TKH GROUP | TKH SECURITY

SIQURA

UP36D
Upright dual sensor PTZ 36x zoom

DESCRIPTION

The Dual sensor Upright PTZ (UP36D) is a high-precision, full-featured network PTZ camera providing high-quality, high-definition optical images, combined with thermal imaging. The integrated 36x optical zoom in combination with the thermal sensor makes the camera ideal for 24/7 intrusion detection, hot-spot detection and other high-risk applications. The UP36D must be ordered in combination with a TC-336 or TC-640 thermal core. It supports all thermal lenses up to 60mm

FEATURES

1/2 Sony CMOS sensor

36x Optical zoom, true day & night

Supports a range of thermal sensors and lenses

Multiple H.264/MJPEG streaming

Combined Optical/Thermal image

Hot-spot detection, intrusion detection

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

Preset accuracy of 0.1°

ONVIF Profile S

Description

Construction

The robust construction using cast aluminum and durable plastics ensures accurate positioning and stable video, close by and at large distances. The UP36D is designed to operate under extreme temperatures for mission critical applications.

Ultra low-light performance

The 36x zoom is fitted with a 1/2 inch ultra low-light sensor, it produces high quality color images even under low light conditions. No more slow-shutter smearing of movement (ghosting) or unclear noisy images.

Thermal imaging

Next to the optical sensor an uncooled thermal sensor is fitted for night-vision or thermal imaging. Depending on the application the UP36D can be fitted with a wide range of thermal sensors and lenses, varying from 7.5mm wide-angle to 60mm tele. For accurate hot-spot measurements, such as smoldering detection, the camera can be fitted with special radiometric thermal sensors.

Multi-stream high definition

The UP36D has multiple stream capability for simultaneous streaming of one or more H.264 or MJPEG streams. Two independent H.264/MJPEG encoders per sensor 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 UP36D 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. The camera will be ONVIF profile S compliant.

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Optical Camera (36x zoom)

Image sensor	1/2 Sony CMOS sensor
Optical zoom	36x
Video standards	25 fps or 30 fps
Output resolutions	1920x1080; 1280x720; 1024x768; 800x600; 720x512; 640x480; 352x240
Aspect ratio	16:9; 4:3
Effective pixels	1937 (H) x 1,097 (V), 2.12 MP
Shutter speed	1/25 ~ 1/30000s, digital slow shutter (DSS) Off/2x/4x
Signal-to-noise ratio	better than 50 dB (AGC off)
Minimum scene illumination	Color (1/30s) 0.01 lux, BW (1/30s) 0.002 lux ;
	Color DSS (1/1s) 0.001 lux, BW DSS (1/1s) 0.0002 lux
Horizontal field of view	56.5° to 2.12°
Focal length	6 mm (F/1.5) to 216 mm (F/4.8)

Image control

WDR/BLC	Off, WDR, BLC
WDR	120 dB (HDR)
HLC	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 to 20 steps
Sharpness	0 to 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, external
Privacy Masks	Dynamic, up to 24
Optical zoom	36x (32x digital)

Thermal imager (TC-336-xy; TC-640-xy)

Imager	uncooled micro-bolometer					
Pixel pitch	17 μm					
Resolution						
- TC-640-xy	640x512					
- TC-336-xy	366x256					
Focal length (y=)	7.5 mm	9 mm	13 mm	19 mm	25 mm (EoL)	35 mm (EoL)
- Field of view TC-640	90°x69°	69°x56°	45°x37°	32°x26°	25°x20°	18°x14°
- f-number	f/1.4	f/1.4	f/1.25	f/1.25	f/1.1	f/1.5
- Field of view TC-336	45°x35°	35°x27°	25°x19°	17°x13°	13°x10°	9.3°x7.1°
- f-number	f/1.4	f/1.25	f/1.25	f/1.25	f/1.1	f/1.5

Specs

Thermal imager (TC-336-xy; TC-640-xy)

Focal length (y=)	50 mm (EoL)	60 mm (EoL)
- Field of view TC-640-xy	12.4°x9.9°	10.4°x8.3°
- f-number	f/1.2	f/1.25
- Field of view TC-366	6.5°x5°	5.5°x4.2°
- f-number	f/1.2	f/1.25
Spectral bandwidth	7.5 µm to 13.5 µm (LWIR)	
Max frame rate		
- TC-640-Fy, TC336-Fy	25/30 fps	
- TC-640-Sy, TC336-Sy	8.3/7.5 fps	
Sensitivity (NEdT)	< 50 mK @ f/1.0	
Time to image	better than 60 s (boot time)	
Digital zoom	Optional	
Color palette	10 selectable color palettes with freely adjustable temperature thresholds	

Video stream

Number of streams	2x streams for optical image and 2x streams for thermal image
Aspect ratio	16:9, 16:10, 5:4, 4:3 (cropped, no scaling, one setting for both sensors)
Compression algorithm(s)	H.264 BP/MP/HP (H.264/MPEG-4 AVC), MJPEG
Supported output resolutions	
- Optical	1920x1080; 1280x1024; 1280x720; 720x576; 704x576; 640x480;
	480x576, 352x576; 704x288; 352x288; 320x240, 176x144
- Thermal	720x576; 704x480; 704x240; 640x512, 352x288; 336x256, 176x120
Compression bit rate control	Variable bit rate (VBR)
Output bit rate (per H.264 stream)	Up to 6Mb/s
Encoding latency	125 ms or better
Number of video output streams	Up to 20 (RTSP) per input
Total output data rate (max)	50Mb/s
Video overlay	3x Text, 1x bitmap (BMP, GIF) in both optical and thermal image
	Compass function (editable)

Analytics Optical

VCA	Video Motion Detection, Image Quality monitor, tamper detection

Analytics Thermal

FenceGuard	Intrusion detection. Free form zones or detection lines
- Detection line	Touch, Cross (directional sensitive), Cross
- Detection zone	Touch, Enter, Inside, Exit
FlameGuard	Hotspot detection in two zones or Flare-on, Flare-off and Flare-too-large monitoring
- Measuring range	-40°C to 550°C
- Accuracy	+/- 20 °C (T 100 °C)
Event time	0 to 10 s
Event output	generic ONVIF, digital I/O, SPI

Network

Specs

Network

Interface(s)	100 Mbps FE Ethernet (RJ-45)
Protocols	IPv4, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, UPnP, TLS1.2, IGMPv1/2/3, SNMPv1/2, QoS, ONVIF Profile S, 802.1X, NTCIP1205
Password levels	Admin, Operator, Viewer
Supported browsers	Edge, Chrome, Firefox, Safari
User accounts	20

Storage

Storage options	Micro HCSD card, 32 GB, NAS
Local recording	Continuous, scheduled, alarm

Powering

Power consumption	70 W incl. heater, 30 W without heater
Heater consumption	30 W Body; 10 W Defroster
Power	24 Vac +/- 10%

Environmental

Operating temperature	-40 °C to +75 °C (per Nema TS-2)
Vibration, shock	Nema TS-2 (2015)
Max wind velocity	240 km/h (150 mph)
Relative humidity	5% to 100%
Ingress rating	IP66
Impact rating (Casing only)	IK10
Corrosion Class	C5 (EN 12944-1998)

Mechanical

Housing materials	Aluminum Die-cast
Coating	Powder coated (White)
Transmission	Toothed belt driven
Pan	Endless 360 degree
Pan speed (variable)	0.036°/s up to 120°/s
Tilt	-90° to +40°
Tilt speed (variable)	0.012°/s up to 40°/s
Speed-by-Zoom	Yes, proportional for Optical zoom as well as Digital zoom
Presets	256
Preset accuracy	0.1° (typ.)
Dimensions (h x w x d)	See drawings for dimensions
Weight	14 kg (30 lbs)

Ordering information

UP36D	Upright dual sensor PTZ 36x zoom
UP-IR200	IR illumination kit for UPxx PTZ, 200 m, 850 nm
UP-WM	Wall mount bracket for UPxx

Specs

Ordering information

UP-JB	Junction Box for UP series
UP-PM	Double bracket Pole mount adaptor for UP series
PA80-24	PSU, 115/230 VAC to 24VAC, 3.3A, indoor, extended temp.
PA144-JB24	PSU, 115/230VAC to 24VAC,6A, outdoor, IP67/IK10
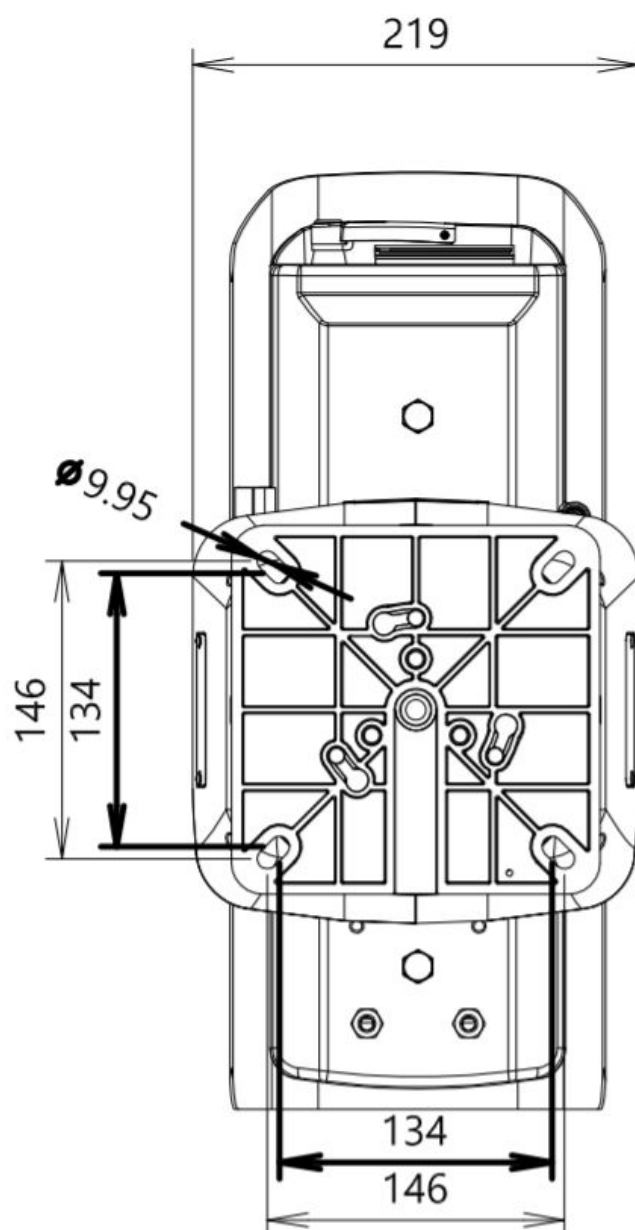
Siqura
Upright dual sensor PTZ 36x zoom

Siqura UP-IR200
IR illumination Kit for Upright PTZ UPxx

Siqura UP-WM
Wall mount bracket for UPxx

Siqura PSR, PA
DC power adaptors for (PTZ) cameras and PoE switches

Siqura UP-PM
Double bracket pole mount adapter for UP wall mount

TKH Security PA144-JB24
PSU, 115/230VAC to 24VAC,6A, outdoor, IP67/IK10 junction box

Siqura UP-JB
Pole top mount with integrated junction box for Upxx