

# TPU230IRV2

## TrafficPTZ Ultimo with IR, v2

### DESCRIPTION

The TrafficPTZ Ultimo (TPU) is a high-precision, full-featured network PTZ camera providing high-quality, high-definition images. The integrated 30x optical zoom in combination with the dual LED illuminators and its embedded image stabilization makes the camera ideal for traffic applications.

### FEATURES

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1/2 Sony CMOS sensor

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30x Optical zoom, true day & night

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Dual LED Illumination

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Full HD 1080p resolution (2.1M)

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Multiple H.264/MJPEG streaming

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Day/Night with IR-cut filter

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Variable pan and tilt speed,  
proportional zoom

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Continuous rotation, tilt from -90° to  
+40°

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Wind load up to 200 km/h

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Preset accuracy of 0.02°

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ONVIF Profile S

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## Description

### Construction

The robust construction using cast aluminium and durable plastics ensures accurate positioning and stable video, close by and at large distances. The TPU230IRv2 is designed to operate under extreme temperatures and all lighting conditions for mission critical applications.

### Multistream high definition

The TPU230v2 has multiple stream capability for simultaneous streaming of one or more H.264 or MJPEG streams. Two independent H.264/MJPEG encoders can generate full-HD 1080p video streams at full frame rate. Multiple combinations of resolution and frame rate can be configured to satisfy different live viewing and recording scenarios.

### Open standards

Its compliance to open standards ensure that the TPU230IRv2 is compatible with the most common VMS's out of the box. If you need to incorporate the camera's special features in your dedicated client software, the Programming Interface offers an easy HTTP API for guaranteed interoperability. This makes the camera an outstanding candidate for projects which require customization.

### Image enhancement

The TPU230IRv2 provides automatic IR-illumination functionality, for use in no-light situations. Backlight compensation enhances image visibility in difficult lighting situations. This ensures quality pictures at all times. An ultra wide dynamic range, using dual-exposure techniques ensures a even exposure in both the highlights and shadows in the image.

| Camera                     |   |        |
|----------------------------|---|--------|
| Image sensor               | 1/2 Sony CMOS sensor  |        |
| Video standards            | 25 fps or 30 fps  |        |
| Output resolutions         | 1920x1080; 1280x720; 1024x768; 800x600; 720x512; 640x480; 352x240                                       |        |
| Effective pixels           | 1937 (H) x 1,097 (V), 2.12 MP   |        |
| Shutter speed              | 1/30 ~ 1/30000s, digital slow shutter (DSS) Off/2x/4x   |        |
| Signal-to-noise ratio      | >50 dB (AGC off)  |        |
| Minimum scene illumination | Color (1/30s) 0.15 lux, BW (1/30s) 0.01 lux<br>Color DSS (1/7.5s) 0.0375 lux, BW DSS (1/7.5s) 0.002 lux |        |
| LED Illumination           | Tele  | Wide   |
| - illumination angle       | 1x 10°  | 1x 60° |
| - Distance                 | 240 m   | 80 m   |
| - Wavelength               | 850 nm  | 850 nm |
| Horizontal field of view   | 61.2 to 2.32 degrees  |        |
| Focal length               | 6mm (F1.5) to 180mm (F4.3)  |        |

| Image control               |   |
|-----------------------------|---|
| WDR/BLC                     | Off / WDR / BLC                               |
| WDR                         | 130 dB (multi-exposure WDR)                   |
| High Light compensation     | Off / On / Night Only                         |
| White balance               | Auto / One Push / Manual / Indoor / Outdoor   |
| Digital image stabilization | Off, On                                       |
| Gain Control (AGC)          | Off / On                                      |
| Iris control                | 0 to 20 steps                                 |
| Exposure                    | Auto, Iris Priority, Shutter Priority, Manual |
| Brightness                  | 0 ~ 20 steps                                  |
| Sharpness                   | 0 ~ 10 steps                                  |
| AF mode                     | Auto / One Push / Manual                      |
| DNR                         | Auto / Off / Low / Middle / High              |
| ACE                         | Off / Low / Middle / High                     |
| Defog                       | Off / On (Auto / Manual)                      |
| Day/Night (IR-cut filter)   | Auto / Day / Night / Ext-in                   |
| Privacy Masks               | Dynamic, up to 24                             |
| Optical zoom                | 30x (32x digital)                             |

| Video                   |  |
|-------------------------|--|
| Compression             | H.264, MJPEG                                 |
| Aspect ratio            | Selectable 16:9 or 4:3. Cropped, no scaling. |
| Number of video streams | 2  |

| Network      |   |
|--------------|---|
| Interface(s) | 100 Mbps FE Ethernet (RJ-45)  |
| Protocols    | IPv4, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE,<br>UPnP, IGMPv1/2/3, SNMPv1/2/3, QoS, ONVIF Profile S, IEEE802.1X, NTCIP1205, TLS1.2 |

# Specs

## Network

## Storage

|                 |                              |
|-----------------|------------------------------|
| Storage options | Micro SDHC card, 32 GB, NAS  |
| Local recording | Continuous, scheduled, alarm |

## Powering

|                   |   |
|-------------------|---|
| Power consumption | 160W with IR+heater; 100W with heater, 50W without heater |
| Power             | 230 Vac   |

## Environmental

|                                   |   |
|-----------------------------------|---|
| Operating temperature             | -40 °C to +65 °C                                |
| Relative humidity                 | 5% to 100%                                      |
| Wind load                         | up to 160 km/h operational, 200 km/h stationary |
| MTBF (Mean Time Between Failures) | >100,000 hours at 40 °C                         |

## Test specification

|              |                                 |
|--------------|---------------------------------|
| EMC Emission | EN 61000-6-3 (2007) + A1 (2011) |
|              | EN 61000-3-2 (2014)             |
|              | EN 61000-3-3 (2013)             |
|              | FCC 47 CFR 15                   |
| EMC Immunity | EN 61000-6-2 (2005) + AC (2005) |
|              | EN 50130-4 (2011)               |
|              | LVD Safety                      |

## Mechanical

|                               |  |
|-------------------------------|--|
| Housing materials             | Aluminum and ABS, stainless steel fasteners                |
| Coating                       | Epoxy polyester powder painting, RAL9002 color             |
| Mounting                      | Top mount (OTT)  |
| Transmission                  | Toothed belt driven  |
| Backlash PTZ                  | 0°   |
| Cable glands                  | 2x M20 + 1x M16  |
| Horizontal rotation (panning) | Endless 360 degrees (uses slip ring)                       |
| Vertical rotation (tilting)   | -90° (vertical down) to +40° (upwards, above horizon)      |
| Horizontal speed (variable)   | From 0.02°/s up to 100°/s                                  |
| Tilting speed (variable)      | From 0.02°/s up to 50°/s                                   |
| Speed-by-Zoom                 | Yes, proportional for Optical zoom as well as Digital zoom |
| Preset accuracy               | 0.02°  |
| Dimensions (h x w x d)        | See drawings for dimensions                                |
| Weight                        | 25 kg  |

## Ordering information

|            |   |
|------------|---|
| TPU230IRv2 | TrafficPTZ Full HD PTZ IP camera system, 230Vac, IR |
| TPTM01     | Top Mount (Parapet) bracket for TrafficPTZ camera   |

# Specs

**Ordering information**

|        |  |
|--------|--|
| TPWM01 | Wall Mount bracket for TrafficPTZ camera   |
| TPPM01 | Pole Mount bracket for TrafficPTZ camera   |
| TPCM01 | Corner Mount bracket for TrafficPTZ camera |
|        |  |
|        |  |

DIMENSIONS IN MM

