**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, EN610000-6-4, 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) (not for thermal cameras version)

8. EAC certification

**2 Products**

**2.1 Full IP PTZ unit for Network cameras for highest precision Day/Night monitoring**

A) Powerful Full-IP PTZ unit for outdoor IP video surveillance, which can manage modern IP SD, HD and Megapixel cameras, with integration in a network system.

B) The distinctive feature of the system is the easy control via network, using the protocol ONVIF, Profile S, of all camera and P&T functions, including wiper, preset and set-up, using the most common VMS on the market.

C) The camera and pan & tilt configurations occur via direct access to their web pages (for the camera via VT Tunneling).

D) It is possible to use any ONVIF compatible Profile S camera, or proprietary protocol on RS-485, whilst the entire management of the system only requires an IP address.

E) The control of the positioning system is directly via network, using the protocol ONVIF, Profile S

F) The unit supports network cameras with motorised standalone lenses or integrated lenses.

G) Cold pack for low temperature down to -30°C (-22°F)

H) Prearrangement for mounting of two UPTIRN LED illuminators.

I) Thanks to its reliability, robustness and accuracy, this Full IP PTZ unit for network cameras is 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 Full IP PTZ unit for network cameras 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. 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° to 40°/s (from 0.02°/s up to 30°/s with LED illuminators)

f. Enclosure glass window (WxH): 118x75mm (4.6x2.9in)

g. Preset accuracy: 0.02°

h. Unit weight: 16.3kg (36lb) (16.8kg-37lb- with bracket for LED illuminators)

i. Germanium window (version for thermal cameras):

1. Dimensions: 70mm - 2.7in (external), 55mm 2.1in (internal)

2. Thickness: 2mm

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

4. Internal antireflection treatment

5. Spectral range: 7.5μm ÷ 14μm

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

7. Medium transmittance (11.5μm ÷ 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. 4 self-powered alarm inputs

e. 2 dry contacts: 30Vdc max or 30Vac, @ 1A

4. 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. Wind resistance (without LED illuminators): up to 160km/h (operational), up to 210km/h (stationary)

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

5. Communications:

a. Ethernet connection: IEEE 802.3 100Base-Tx

6. Protocols:

a. ONVIF, S profile

7. 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)

8. 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:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ULISSE NETCAM - Configuration options** | | | | | | | |
|  | **Voltage** |  |  | **Options** |  | **Video output** |  |
| **UPT** | **1** 230Vac | **S** Without camera | **V** | **S** Without accessories | **A** | **N** For Network cameras compatible with ONVIF protocol, Profile S, or with built-in telemetry output | **00E** |
|  | **2** 24Vac |  |  | **W** With wiper |  |  |  |
|  | **3** 120Vac |  |  | **K** With brackets for UPTIRN (only 24Vac, illuminators not included) |  |  |  |
|  |  |  |  | **J** With wiper and brackets for UPTIRN (only 24Vac, illuminators not included) |  |  |  |
|  |  |  |  | **G** With germanium front window for thermal cameras applications |  |  |  |