2016/05/17 ULISSE COMPACT THERMAL

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OUTDOOR PTZ CAMERA DUAL VISION, DAY/NIGHT AND THERMAL, 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 stabilizer (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

Operating temperature: $-40^{\circ}\text{C} / +60^{\circ}\text{C} (-40^{\circ}\text{F} / +140^{\circ}\text{F})$

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 construction ensures vision beyond the horizon and the continuous rotation on the horizontal axis, combining high speed to absolute tracking accuracy, both in manual mode and in patrol mode.



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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: continuous

Vertical rotation: -90° 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)

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)

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

Maximum number of presets for protocol

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

ENVIRONMENT

Indoor/Outdoor

Operating temperature (with heater): from -40° C (-40° F) up to $+60^{\circ}$ C (140° F)

Relative Humidity 10-95% (no condensation)

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)

CERTIFICATIONS

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

Electromagnetic compatibility (CE): EN610000-6-4, 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

| AC | | |
|----|--|--|
| | | |

| UPTJBUL | Junction weatherproof box for cables connexion (according UL norm) |
|-----------------|---|
| WASPT0V5L5M00 | Water tank SI (1 gal), pump with delivery up to 5m (16ft), IN 230Vac-24Vac-120Vac |
| WASPT0V23L5M00 | Water tank 23I (6 gal), pump with delivery up to 5m (16ft), IN 230Vac-24Vac-120Vac |
| WASPT0V23L11M00 | Water tank 23I (6 gal), pump with delivery up to 11m (36ft) with water floating, IN 230Vac-24Vac-120Vac |
| WASPT1V23L30M00 | Water tank 23I (6 gal), pump with delivery up to 30m (98ft) with water floating, IN 230Vac |

WASPT3V23L30M00 Water tank 23I (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) | - |



^{*250,} from OSD only (On Screen Display)

| ULISS | E COMPA | CT THE | RMAI | L - CONFIGURATION OPTIO | NS | | | | | | | | | |
|-------|--------------------------|--------|-------------------------------|--|--------------|----------------------------------|---|-----------------------|--------------|---|----------------|-----------|---|---------------|
| | Voltage Day/Night camera | | ay/Night camera Thermal camer | | ermal camera | | | | Video Output | | | Frequency | | |
| UCT | 1 23 | 30Vac | 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 24 | 4Vac | Q | Day/Night camera 28x optical zoom lens, PAL | В | Thermal camera 25mm - 336x256 | | | | | | | Н | 25- 30Hz |
| | 3 12 | 20Vac | 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 | | | | | | | | |

| | Day/Night 36x | | Day/Night 28x High sensitivity | | |
|---|---|---|---|--|--|
| | PAL NTSC | | PAL | NTSC | |
| Optical zoom | 36x | | 28x | | |
| Wide Dynamic Range (Fix/Auto) | ✓ | | - | | |
| True progressive SCAN | 1 | | _ | | |
| Digital image stabilisation | ✓ | | ✓ | | |
| White balance | Auto, ATW, Indoor, Out Sodium Vapor Lamp (F | | Auto, ATW, Indoor, Outo Sodium Vapor Lamp (Fi | | |
| High horizontal resolution | Up to 550 TV Lines | | Up to 550 TV Lines | | |
| Day/Night (Auto ICR) | ✓ | | 1 | | |
| 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. Color illumination (IR-Cut Filter = OFF) | 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. B/W illumination | 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 | ✓ | | 1 | | |
| S/N ratio | More than 50dB | | More than 50dB | | |
| AE control | Automatic, Shutter prio priority, Brightness prio | | Automatic, Shutter priority, Diaphragn priority, Brightness priority and Manua | | |
| Back light compensation | On/Off | | On/Off | | |
| Spherical masking (3D) of Privacy zones with automatic upgrade | √ | | 1 | | |
| 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: Norm | al, Low), Trigger PTZ, Manual | Auto (Sensitivity: Norm | al, Low), Trigger PTZ, Manual | |
| "Smart" lens control | Automatic Lens Reset | | Automatic Lens Reset | s Reset | |
| High Zoom and Wide Horizontal Field of View Capability | 1 | | 1 | | |
| Optical zoom | 36x, f=3.4 (wide) to 12 | =3.4 (wide) to 122.4mm (tele) / F1.6 to F4.5 28x, f=3.5 (wide) to 98mm (tele) / | | mm (tele) / F1.35 to F3.7 | |
| Digital Zoom | 12x (432x with optical zoom) 12x (336x with optical zoom) | | zoom) | | |
| Angle of view (A) | 57.8 degrees (wide) to 1.7 degrees (tele) 55.8 degrees (wide) to 2.1 degr | | 2.1 degrees (tele) | | |
| Minimum object distance | 320mm (12.6in) (wide | to 1500mm (59.1in) (tele) | 10mm (0.4in) (wide) to 1500mm (59.1in) (tele) | | |
| Electronic Iris Speed | $1/1 \div 1/10000s$ $1/1 \div 1/10000s$ | | | | |

ULISSE COMPACT THERMAL 2016/05/17

| THERMAL CAMERAS (RESOLUTION 336X256) | | | | | |
|---|--------------------|--|--------------------|-------------------------------|--|
| | Lens 25mm | Lens 25mm | | | |
| | PAL | NTSC | PAL | NTSC | |
| Image sensor | Uncooled VOx micro | ncooled VOx microbolometer | | robolometer | |
| Resolution | 320x256 | 320x240 | 320x256 | 320x240 | |
| Pixel dimensions | 17µm | | 17μm | | |
| Spectral response - long wave infrared (LWIR) | from 7.5μm to 13.5 | μm | from 7.5μm to 13. | 5μm | |
| Internal shutter (only for sensor compensation) | Video stop < 1sec. | | Video stop < 1sec. | /ideo stop < 1sec. | |
| Digital Detail Enhancement (DDE) | ✓ | | 1 | | |
| 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 (-4 | -40°C ÷ +160°C (-40°F ÷ +320°F) | | 40°F ÷ +320°F) | |
| Scene range (Low Gain) | -40°C ÷ +550°C (-4 | -40°C ÷ +550°C (-40°F ÷ +1022°F) -40°C ÷ +550°C (-40°F | | 40°F ÷ +1022°F) | |
| Horizontal field of view | 13° | 13° | | 9,3° | |
| Vertical field of view | 10° | 10° 7,1° | | | |
| F-number | F/1.1 | F/1.1 F/1.2 | | | |
| Thermal sensitivity (NEdT) | < 50mK to f/1.0 | < 50mK to f/1.0 < 50mK to f/1.0 | | | |
| Person (detection / recognition / identification) | 930m / 230m / 116 | 930m / 230m / 116m (3051ft / 754ft / 380ft) 1280m / 320m / 160m (4199ft / 1049ft / | | 60m (4199ft / 1049ft / 525ft) | |
| Auto (detection / recognition / identification) | 2800m / 710m / 36 | 60m (9186ft / 2329ft / 1181ft) 3850m / 950m / 295m (12631ft / 3116ft / 967ft) | | | |



2016/05/17 ULISSE COMPACT THERMAL

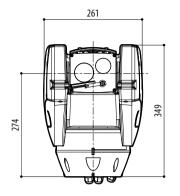
| THERMAL CAMERAS (RESOLUTION 640X512) | | | | | |
|---|--------------------|---|---------------------------|------------------------------|--|
| | Lens 25mm | Lens 25mm | | | |
| | PAL | NTSC | PAL | NTSC | |
| Image sensor | Uncooled VOx micro | bolometer | meter Uncooled VOx microb | | |
| Resolution | 640x512 | 640x480 | 640x512 | 640x480 | |
| Pixel dimensions | 17µm | | 17μm | | |
| Spectral response - long wave infrared (LWIR) | from 7.5μm to 13.5 | μm | from 7.5μm to 13.5 | 5μm | |
| Internal shutter (only for sensor compensation) | Video stop < 1sec. | | 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 (-4 | 10°F ÷ +320°F) | -40°C ÷ +160°C (- | 40°F ÷ +320°F) | |
| Scene range (Low Gain) | -40°C ÷ +550°C (-4 | 10°F ÷ +1022°F) | -40°C ÷ +550°C (- | 40°F ÷ +1022°F) | |
| Horizontal field of view | 25° | | 18° | 18° | |
| Vertical field of view | 20° | | 14° | | |
| F-number | F/1.1 | F/1.1 F/1.2 | | | |
| Thermal sensitivity (NEdT) | < 50mK to f/1.0 | < 50mK to f/1.0 < 50mK to f/1.0 | | | |
| Person (detection / recognition / identification) | 820m / 210m / 104 | 820m / 210m / 104m (2690 / 689 / 341ft) 1140m / 280m / 142m (3740ft / 919ft / | | 42m (3740ft / 919ft / 466ft) | |
| Auto (detection / recognition / identification) | 2200m / 580m / 29 | 2200m / 580m / 290m (7218ft / 1903ft / 951ft) 3000m / 800m / 200m (9843ft / 2625ft / 656ft) | | | |

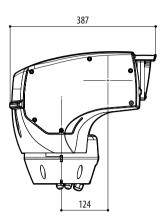


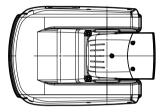
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TECHNICAL DRAWINGS

Sizes in millimeters.







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