC MACRO and PELCO D protocols)

Up to 1023 units, addressable by means of dip-switches

PROTOCOLS

AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO D, VIDEOTEC MACRO

AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO are registered trademarks.

The product may be interfaced with devices not manufactured by VIDEOTEC. It is possible that the interface protocols have changed or are in a different configuration from earlier tested units by VIDEOTEC. VIDEOTEC recommends a test prior to installation. VIDEOTEC will not be liable for any installation costs or lost revenues in the event a compatibility problem will occur.

ENVIRONMENT

Indoor / Outdoor

Operating temperature: -40°C /+60°C (-40°F / +140°F)

Surge immunity: up to 2KV line to line, up to 4KV line to earth (Class 4)

CERTIFICATIONS

CE EN60950-1, EN61000-6-3 and EN50130-4

FCC part 15, Class A

IP66 EN60529

UL pending

UL Canadian Safety Standards pending

NEMA 4X

ACCESSORIES

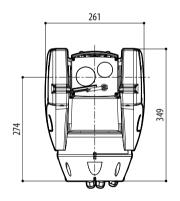|	
UPT5WAS01C	Tank 5l (1,3gal) 230Vac washer pump
UPT5WAS02C	Tank 5l (1,3gal) 24Vac washer pump
UPTWAS01C	Tank 23l (6gal), IN 230Vac washer pump
UPTWAS02C	Tank 23l (6gal), IN 24Vac washer pump
UPTWAS03C	Tank 23l (6gal), IN 120Vac washer pump
UPTWASM	Tank 23l, washer pump 230Vac-24Vac or 120Vac, delivery up 11m (36ft)
UPTWASA01C	Tank 23l (6gal), IN 230Vac washer pump, high delivery up 30m (98ft)
UPTWASA03C	Tank 23l (6gal), IN 120Vac washer pump, high delivery up 30m (98ft)

BRACKETS AND ADAPTORS

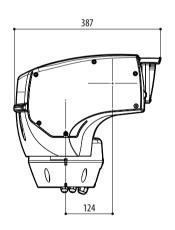|	
UPTWBA	Wall bracket with internal cable channel
UPTWBTA	Parapet bracket with internal cable channel
PTCC1	Pole mount adapter for UPTWBA
WCWGC	Corner adapter for UPTWBA

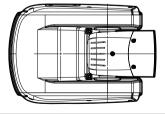### RELATED PRODUCTS

ALBERT	Unit for the intelligent digital video content analysis
DCJ	Keyboard to control matrix, multiplexers and telemetry equipped with three axis joystick
DCT	Touch screen keyboard to control matrix, multiplexers, DVRs and telemetry equipped with three axis joystick

PACKAGE

Code	Unit weight		Package weight		Package dimensions (WxHxL)		Master carton
	kg	lb	kg	lb	cm	in	unit
UCT1PBWA00A	12.5	27.6	15.5	34.2	66.0x33.0x57.0	26.0x13.0x22.5	-

VIDEOTEC CCTV PRODUCTS

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Not all combinations are possible.

UCT	Voltage	Day/night camera	Thermal camera	Options	A	Video output	00	A
	1 230Vac	**S** Without day/night camera	**A** Thermal camera 35mm (7.5-9Hz) 320x256, PAL/NTSC	**W** With built-in wiper		**0** Analog control mode		
	2 24Vac	**P** Day/night camera 36x optical zoom lens, PAL	**B** Thermal camera 25mm (7.5-9Hz) 320x256, PAL/NTSC					
	3 120Vac	**Q** Day/night camera 28x optical zoom lens, PAL	**C** Thermal camera 9mm (7.5-9Hz) 320x256, PAL/NTSC					
		N Day/night camera 36x optical zoom lens, NTSC	**N** Thermal camera 35mm (25-30Hz) 320x256, PAL/NTSC					
		M Day/night camera 28x optical zoom lens, NTSC	**O** Thermal camera 25mm (25-30Hz) 320x256, PAL/NTSC					
			P Thermal camera 9mm (25-30Hz) 320x256, PAL/NTSC					

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AVAILABLE BUILT-IN THERMAL CAMERAS						
	Thermal camera 35mm		Thermal camera 25mm		Thermal camera 9mm	
	PAL	NTSC	PAL	NTSC	PAL	NTSC
Detector	Uncooled Vanadium Oxide microbolometer (VOx)					
Resolution	320x256	320x240	320x256	320x240	320x256	320x240
Pixel dimensions	25µm					
Spectral response - Infrared long wave (LWIR)	From 7.5µm to 13.5µm					
Internal shutter (only for sensor compensation)	Video stop < 1sec.					
Digital Detail Enhancement (DDE)	Yes		Yes		Yes	
Digtal zoom	2x, 4x					
Image frequency	8.3fps, 25fps	7.5fps, 30fps	8.3fps, 25fps	7.5fps, 30fps	8.3fps, 25fps	7.5fps, 30fps
Image temperature range	-40°C ÷ +160°C (-40°F ÷ +320°F)					
Horizontal field of view	13°		18°		48°	
Vertical field of view	10°		14°		37°	
F-number	F/1.2		F/1.1		F/1.25	
Thermal sensitivity (NEdT)	< 50mK at f/1.0					
Man (detection / recognition / identification)	780m / 190m / 97m (2559/623/318ft)		560m / 140m / 70m (1837/459/230ft)		205m / 56m / 26m (673/184/85ft)	
Car (detection / recognition / identification)	2150m / 560m / 280m (7054/1837/919ft)		1550m / 400m / 200m (5085/1312/656ft)		590m / 150m / 74m (1936/492/243ft)	

AVAILABLE ANALOG CAMERAS				
	SONY Day/Night 36x		SONY Day/Night 28x High sensitivity	
	PAL	NTSC	PAL	NTSC
Optical zoom	36x		28x	
Wide Dynamic Range (Fix/Auto)	Yes		-	
Progressive SCAN	Yes		-	
Digital image stabilisation	Yes		Yes	
White balance	Auto, ATW, Indoor, Outdoor (Fix/Auto), Sodium Vapor Lamp (Fix/Auto)			
High horizontal resolution	Up to 550 TV Lines			
Day-Night (Auto ICR)	Yes			
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. night Illumination (ICR ON) (typical)	0.01 Lux / 1/3s	0.01 Lux / 1/4s	0.0015 Lux / 1/3s	0.0015 Lux / 1/4s
Min. day Illumination (ICR OFF) (typical)	0.1 Lux / 1/3s	0.1 Lux / 1/4s	0.16 Lux / 1/3s	0.16 Lux / 1/4s
"Shutter Time" automatic increase to improve the night surveillance	Yes			
S/N ratio	More than 50dB			
AE control	Auto, Shutter priority, Diaphragm priority, Brightness priority and Manual			
Back Light Compensation	On/Off			
Spherical masking (3D) of Privacy zones with automatic upgrade	Yes			
Privacy Zone Masking	On/Off (24 positions)			
Maximum number of masking blocks to be displayed	8			
Resolution of masking blocks	160x120 HxV			
Masking	Up to 15 different masking types: 14 colour types or mosaic			
Focusing System	Auto (Sensitivity: Normal, Low), Trigger PTZ, Manual			
"Smart" Lens Control	SONY Modular Automatic Lens Reset Technology			
High Zoom and Wide Horizontal Field of View Capability	Yes			
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)	
Min. Object Distance	320mm (wide) to 1500mm (tele)		10mm (wide) to 1500mm (tele)	
Electronic Shutter Speed	1/1 ÷ 1/10000s			

SONY is a registered trademark of SONY Corporation, Japan. EXview HAD is a registered trademark of SONY Corporation.