**DIVISION 28 ELECTRONIC SAFETY AND SECURITY**

**SECTION 28 20 00 ELECTRONIC SURVEILLANCE**

**SECTION 28 23 00 VIDEO SURVEILLANCE**

**SECTION 28 23 29 VIDEO SURVEILLANCE REMOTE DEVICES AND SENSORS**

**1 General**

**1.1 General requirements**

A) The components and materials used for the construction of the products are standard type, they are manufactured and available also as spare parts, as long as the products remain on the market.

B) All products and versions will be severely tested and validated by the internal laboratories of the manufacturer before being released on the market.

C) All products released on the market by the manufacturer are designed for 24x7x365 constant use.

D) For all products a Technical Support service is available for free via phone and e-mail.

**1.2 Quality**

A) The manufacturer has to repair or replace without charge any products in which construction and/or material defects are found for the stated warranty period, starting from the delivery date of the material.

B) The specified devices must be manufactured in Italy following the standards of EN ISO 9001: 2008 certification.

**1.3 Environmental sustainability**

A) All products must comply with RoHS-6/6 according to the specifications 2011/65/EU, 2005/717/EC, 2006/122/EC and REACH according to the specifications EC 1907/2006.

**1.4 Certifications**

A) All products must have the following certifications:

1. Electrical safety: EN60950-1

2. Electromagnetic compatibility: (CE) EN50130-4, EN55022 (Class A), FCC Part 15 (Class B)

3. Outdoor installation: (CE) EN60950-22

4. Photobiological safety: (CE) EN62471 (LED illuminators)

5. IP protection degree: EN60529 (IP66)

6. Resistant to salty fog: EN50130-5, EN60068-2-52

7. EAC certification

**2 Products**

**2.1 PTZ unit for dynamic monitoring of large outdoor areas**

A) Robust and efficient Pan/Tilt/Zoom unit designed to ensure dynamic and non-stop surveillance of large outdoor areas and withstand harsh weather conditions.

A) This model can contain and manage the largest motorized lenses on the market, with a total weight of up to almost 8 kilos.

B) The system has, in addition to the OSD configuration, a RS485 and a RS422 interface for the complete system control and the remote firmware update.

C) The optical sensors provide precise control of the position in any operating condition.

D) The PTZ unit is equipped with a wiper for removing rain and dust from the front glass.

E) Prearrangement for mounting of two UPTIRN LED illuminators.

F) Models are available for vision with a thermal camera.

G) Thanks to its reliability, robustness and accuracy, this PTZ unit is the ideal solution for demanding security applications, including: coastal and harbour monitoring, borders, military installation and perimeter surveillance.

H) The unit features the following specifications:

1. General:

a. Built in aluminium and ABS

b. Epoxypolyester powder painting, RAL9002 colour

c. Top mount (OTT)

d. Transmission through toothed belt

e. Slip-ring

f. Electronic limit switches

g. Plug installation thanks to connector and easy replacement on-site

h. Zero backlash

i. Max weight camera+lens: 7.6Kg (17lb)

j. Optical sensors for absolute positioning feedback

k. Integrated wiper

l. Configuration of telemetry protocol parameters through dip-switch for RS485

2. Mechanical features:

a. Cable glands: 3xM16

b. Horizontal rotation: continuous

c. Vertical rotation: from +45° to -20°

d. Pan speed: (variable): from 0.02° to 20°/s

e. Tilt speed (variable): from 0.02° to 20°/s

f. Preset accuracy: 0.02°

g. Unit weight: 30kg (66lb)

h. Glass window (WxH): 112x95mm (4.4x3.7in)

i. Germanium window:

1. Dimensions (Ø): 85mm (external), 70mm (usable diameter)

2. Thickness: 2mm

3. External scratch-resistant treatment: Hard Carbon Coating (DLC)

4. Internal antireflection treatment

5. Spectral range: 7.5 ÷ 14µm

6. Medium transmittance (7.5 ÷ 11.5µm): 94%

7. Medium transmittance (11.5 ÷ 14µm): 90%

3. Electrical features:

a. Power supply/current consumption:

1. 230Vac, 0.4A, 50/60Hz

2. 24Vac, 4A, (8A with LED illuminators) 50/60Hz

3. 120Vac, 0.8A, 50/60Hz

b. Power consumption

1. 100W

2. 150-190W max with LED illuminators in 24Vac

3. 24W P&T stopped, heating switched off

c. Camera power supply: 12Vdc, 800mA

d. Lens power supply: 6-15Vdc, 200mA max

e. Input cables size: AWG 16 (24Vac) – AWG 18 (120/230Vac)

f. Dimensions of signal cables: AWG 20-26

g. Video line: coaxial cable (1Vpp, 75Ohm)

4. Technical features:

a. Autopan, Preset, Patrol

b. Configuration of telemetry protocol parameters through dip-switch

c. Supported protocols:

1. AMERICAN DYNAMICS

2. PANASONIC

3. PELCO D

4. VIDEOTEC MACRO

5. VISTA

d. Configuration through OSD

e. 15 characters string for Area and Preset titling

f. Maximum number of presets for protocol: 250 (VIDEOTEC MACRO)

g. 4 alarm inputs: 10-35Vdc (2 alarm inputs with LED illuminators)

h. 2 dry contacts: 50Vdc max or 30Vac, @1A (1 dry contact with LED illuminators on)

i. Lenses control: polarity inversion and common wire

j. Communication:

1. RS232 interface for PC control and firmware update

2. 2-ports RS485: daisy chain configuration or RS232

3. Addressable through dip-switch up 255 units

5. Environmental features:

a. Indoor / Outdoor

b. Operating temperature (with heater): -10°C / +60°C (14°F / 140°F)

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

6. Optional Accessories:

a. LED illuminator, 10°, 850nm, 24Vac – 12/24Vdc (UPTIRN108A00)

b. LED illuminator, 30°, 850nm, 24Vac – 12/24Vdc (UPTIRN308A00)

c. LED illuminator, 60°, 850nm, 24Vac – 12/24Vdc (UPTIRN608A00)

d. LED illuminator, 10°, 940nm, 24Vac – 12/24Vdc (UPTIRN109A00)

e. LED illuminator, 30°, 940nm, 24Vac – 12/24Vdc (UPTIRN309A00)

f. LED illuminator, 10°, white light, 24Vac – 12/24Vdc (UPTIRN10WA00)

g. LED illuminator, 30°, white light, 24Vac – 12/24Vdc (UPTIRN30WA00)

h. LED illuminator, 60°, white light, 24Vac – 12/24Vdc (UPTIRN60WA00)

i. Sensor and Power supply for version with illuminators, IN 230Vac, in waterproof metal box (UPTIRPS230N)

j. Sensor and Power supply for version with illuminators, IN 100Vac, in waterproof metal box (UPTIRPS100N)

k. Sensor and Power supply for version with illuminators, IN 120Vac, in waterproof metal box (according UL norm) (UPTIRPS120UL)

l. Water tank 5l, pump with delivery up to 5m (16ft), IN 230Vac-24Vac-120Vac (WASPT0V5L5M00)

m. Water tank 23l, pump with delivery up to 5m (16ft), IN 230Vac-24Vac-120Vac (WASPT0V23L5M00)

n. Water tank 23l, pump with delivery up to 11m (36ft), IN 230Vac-24Vac-120Vac (WASPT0V23L11M00)

o. Water tank 23l, pump with delivery up to 30m (98ft), IN 230Vac (WASPT1V23L30M00)

p. Water tank 23l, pump with delivery up to 30m (98ft), IN 120Vac (WASPT3V23L30M00)

q. Junction weatherproof box for cables connection (according UL norm) (UPTJBUL)

7. Brackets and Adapters:

a. Wall bracket with internal cable channel (UPTWBA)

b. Parapet bracket with internal cable channel (UPTWBTAB)

c. Pole mount adaptor for UPTWBA (PTCC1)

d. Corner mount adaptor for UPTWBA (WCWGC)

I) Available models: the following table shows the configuration options depending on the installation needs:

|  |
| --- |
| **ULISSE MAXI - Configuration options** |
|   | **Voltage** |   | **Options** |   | **Video output** |   |
| **UPT** | **1** 230Vac | **SL** | **W** 230Vac and 120Vac, with wiper | **A** | **O** Analog | **00E** |
|  | **2** 24Vac |  | **J** 24Vac, with wiper and prearrangement for mounting of two UPTIRN (illuminators not included) |  |  |  |
|  | **3** 120Vac |  | **G** With germanium front window for thermal cameras applications |  |  |  |