**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, IEC60950-1

2. Electromagnetic compatibility: (CE) EN50130-4, EN610000-6-3, EN55022 (Class A), FCC Part 15 (Class B)

3. Outdoor installation: (CE) EN60950-22, IEC60950-22

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

5. IP protection degree: EN60529 (IP66)

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

7. UL certification: cULus Listed (TYPE 4X)

8. EAC certification

**2 Products**

**2.1 Outdoor PTZ unit for cameras with medium size lenses**

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, reducing maintenance to zero.

B) The unit can contain cameras with medium-sized lenses.

C) 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.

D) 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.

E) The optimal operation is ensured in very hot environments up to 60°C or in very cold environments up to -30°, thanks to optional enhanced heating.

F) The unit is equipped with optical sensors which ensure the accurate control of the position in any condition of use.

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

H) Prearrangement for mounting of two UPTIRN LED illuminators.

I) Thanks to their reliability, robustness and accuracy, these PTZ cameras and units are the ideal solution for demanding security applications, including: traffic and highways control, coastal and harbour monitoring, borders, stadiums and industries surveillance, prisons, military installation and perimeter surveillance.

J) 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. Optical sensors for absolute positioning feedback

j. Integrated wiper

k. 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 +90° to -40°

d. Pan speed: (variable): from 0.02° up to 100°/s (from 0.02°/s up to 40°/s with LED illuinators)

e. Tilt speed (variable): from 0.02°/s up to 50°/s (from 0.02°/s up to 30°/s with LED illuminators)

f. Preset accuracy: 0.02°

g. Unit weight: 17.3kg (38lb) (17.8kg-39lb- with bracket for LED illuminators)

h. Glass window (WxH): 124x112mm (4.9x4.4in)

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. 28.5W 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): -20°C / +60°C (-4°F / +140°F)

c. Operating temperature (with reinforced heater): -30°C / +60°C (-22°F / +140°F)

d. 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. Cold pack for low temperature 24Vac, 30W (UPTHT1)

r. 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)

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

|  |
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| **ULISSE PLUS - Configuration options** |
|   | **Voltage** |   | **Options** |   | **Video output** |   |
| **UPT** | **1** 230Vac | **SM** | **W** With wiper | **A** | **O** Analog | **00E** |
|  | **2** 24Vac |  | **J** With wiper and brackets for UPTIRN (only 24Vac, illuminators not included) |  |  |  |
|  | **3** 120Vac |  |  |  |  |  |