Cámaras para CCTV

SIQURA

SIQURA

Indicé

Cámaras Tipo Box

STICAqC

4MP IP Box Camera with Auto Back Focus

DESCRIPTION

o   STICAC   Egk bV   k6
                    8o   6
    b8CGE%b8CGE   b8CGE9g dkWa 8o   R   S   X
                8

FEATURES

1/3 Progressive scan CMOS imager

Auto Back Focus

4MP @ 15 fps WDR

2MP @ 25/30 fps

120dB WDR

Quad-stream H.264 and MJPEG video

120 dB WDR (HDR)

P-iris for an optimal exposure

Day/Night with IR-cut filter

24 Vac / 24Vdc / 12Vdc / 802.3af PoE

ONVIF Profile S conformant

V

g
o   6   b 8CGE% b 8CGE
b 8CGE% g dk Wa 8g

                                                        8E g   BF
    5   6 V BAI A   DA   ns a R   DA   8W
                    6   8

i
g   STI CA C
      8c   5   i h q cX k   n
              8

c
o   STI CA C   9   5
          6   8S   6
                    8o   STI CA C   8o

                                                            8o   C

                                              8o
              8

k
o   STI CA C   BC q   5Œ q   5Œ q   5   I AC8D 6
          k W   8

k
k   8o

Camera

Image sensor	1/3 Progressive scan CMOS
Effective pixels	2688(H) x 1520(V)
Minimum scene illumination	0.1 lux colour, 0.01 lux (b/w)
Shutter speed	1 - 1/10000 s
Lens mount	CS mount
Iris control	P-iris
Focus control	ABF (Auto Back Focus)

Functions

Privacy masks	5
Text and picture overlay	Date, time, date & time, 3x subtitle (16 characters each), text string (24 characters), image, image transparency
Video motion detection	On / off / by schedule
Video motion detection alarm	Alarm output, record video clip, send alarm message, upload image
Network failure detection	On / off / by schedule
Network failure detection alarm	Alarm output, record video clip, send alarm message
Tamper detection	On / off / by schedule
Tamper detection alarm	Alarm output, record video clip, send alarm message, upload image
Periodical event	On/Off
Periodical event action	Upload image
Recording	On / off / by schedule
Recording destination	SD card/ Network share

Image control

Wide dynamic range	
- gamma WDR	On/Off
- dual shutter WDR	On/Off (>120 dB)
Exposure	Auto (P-iris priority, iris size, max gain and min shutter speed configurable) / Manual
White balance	Auto / ATW / Manual / One push
Contrast	Manual
Brightness	Manual
Saturation	Manual
Hue	Manual
Sharpness	Manual
Day/Night function	Auto/night/day/IR light compensation
Noise reduction	Off, 3DNR (low, medium, high), 2DNR (On/Off), ColorNR (low, medium, high)
Back-light compensation	On/Off
Digital zoom	Up to10x
Image rotation	Normal / Flip / Mirror / 90° (clockwise, counterclockwise) and 180° Rotate

Video

Compression algorithm(s)	H.264 (baseline / main / high profile); MJPEG
Number of compression instances	Quad stream. Any combination of H.264 streams with possibly one MJPEG stream.

Specs

Video

Output streams	Any output stream can be freely configured to one of the resolution/frame rate formats.			
Supported resolutions	2688x1512 (4MP); 2560x1440; 2304x1296 (3MP); 1920x1080 (1080p); 1280x1024; 1280x720 (720p); 10			
Compression capabilities	(indication, other combinations possible)			
Resolution format	format 1	format 2	format 3	format 4
H.264 in 15 fps	2688x1512	1280x720	---	---
H.264 @ 50/60fps	2304x1296	800x600	---	---
	1920x1080	1280x1024	352x288	---
	1920x1080	1280x720	720x576	352x288
H.264 @ 25/30fps	1280x720	640x480	352x288	---
H.264 @ 25/30fps WDR 2	1920x1080	720x576 (15fps)	352x288 (15fps)	---
MJPEG	One of the above resolution formats in each instance can be MJPEG instead of			
	H.264 if the resolution is lower than or equal to 1920x1080			
Compression bit rate control	Constant bit rate (CBR), variable bit rate (VBR), Low bit rate (LBR)			
Output bit rate (per H.264 stream)	Up to 20480 kbit/s			
Total H.264 output	26624 kbit/s			
Number of video output streams	Up to 20 (RTSP)			
Total output data rate (max)	50000 kbit/s			
Video frame rate	1 to 60 fps / 1 to 50 fps			
Analogue video output	PAL/NTSC			
- Connector type	BNC (1.0 Vpp in 75)			

Audio

Two-way stereo audio	Microphone in / line in / line out
Compression	G.711 (µ-law, a-law) / G.726 / AAC / PCM
Bit rate	G.711: 64 Kbps
	G.726: 16 Kbps, 24 Kbps, 32 Kbps, 40 Kbps
	AAC: 128 Kbps
	PCM: 128 Kbps, 256 Kbps, 384 Kbps, 768 Kbps
Sample rate	G.711: 8 KHz / G.726: 8 KHz / AAC: 48 KHz / PCM: 8, 16, 24, 48 KHz
Input level, Output level	Adjustable gain
Connector type	Female phone jack, 3.5 mm (2x)

Data

Serial port	RS-485, 2-wire
Protocols	Pelco D, Pelco P
Connector type	Multifunction terminal block (D+, D-)

Alarm inputs/output

Input	2x 0 - 5 V, 10 k pull-up
Output	1x Photo relay output 300 Vdc/ac
Operational modes	Normally open; normally closed
Connector type	Multifunction terminal block (I1+, I- I2+, O+, O-)

Storage

Specs

Storage

Storage options	Micro SDXC card, 64 GB

Network

Interface(s)	10/100 Ethernet
Network protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, IGMP, PNAC (IEEE 802.1x), QoS
Connector type	RJ-45

Management

Supported browsers	Internet Explorer (6.0+), Chrome, Firefox, Safari
Security	HTTPS, IP Filter, PNAC (IEEE 802.1x)
Protocols	UPnP, SNMP, ONVIF Profile S
Password levels	User and Administrator
User accounts	20

Powering

Power consumption	
- System	Max. 4.1 W
- ABF (Auto back Focus)	Max. 3.2 W
Power	24 Vac / 24 Vdc / 12 Vdc / 802.3af PoE
Connector type	Barrel connector (5.5 x 2.1 mm) Adapter to 2-pin terminal block included

Environmental

Start-up temperature	-15 C (5 F)
Operating temperature	-20 C to +60 C (-4 F to +140F)
Relative humidity	10% to 90%, no condensation
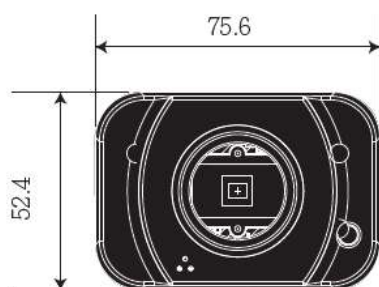
Mechanical

Dimensions (camera body)	150 x 80 x 53 mm (5.9 x 3.1 x 2 in) (without lens)
Weight	365 g (0.80 lbs)
Colour	Black/Grey

Ordering information

BC820v2	Network box camera, 4MP, CMOS, day/night, H.264/MJPEG, P-iris
WM04A	Wall mount, Indoor, box camera
PSA-UN12DC with ferrules	Power adapter, 110-230 Vac, 60/50 Hz to 12 Vdc, 1.5 A, ferrules

DIMENSIONS IN MM

75.6

52.4

150.3

RELATED

Siqura HSG02LV
Outdoor housing for a fixed box camera

Siqura Lenses
Megapixel Varifocal Lenses

BC822

Network box camera, 2MP, Day/night, H.264/MJPEG, WDR

- ✓ 1/2.8" Progressive scan CMOS
- ✓ 2 Megapixels @ 60fps
- ✓ 120 dB WDR
- ✓ Quad stream H.264 and MJPEG video
- ✓ Day/Night with IR-cut filter
- ✓ 24 Vac, 24 Vdc, 12 Vdc, 802.3af PoE
- ✓ ONVIF Profile S protocol support

Description

The BC822 is a full featured 2 megapixel IP box with good low light sensitivity. The camera provides high quality, clear images in any situation.

Multistream high definition

The camera has quad-stream capability for simultaneous streaming of H.264/H.264 or H.264/MJPEG. Multiple combinations of resolution and frame rate can be configured to satisfy different live viewing and recording scenarios. 2 Mpixel resolution is available at 60 fps, a full-HD 1080p stream at 60 fps can be combined with a second stream at 30 fps. Each selected resolution-frame rate combination can be freely set to a stream number.

ONVIF

Multiple options are available to easily integrate the BC822 to a video management system. In support of open standards, the camera is compliant with the ONVIF Profile S specification.

Image optimalisation

The BC822 provides automatic day/night functionality with configurable thresholds, for use in low-light situations. Backlight compensation enhances image visibility in difficult lighting situations. The BC822 provides two modes for wide dynamic range. The first mode uses different gain ratios for different illumined areas to bring details in the darker areas of an image without saturation in the brighter parts. The second mode uses a 2 shutter mechanism which applies two different exposure settings to capture both darker and lighter areas with excellent details. The resulting image is the optimal aggregation of both exposures.
The available image optimalisation methods ensure quality pictures at all times.

Power source choices

The BC822 can be powered by 12 Vdc, 24 Vdc, 24 Vac, or over the network with 802.3af-compliant PoE sources.

Privacy masks

Privacy masks cover sections of the image. This feature is often requested for such situations as city centre surveillance and point of sale keypads.

BC822

Technical specifications

Camera

Image sensor	1/2.8" CMOS Progressive Scan
Effective pixels	1920(H) x 1080(V)
Minimum scene illumination	0.01 lux color, 0.001 lux (b/w) @ F1.2 (IRE30)
Shutter speed	1 ~ 1/10.000 sec
Lens mount	C/CS mount
Iris control	DC Drive

Functions

Privacy masks	5
Text and picture overlay	Date, time, date & time, text string (15 characters)
Video motion detection	On, Off, By schedule
Video motion detection alarm	Alarm output, record video clip, send alarm message, upload image
Network failure detection	On, Off, By schedule
Network failure detection alarm	Alarm output, record video clip, send alarm message
Tamper detection	On, Off, By schedule
Tamper detection alarm	Alarm output, record video clip, send alarm message, upload image
Time laps	On/Off
Time laps action	Upload image
Face detection	On, Off, By schedule
Face detection action	Alarm output, record video clip, send alarm message, upload image
Audio detection	On, Off, By schedule
Audio detection action	Alarm output, record video clip, send alarm message, upload image
Recording	On, Off, By schedule
Recording destination	SD card/ Network share

Image control

Wide dynamic range	
Gamma WDR	On/Off
Shutter WDR	On/Off (120dB)
Exposure	Auto (max gain and minimum shutter speed configurable) Manual
White balance	Auto, ATW, Indoor, Outdoor, Manual
Contrast	Manual
Brightness	Manual
Saturation	Manual
Hue	Manual
Sharpness	Manual
Day/Night function	Auto, Night, Day, Smart
Noise reduction	Off, 3DNR (low, middle, high), 2DNR ((low, middle, high)
Backlight compensation	On/Off
Digital zoom	16x
Image rotation	Normal, Flip, Mirror, 180° Rotate

BC822

Technical specifications

Video	
Compression algorithm(s)	H.264 (baseline / main / high profile); MJPEG
Number of compression instances	Quad stream. Any combination of H.264 streams with possibly one MJPEG stream.
Output streams	Any output stream can be freely configured to one of the resolution/frame rate formats.
Supported resolutions	1920x1080, 1280x1080, 1280x1024, 1280x720, 1024x768, 800x600, 720x480, 640x480, 352x240
Compression capabilities	(indication, other combinations possible)

Resolution format	format 1	format 2	format 3	format 4
H.264 instances in 50/60fps	1920x1080	-	-	-
	1280x1024	800x600	-	-
	1280x720	720x480	640x480	-
H.264 instances in 25/30fps	1920x1080	-	-	-
	1920x1080	1280x1024	-	-
	1920x1080	1280x1024	800x600	-
	1920x1080	1280x720	800x600	720x480

MJPEG	One of the above resolution formats in each instance can be MJPEG instead of H.264 if the resolution is lower than or equal to 1920x1080
Compression bit rate control	MBR
Output bit rate (per H.264 stream)	Up to 8192 kbit/s
Total H.264 output	26624 kbit/s
Number of video output streams	Up to 20 (RTSP)
Total output data rate (max)	50000 kbit/s
Video frame rate	1 to 60 fps / 1 to 50 fps
Analogue video output	PAL/NTSC
- Connector type	BNC (1.0 Vpp in 75 Ω)

Audio	
Two-way audio	Line in, Line out
Compression	G.711 (µ-law, a-law) / G.726
Bit rate	G.711: 64 Kbps G.726: 16 Kbps, 24 Kbps, 32 Kbps, 40 Kbps
Sample rate	G.711: 8 KHz / G.726: 8 KHz
Input level, Output level	Adjustable gain
Connector type	Female phone jack, ø 3.5 mm (2x)

Data	
Serial port	RS-485, 2-wire
Protocols	Pelco D, Pelco P
Connector type	Multifunction terminal block (D+, D-)

Alarm inputs/output	
Input	0 - 5 V, 10 kΩ pull-up
Output	1x Photo relay output 300 Vdc/ac
Operational modes	Normally open; normally closed
Connector type	Multifunction terminal block (I1+, I- I2+, O+, O-)

Storage	
Storage options	Supports up to 128 GB capacity of SD/SDHC/SDXC memory (fat32)
Network storage	NAS

BC822
Technical specifications

Network	
Interface(s)	10/100 Ethernet
Network protocols	ARP, DHCP, FTP, ICMP, IEEE 802.1 X, IPv4/IPv6, PPPoE, QoS, RTP, RTSP, SMTP, SNMP, TCP/IP, UDP, UPnP
Connector type	RJ-45

Management	
Supported browsers	Internet Explorer (6.0+), Chrome, Firefox, Safari
Security	User account, HTTPS, IP Filter, IEEE 802.1x
Protocols	UPnP, SNMP, ONVIF Profile S
Password levels	User and Administrator
User accounts	20

Powering	
Power consumption	Max. 5 W
Power	24 Vac / 12 Vdc / 24 Vdc / 802.3af PoE
Connector type	

Environmental	
Operating temperature	-10 ºC to +60 ºC
Relative humidity	10% to 90%, no condensation

Mechanical	
Dimensions (camera body)	76 x 53 x 126 mm (3.0 x 2.1 x 5.0 in) (without lens)
Weight	0.36 kg (0.79 lbs)
Color	Black/Grey

Ordering information	
BC822	Network box camera, 2MP, Day/night, H.264/MJPEG, WDR
WM04A	Wall mount

Accessories		
WM04A		Wall mount

Dimensons
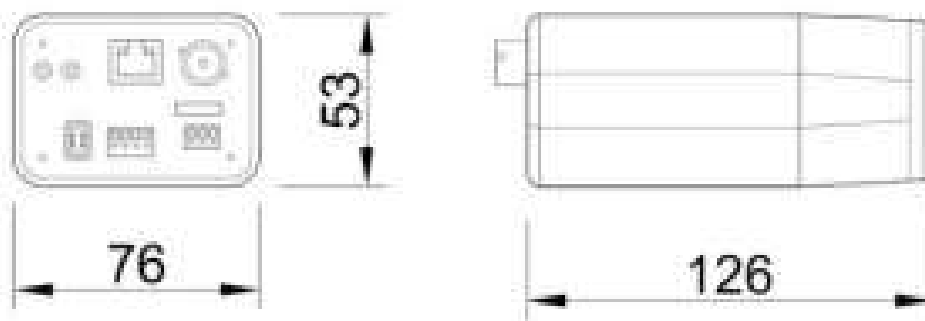
SIQURA

ST1 CCqCbD

3MP IP Box camera with integrated 33x zoom lens

DESCRIPTION

o   ST1 CC CbD   Dg   ⅾk
            bVm   8c   DD
        6   8o   5

FEATURES

1/2.8 ultra-low light CMOS

3 Mpixel @ 30 fps HDR

33x Auto-focus zoom

120 dB WDR (HDR)

Quad stream H.264, H.265 and MJPEG

24 Vac, 12 Vdc, 802.3af PoE

Day/Night with IR-cut filter

ONVIF Profile S, G and Q

V

g 6
o 6 b 8CGF5b 8CGE 9
g dkW a 8g
8Dg DA 5 6b V BAI A GA
DA 8W 6
8

i h qX
g STI CC Cb D
8c 5 i h qX k l
5k n qg n 5
k a 8o STI CC Cb D
k 9o 8

c
o STI CC Cb D 9 5
6 8S 6 6
8b V m r V m
8

k
o STI CC Cb D BCq 5Œ q 5 W IAC8D 6
k W 8

k
k 8o
8

Camera

Image sensor	1/2.8 Progressive scan CMOS
Effective pixels	2065 (H) x 1553 (V)
Shutter speed	1 to 1/10.000 s
Day/Night	IR-cut filter
Minimum scene illumination	0.04 lux (colour), 0.002 lux (b/w), F1.6
Lens	33x Optical zoom, F1.6 (wide), F5 (tele)
Lens focal length	4.6 to 152 mm
Horizontal field of view	52° (W) to 3° (T)
Body material	Aluminum alloy, ABS
Internal demister/heater	Standard

Image control

Dynamic range (WDR)	120 dB, dual exposure HDR
White balance	Auto, ATW, Manual, One push
Image settings	Contrast Brightness Saturation Hue Sharpness
SNR	Better than 54dB
Noise reduction	3DNR, 2DNR, Color Low, mid, high (w/ Motion Compensation)
Image Stabilization	No
Image enhancement	HLC/BLC/Defog
Digital zoom	10x
Text and picture overlay	date & time, 4x line (40 characters each),
	preset title, image, image transparency
Privacy masks	5
Image rotation	90°, 180°, 270° rotation

Video

Video compression	H.265, H.264 (main or high profile); MJPEG		
Number of compression instances	Any combination of H.265 or H.264 streams with possibly		
	one MJPEG stream.		
Supported resolutions	2048x1536 (3MP); 1080p60,1280x1024; 720p60; 1024x768; 800x600;		
	720x567(D1); 640x480 (VGA); 352x240 (CIF)		
Max streaming (H264/H265/MJPEG)			
60fps	2048x1536	800x600	
60fps	2048x1536	720x480	352x240	352x240
30fps	2048x1536	2048x1536	1280x720	352x240
30fps (dual shutter WDR)	2048x1536	2048x1536	800x600	352x240
Compression bit rate control	Constant bit rate (CBR), variable bit rate (VBR), Low bit rate (LBR)		
Number of video output streams	Up to 20 (RTSP)		
Total output data rate (max)	60 Mb/s		
Video frame rate	1 to 60 fps, 1 to 50 fps		

Audio

Audio compression	G.711, G.726, AAC, LPCM

Specs

Audio

Audio Input	Line in
Audio Output	Line out

Analytics

Event detection	Motion Detection; Audio detection
Event Triggers	External Input, Analytics, Network Failure Detection,
	Periodical Event, Manual Trigger

Network

Local storage	Micro SD/SDHC/SDXC up to 128 GB;
Network storage	NAS (Support NFS, SMB/CIFS)
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP,
	RTSP, RTCP, RTP, TCP/IP, DHCP, PPPoE, Diamond*, NTCIP*.
Security	User authentication, IP filtering, Digest authentication (RTSP, HTTP)
	HTTPS encryption (TLS1.2); IEEE 802.1x port-based network access control
Standard	ONVIF (Profile S, Profile G, Profile Q), Siqura API
Web browser	IE 9, 10 and 11; limited support for Edge, Chrome, Firefox

Environmental

Ingress protection level	IP20
Relative humidity	10 to 90%, No condensation
Power supply	12 Vdc, 24 Vac, 802.3af Class 0
Power consumption	Max. 13.68 W

Mechanical

Interfaces	
- Ethernet	RJ45
- Alarm in / out	2x / 1x Terminal Block
- 12Vdc	Terminal Block
- 24Vac	Terminal Block
- Audio in / out	3.5 mm jack
- Video out	BNC Connector
- RS485	Terminal Block
Dimensions	116 x 82.6 x 60 mm
Weight	0.49 kg
Color	RAL 9003 (signal white)

Ordering information

BC822v2H3	3MP IP Box camera with integrated 33x zoom lens

SIQURA

BC822V2H3 DIMENSION IN MM

82.6

116

60
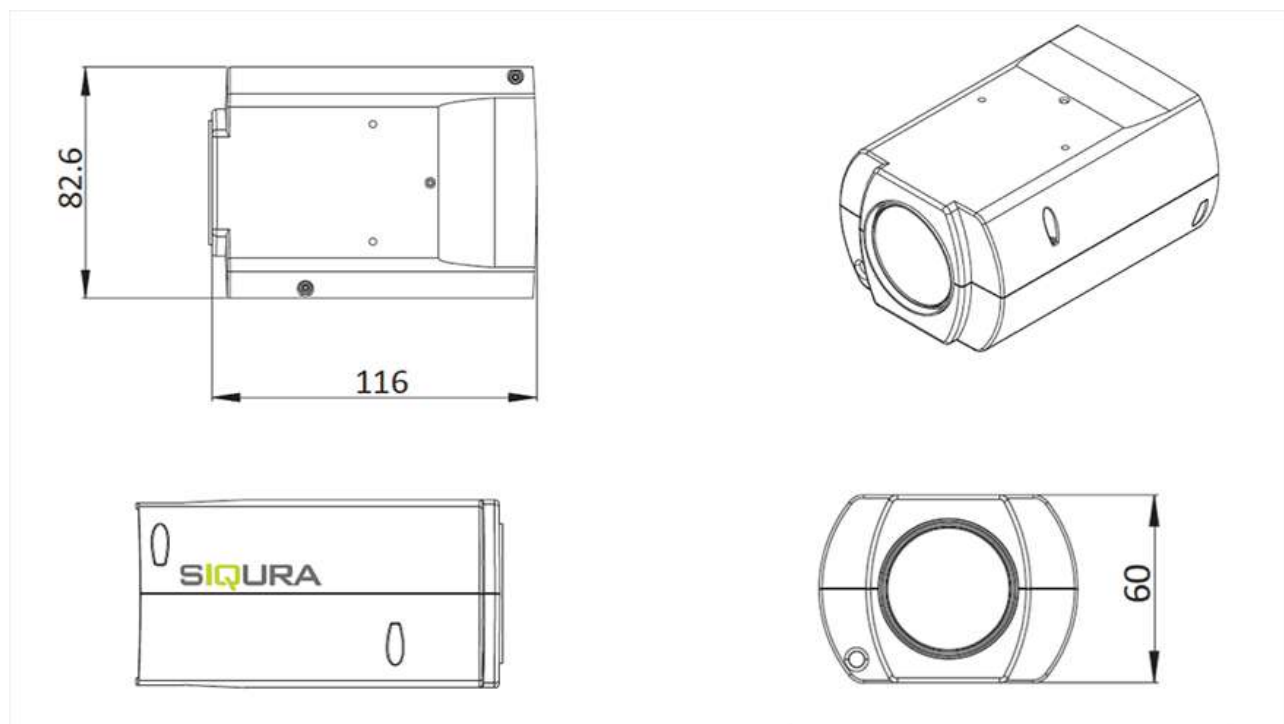
Features

- 1/2.8" Progressive scan CMOS imager
- Full HD 1080p resolution
- Multicodec, multistream (H.264/MPEG-4/MPEG-2/MJPEG)
- Day/Night with IR-cut filter
- Wide dynamic range
- 2 Alarm inputs / 2 outputs
- Analogue video output
- Two-way audio
- NTCIP protocol support
- 24 Vac; 12 Vdc / 24 Vdc; 802.3af PoE
- SFP Interface (optional)

Note: Lens sold separately. See Lenses datasheet

BC840-MC
Full HD IP multicodec box camera

Description

The BC840-MC is a full-featured network box camera providing high-quality, high-definition images.

Multistream/multicodec
The versatile BC840-MC camera is capable of quad streaming, with dual H.264 streams simultaneous with two flexible encoding outputs which can provide MPEG-2, MPEG-4 or MJPEG streams. Each stream is optimised for its purpose. The H.264 implementation is based on dedicated hardware resulting in unparalleled video quality.

Image quality monitor and tampering alarm
The BC840-MC is fitted with video analytics to check the health of the camera. This image quality monitor analyses contrast, exposure, sharpness and noise. Camera tampering analytics detect all changes in the camera's position or field of view. The instant a camera is subject to failure or tampering, an alert can be raised.

Open Streaming Architecture (OSA) and ONVIF
The BC840-MC, designed with OSA, offers standardised streaming video and remote control based on a comprehensive HTTP API giving access to all controls and making integration easy. Additionally, the BC840-MC fully supports ONVIF. It has been tested to support ONVIF Profile S.

Privacy masks
Privacy masks cover sections of the image. This feature is often requested for such situations as city centre surveillance and point of sale keypads.

Audio, I/O contacts, and analogue output
By combining streaming video with duplex audio and I/O contacts over IP, the BC840-MC provides all the interfaces necessary for any IP CCTV application. The BC840-MC is a hybrid solution and can provide local video for a public view monitor or local DVR.

SFP interface
The BC840-MC-SFP model is equipped with an SFP interface. It supports the XSNet SFP range for Ethernet over fiber and the ECO-plug™ for Ethernet over coax.

TKH GROUP SECURITY SOLUTIONS

Technical Specifications
BC840-MC

Camera

Image sensor	1/2.8" Progressive scan CMOS
Electronic shutter	1/25~1/10000 s
Minimum scene illumination (30 IRE)	0.1 lux colour; 0.01 lux (b/w)
Video standards	NTSC/PAL (selectable via menu)
Output modes	Progressive scan
Video output	1 Vpp, 75 Ω, BNC
Lens mount	CS/C
Lens type	DC iris, manual
Auto iris drive	DC or manual
Composite video	BNC
Wide dynamic range	On/Off
WDR value	>60 dB

Functions

Privacy masks	10
On-screen display	3x text lines (configurable: position, colour, border/outline colour, font size) 1x image in BMP, GIF, or JPEG format (configurable: position, scaling)
Video settings	User profiles, contrast, brightness, colour saturation, hue, sharpness, noise filter

Embedded analytics

Video motion detection	Yes (free-drawn ROI)
Image quality monitor	Focus, contrast, SNR, exposure
Tamper detection	Partially blocked view, cloaked, changed position

Technical Specifications
BC840-MC

Video	
Number of video streams	2x H.264, 2x MPEG-4, MPEG-2, and/or MJPEG
Frame rate	1 to 30 fps
Compression algorithm(s)	H.264 BP, MP or HP (ISO/IEC H.264 / MPEG-4 AVC), MPEG-4 Layer 5 (ISO/IEC 14496-2), MJPEG-2 (ISO/IEC 13818-2), MJPEG
Supported resolutions	1080p (1920x1080), 720p (1280x720), 960H, D1, VGA, 2CIF, CIF
Types of streaming	UDP/IP (multicast and/or unicast)
Number of output streams	Up to 20
Encoding latency	<130 ms typ
GOP structure	I, IP (selectable / user profiles)
Output data rate	Up to 20 Mb/s (CBR or VBR selectable/user profiles)

Audio	
Two-way audio	Line out, line in/mic in (jack Ø3.5 mm)

Data/serial port	
Number of channels	1 (full-duplex)
Number of streams	2 x 3 (multicast and/or unicast)
Interface(s)	1x RS-422/485 (2- or 4-wire)
Streams	TCP, UDP, MX configurable
Data rate	300 b/s to 230.4 kbps
PTZ control interface(s)	Serial tunneling, webpage, HTTP (API), NTCIP (SNMP)
PTZ control protocols	Standard Pelco-D, Bosch, other remotely loadable protocols

Contact closures	
Inputs	2
Outputs	2

Network	
Interface(s)	RJ-45 or SFP (modules not included)
Protocols	H.264 (BP, MP, HP), RTP, UDP, IP, DHCP, IGMPv2, RTSP, (S)NTP, MX/IP, HTTP, SNMP v2, DiffServ, SAP, UPnP, ONVIF, NTCIP

Powering	
Power consumption	7 W
Power	20 - 30 Vac, 11 - 30 Vdc, 802.3af PoE
Power adapter not included)	110 - 230 Vac to 12 Vdc, 1.5 A 50/60 Hz

Environmental	
Operating temperature	Continuous -30 °C to +50 °C (-22 °F to +122 °F)
MTBF (Mean Time Between Failures)	329,585 hours

Technical Specifications
BC840-MC

Mechanical

Dimensions (h x w x d)	64.6 x 64 x 148 mm (2.54 x 2.52 x 5.83 in)
Colour	Black/Grey
Connector type	RJ-45, BNC

Ordering information

Models	Description
BC840-MC	Network box camera, 1080p, CMOS, dual H.264
BC840-MC-SFP	Network box camera, 1080p, CMOS, dual H.264, with SFP interface
PSA-UN12DC with ferrules	Power adapter,110 - 230 Vac, 60/50 Hz to 12 Vdc, 1.5 A,ferrules, with US/EU/UK plug adapters
PSR-12DC	Power supply unit,rail-mount, 85 to 265 Vac, 12 Vdc at 1.5 A
MPL4080IR	Lens, 1/2 inch 4-8mm 90.4-47.0° f1.4 IR Aspherical CS
MPL40120IR	Lens, 1/2 inch 4-12mm 90.4-37.0° f1.4 IR Aspherical CS
VL33	Lens, 1/2.7 inch, 2.8-8.0mm, f1.3, DC auto iris, IR-corrected, 3MP
VL34	Lens, 1/2 inch, 8.0-80.0mm, f1.6, DC auto iris, IR-corrected, 3MP
VL37	Lens, 1/2.7 inch, 3.1-8mm, f1.2, DC auto iris, IR-corrected, 3MP
WM04	Indoor wall bracket
HSG02LV	Housing, fixed camera,heater/blower, 90-230 Vac
HSG03LV	Housing, fixed camera,IR illuminator, heater/blower, 90-230 Vac
HSG/WALL	Bracket, wall
HSG/POLE	Bracket, pole
HSG/CORNER	Bracket, corner
HSG/CEILING	Bracket, ceiling
HSG/SUN	Housing fixed camera, sunshield
ECO-plug	Ethernet over coax, SFP Module, 100 Mb with accessory cable, 40 cm
XSNet SFP MM/...... *	Multimode SFP, available in 1- or 2-fiber, different distance and speed ratings
XSNet SFP SM/...... *	Single-mode SFP, available in 1- or 2-fiber, different distance and speed ratings
XSNet SFP SM/CWDM...... *	Single-mode CWDM SFP, available in 8 wavelengths

* For a detailed overview of available SFP types consult appropriate product data.

Features

- 1/2.8" Progressive scan CMOS imager
- Full HD 1080p resolution
- Built-in analytics for Perimeter Intrusion Detection
- Day/Night with IR-cut filter
- Wide dynamic range
- 2 Alarm inputs / 2 outputs
- Analogue video output
- Two-way audio
- 24 Vac; 12 Vdc / 24 Vdc; 802.3af PoE
- SFP Interface (optional)
- NTCIP protocol support

Note: Lens sold separately. See Lenses datasheet

BC840-PID
Full HD IP box camera with Perimeter Intrusion Detection

Description

The BC840-PID is a full-featured network box camera providing high-quality, high-definition images. Its built-in Perimeter Intrusion Detection is based on i-LIDS certified video analytics for accurate and secure detection with the lowest possible false-alarm rate.

Dual stream

The versatile BC840-PID is capable of streaming two independent H.264/MJPEG streams simultaneously. The H.264 implementation is based on dedicated hardware resulting in unparalleled video quality.

Perimeter Intrusion Detection

The embedded analytics for PID is derived from software which is certified by i–LIDS® for primary sensor in a sterile environment. With two detection lines or two zones the PID analytics can be configured easily using the web interface. The quality of PID is determined by a number of external factors, such as lighting, field of view, camera mounting, shadows, etc. The BC840-PID is suited for outdoor intrusion detection under well-lit conditions. When reliable detection is required you should contact for expertise and configuration services.

Image quality monitor and tampering alarm

The BC840-PID is fitted with video analytics to check the health of the camera. This image quality monitor analyses contrast, exposure, sharpness and noise. Camera tampering analytics detect all changes in the camera's position or field of view. The instant a camera is subject to failure or tampering, an alert can be raised.

Open Streaming Architecture (OSA) and ONVIF

The BC840-PID, designed with OSA, offers standardised streaming video and remote control based on a comprehensive HTTP API giving access to all controls and making integration easy. Additionally, the BC840-PID fully supports ONVIF. It has been tested to support ONVIF Profile S.

Privacy masks

Privacy masks cover sections of the image. This feature is often requested for such situations as city centre surveillance and point of sale keypads.
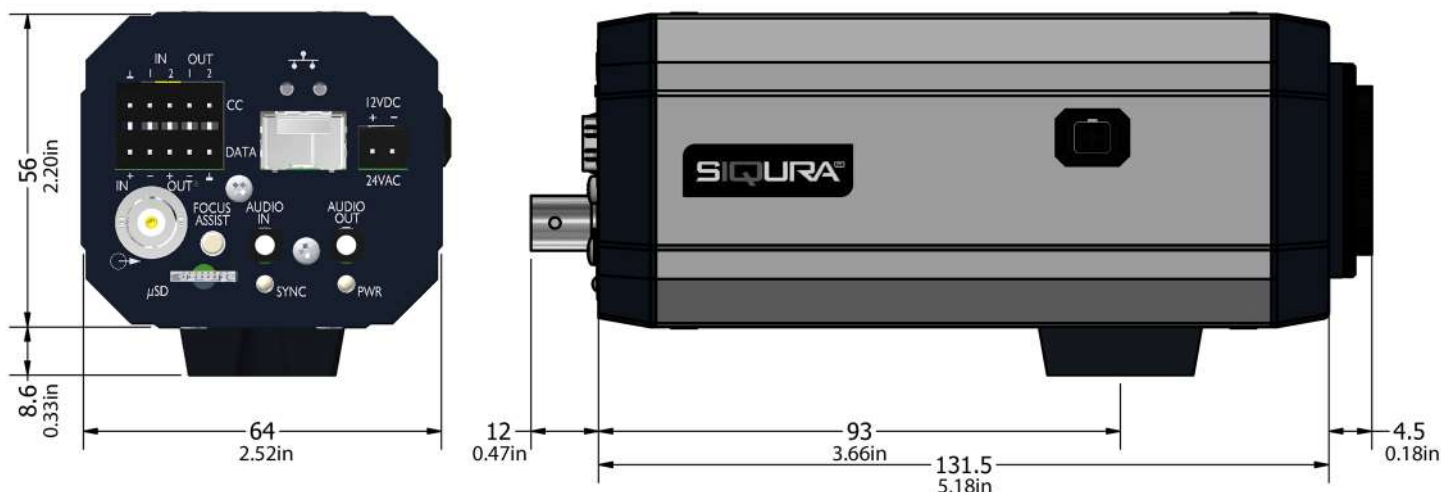
Audio, I/O contacts, and analogue output

By combining streaming video with duplex audio and I/O contacts over IP, the BC840-PID provides all the interfaces necessary for any IP CCTV application. The BC840-PID is a hybrid solution and can provide local video for a public view monitor or local DVR.

SFP interface

The BC840-PID-SFP model is equipped with an SFP interface. It supports the XSNet SFP range for Ethernet over fiber and the ECO-plug™ for Ethernet over coax.

TKH GROUP SECURITY SOLUTIONS

Camera

Image sensor	1/2.8" Progressive scan CMOS
Electronic shutter	1/25~1/10000 s
Minimum scene illumination (30 IRE)	0.1 lux colour; 0.01 lux (b/w)
Video standards	NTSC/PAL (selectable via menu)
Output modes	Progressive scan
Video output	1 Vpp, 75 Ω, BNC
Lens mount	CS/C
Lens type	DC iris, manual
Auto iris drive	DC or manual
Composite video	BNC
Wide dynamic range	On/Off
WDR value	>60 dB

Functions

Privacy masks	10
On-screen display	3x text lines (configurable: position, colour, border/outline colour, font size) 1x image in BMP, GIF, or JPEG format (configurable: position, scaling)
Video settings	User profiles, contrast, brightness, colour saturation, hue, sharpness, noise filter

Video

Number of video streams	2x H.264/MJPEG
Frame rate	1 to 30 fps
Compression algorithm(s)	H.264 BP, MP or HP (ISO/IEC 14496-10), MJPEG
Supported resolutions	1080p (1920x1080), 720p (1280x720), 960H, D1, VGA, 2CIF, CIF
Types of streaming	UDP/IP (multicast and/or unicast)
Number of output streams	Up to 20
Encoding latency	<130 ms typ
GOP structure	I, IP (selectable/user profiles)
Output data rate	Up to 20 Mb/s (CBR or VBR selectable/user profiles)

Technical Specifications
BC840-PID

Audio	
Two-way audio	Line out, line in/mic in (jack Ø3.5 mm)

Embedded analytics	
Video motion detection	Yes (free-drawn ROI)
Image quality monitor	Focus, contrast, SNR, exposure
Tamper detection	Partially blocked view, cloaked, changed position
Intrusion detection (PID)	2x Detection zones, 2x detection lines
Minimum illumination	4 Lux
Detection zone	Entering, exiting, touch
Detection line	Directional crossing, touch
Additional features	Ignore line, minimum object size, perspective
Services	Parameter optimisation

Data/serial port	
Number of channels	1 (full-duplex)
Number of streams	2 x 3 (multicast and/or unicast)
Interface(s)	1x RS-422/485 (2- or 4-wire)
Streams	TCP, UDP, MX configurable
Data rate	300 b/s to 230.4 kbps
PTZ control interface(s)	Serial tunneling, webpage, HTTP (API), NTCIP (SNMP)
PTZ control protocols	Standard Pelco-D, Bosch, other remotely loadable protocols

Contact closures	
Inputs	2
Outputs	2

Network	
Interface(s)	RJ-45 or SFP (modules not included)
Protocols	H.264 (BP, MP, HP), RTP, UDP, IP, DHCP, IGMPv2, RTSP, (S)NTP, MX/IP, HTTP, SNMP v2, DiffServ, SAP, UPnP, ONVIF, NTCIP

Powering	
Power consumption	7 W
Power	20 - 30 Vac, 11 - 30 Vdc, 802.3af PoE
Power adapter not included)	110 - 230 Vac to 12 Vdc, 1.5 A 50/60 Hz

Environmental	
Operating temperature	Continuous -30 °C to +50 °C (-22 °F to +122 °F)
MTBF (Mean Time Between Failures)	329,585 hours

Mechanical

Dimensions (h x w x d)	64.6 x 64 x 148 mm (2.54 x 2.52 x 5.83 in)
Colour	Black/Grey
Connector type	RJ-45, BNC

Ordering information

Models	Description
BC840-PID	Network box camera, 1080p, CMOS, dual H.264, Perimeter Intrusion Detection
BC840-PID-SFP	Network box camera, 1080p, CMOS, dual H.264, Perimeter Intrusion Detection, with SFP interface
PSA-UN12DC with ferrules	Power adapter, 110-230 Vac, 60/50 Hz to 12 Vdc, 1.5 A, ferrules, with US/EU/UK plug adapters
PSR-12DC	Power supply unit, rail-mount, 85 to 265 Vac, 12 Vdc at 1.5 A
MPL4080IR	Lens, 1/2 inch 4-8mm 90.4-47.0° f1.4 IR Aspherical CS
MPL40120IR	Lens, 1/2 inch 4-12mm 90.4-37.0° f1.4 IR Aspherical CS
VL33	Lens, 1/2.7 inch, 2.8-8.0mm, f1.3, DC auto iris, IR-corrected, 3MP
VL34	Lens, 1/2 inch, 8.0-80.0mm, f1.6, DC auto iris, IR-corrected, 3MP
VL37	Lens, 1/2.7 inch, 3.1-8mm, f1.2, DC auto iris, IR-corrected, 3MP
WM04	Indoor wall bracket
HSG02LV	Housing, fixed camera, heater/blower, 90-230 Vac
HSG03LV	Housing, fixed camera, IR illuminator, heater/blower, 90-230 Vac
HSG/WALL	Bracket, wall
HSG/POLE	Bracket, pole
HSG/CORNER	Bracket, corner
HSG/CEILING	Bracket, ceiling
HSG/SUN	Housing fixed camera, sunshield
ECO-plug	Ethernet over coax, SFP Module, 100 Mb with accessory cable, 40 cm
XSNet SFP MM/...... *	Multimode SFP, available in 1- or 2-fiber, different distance and speed ratings
XSNet SFP SM/...... *	Single-mode SFP, available in 1- or 2-fiber, different distance and speed ratings
XSNet SFP SM/CWDM...... *	Single-mode CWDM SFP, available in 8 wavelengths

* For a detailed overview of available SFP types consult appropriate product data.

Features

- 1/2.8" Progressive scan CMOS imager
- Hardened: -40 °C to +75 °C
- Full HD 1080p resolution
- Built-in analytics for Perimeter Intrusion Detection
- Day/Night with IR-cut filter
- Wide dynamic range
- 2 Alarm inputs / 2 outputs
- Analogue video output
- Two-way audio
- 10 Privacy masks
- NTCIP protocol support

Note: Lens sold separately. See "Ordering information".

BC840-PID-XT
Temperature-hardened IP camera with built-in PID

Description

The BC840-PID-XT is a full-featured network camera providing high-quality, high-definition images. Its built-in Perimeter Intrusion Detection is based on i-LIDS certified video analytics for accurate and secure detection with the lowest possible false-alarm rate.

Extended temperature
The BC840-PID-XT offers an extended temperature range of -40 °C to +75 °C. This is particularly useful in hot environments, such as deserts. With its passive cooling, the BC840-PID-XT boasts low energy consumption and high reliability.

Dual stream
The versatile BC840-PID-XT is capable of streaming two independent H.264/MJPEG streams simultaneously. The H.264 implementation is based on dedicated hardware resulting in unparalleled video quality.

Perimeter Intrusion Detection
The embedded analytics for PID is derived from software which is certified by i–LIDS® for primary sensor in a sterile environment. With two detection lines or two zones the PID analytics can be configured easily using the web interface. The quality of PID is determined by a number of external factors, such as lighting, field of view, camera mounting, shadows, etc. The BC840-PID-XT is suited for outdoor intrusion detection under well-lit conditions. When reliable detection is required you should contact TKH Security for expertise and configuration services.

Privacy masks
Privacy masks cover sections of the image. This feature is often requested for such situations as city centre surveillance and point of sale keypads.

Image quality monitor and tamper detector
When the image from the camera becomes too poor, even for the encoder to enhance, an Image Quality alert is raised. The image is continuously monitored on contrast, exposure, focus, and noise by the unique Image Quality Monitor. In addition, the built-in tamper detector monitors changes in the position or field of view of the camera. The instant a camera's position is changed a Tamper Detect alert is raised.

ONVIF and Open Streaming Architecture (OSA)
The BC840-PID-XT supports both the international ONVIF standard and OSA for remote control, configuration, video switching, and streaming. The encoder has been approved for ONVIF Profile S for streaming, PTZ, and I/O. An alternative control interface is OSA, a comprehensive HTTP- and RTSP-based API for remote control of the encoder that makes full integration easy.

Edge recording
The BC840-PID-XT offers edge recording. A recording is activated when the connection with the network recorder is lost. The missing images are available as AVI, which can easily be downloaded from the device. The recordings are stored on a single μSDHC card with a maximum capacity of 32 GB.

TKH GROUP — SECURITY SOLUTIONS

BC840-PID-XT

Audio, I/O contacts, and analogue output

By combining streaming video with duplex audio and I/O contacts over IP, the BC840-PID-XT provides all the interfaces necessary for any IP CCTV application. The BC840-PID-XT is a hybrid solution and can provide local video for a public view monitor or local DVR.

SFP interface

The BC840-PID-XT-SFP model is equipped with an SFP interface. It supports the XSNet SFP range for Ethernet over fiber and the ECO-plug™ for Ethernet over coax.

Technical Specifications

Dimensions in millimetres

Camera

Image sensor	1/2.8" Progressive scan CMOS
Electronic shutter	1/25 ~ 1/10000 s
Minimum scene illumination	0.1 lux colour; 0.01 lux (b/w)
Video standards	NTSC/PAL (selectable via menu)
Output modes	Progressive scan
Video output	1 Vpp, 75 Ω, BNC
Lens mount	CS Mount
Auto iris drive	DC or manual
Composite video	BNC
Wide dynamic range	On/Off
WDR value	>60 dB

Functions

Privacy masks	10
On-screen display	3x text lines (configurable: position, colour, border/outline colour, font size) 1x image in BMP, GIF, or JPEG format (configurable: position, scaling)
Video settings	User profiles, contrast, brightness, colour saturation, hue, sharpness, noise filter

Technical Specifications
BC840-PID-XT

Video

Number of video streams	2x H.264/MJPEG
Frame rate	1 to 30 fps
Compression algorithm(s)	H.264 BP, MP or HP (ISO/IEC 14496-10), MJPEG
Supported resolutions	1080p (1920x1080), 720p (1280x720), 960H, D1, VGA, 2CIF, CIF
Types of streaming	UDP/IP (multicast and/or unicast)
Number of output streams	Up to 20
Encoding latency	<130 ms typ
GOP structure	I, IP (selectable/user profiles)
Output data rate	Up to 20 Mb/s (CBR or VBR selectable/user profiles)

Embedded analytics

Video motion detection	Yes (free-drawn ROI)
Image quality monitor	Focus, contrast, SNR, exposure
Tamper detection	Partially blocked view, cloaked, changed position
Intrusion detection (PID)	2x Detection zones, 2x detection lines
Minimum illumination	4 Lux
Detection zone	Entering, exiting, touch
Detection line	Directional crossing, touch
Additional features	Ignore line, minimum object size, perspective
Services	Parameter optimisation

Audio

Two-way audio	Line out, line in/mic in (jack Ø3.5 mm)

Data/serial port

Number of channels	1 (full-duplex)
Number of streams	2 x 3 (multicast and/or unicast)
Interface(s)	1x RS-422/485 (2- or 4-wire)
Streams	TCP, UDP, MX configurable
Data rate	300 b/s to 230.4 kbps
PTZ control interface(s)	Serial tunneling, webpage, HTTP (API), NTCIP (SNMP)
PTZ control protocols	Standard Pelco-D, Bosch, other remotely loadable protocols

Contact closures

Inputs	2
Outputs	2

Storage

Storage options	Micro SDHC (32 GB max.)

Network

Interface(s)	RJ-45 or SFP (modules not included)
Protocols	H.264 (BP, MP, HP), RTP, UDP, IP, DHCP, IGMPv2, RTSP, (S)NTP, MX/IP, HTTP, SNMP v2, DiffServ, SAP, UPnP, ONVIF, NTCIP

Powering

Power consumption	7 W
Power	20 - 30 Vac, 11 - 30 Vdc, 802.3af PoE
Power adapter not included)	110 - 230 Vac to 12 Vdc, 1.5 A 50/60 Hz

Environmental

Operating temperature	-40 °C to +75 °C (NEMA TS 2)
Relative humidity	10% to 90%, no condensation

Mechanical

Dimensions (h x w x d)	73.8 x 64 x 148 mm (2.9 x 2.52 x 5.83 in)
Colour	Black/Grey
Connector type	RJ-45, BNC

Ordering information

Models	Description
BC840-PID-XT	IP HD box camera, 1080p, Perimeter Intrusion Detection, extended temperature
BC840-PID-XT-SFP	IP HD box camera, 1080p, Perimeter Intrusion Detection, extended temperature, with SFP
PSA-UN12DC with ferrules	Power adapter,110 - 230 Vac, 60/50 Hz to 12 Vdc, 1.5 A , ferrules, with US/EU/UK plug adapters
PSR-12DC	Power supply unit, rail-mount, 85 to 265 Vac, 12 Vdc at 1.5 A
VL-XT288	Lens, 1/3 inch, 2.8-8.0 mm, DC auto iris, IR-corrected, temperature-hardened
VL-XT850	Lens, 1/3 inch, 8.0-50.0 mm, DC auto iris, IR-corrected, temperature-hardened
WM04	Indoor wall bracket
HSG02LV	Housing,fixed camera, heater/blower, 90-230 Vac
HSG03LV	Housing, fixed camera, IR illuminator, heater/blower, 90-230 Vac
HSG/WALL	Bracket, wall
HSG/POLE	Bracket, pole
HSG/CORNER	Bracket, corner
HSG/CEILING	Bracket, ceiling
HSG/SUN	Housing fixed camera, sunshield
ECO-plug	Ethernet over coax, SFP Module, 100 Mb with accessory cable, 40 cm
XSNet SFP MM/...... *	Multimode SFP, available in 1- or 2-fiber, different distance and speed ratings
XSNet SFP SM/...... *	Single-mode SFP, available in 1- or 2-fiber, different distance and speed ratings
XSNet SFP SM/CWDM...... *	Single-mode CWDM SFP, available in 8 wavelengths

* For a detailed overview of available SFP types consult appropriate product data.

TKH GROUP SECURITY SOLUTIONS

BC860

Network box camera, 3MP, Day/night, H.264/MJPEG, P-Iris, WDR, ABF

- ✓ 1/2.8" CMOS
- ✓ 3 Megapixels Camera @30fps
- ✓ Auto back Focus
- ✓ 120 dB WDR
- ✓ Quad stream H.264 and MJPEG video
- ✓ 24 Vac, 24 Vdc, 12 Vdc, 802.3af PoE
- ✓ ONVIF Profile S protocol support

Description
The BC860 is a full featured 3 megapixel IP box with good low light sensitivity. The camera provides high quality, clear images in any situation.

Multistream high definition
The camera has quad-stream capability for simultaneous streaming of H.264/H.264 or H.264/MJPEG. Multiple combinations of resolution and frame rate can be configured to satisfy different live viewing and recording scenarios. 3 Mpixel resolution is available at 30 fps, 2 Mpixel at 60 fps. A full-HD 1080p stream at 60 fps can be combined with a D1 stream at 60 fps. Each selected resolution-frame rate combination can be freely set to a stream number.

ONVIF
Multiple options are available to easily integrate the BC860 to a video management system. In support of open standards, the camera is compliant with the ONVIF Profile S specification.

Image optimalisation
The BC860 provides automatic day/night functionality with configurable thresholds, for use in low-light situations. Backlight compensation enhances image visibility in difficult lighting situations. The BC860 provides two modes for wide dynamic range. The first mode uses different gain ratios for different illumined areas to bring details in the darker areas of an image without saturation in the brighter parts. The second mode uses a 2 shutter mechanism which applies two different exposure settings to capture both darker and lighter areas with excellent details. The resulting image is the optimal aggregation of both exposures.
The available image optimalisation methods ensure quality pictures at all times.

Power source choices
The BC860 can be powered by 12 Vdc, 24 Vac, or over the network with 802.3af-compliant PoE sources.

Privacy masks
Privacy masks cover sections of the image. This feature is often requested for such situations as city centre surveillance and point of sale keypads.

BC860

Technical specifications

Camera	
Image sensor	1/2.8" CMOS, 3 Megapixel
Effective pixels	2048 (H) x 1536 (V)
Minimum scene illumination	0.5 Lux@F1.2 (IRE50), 0.2 Lux@F1.2 (IRE30) color, 0.1 Lux@F1.2 (IRE50), 0.02 Lux@ F1.2 (IRE30) (b/w)
Shutter speed	1 ~ 1/10.000 sec
Lens mount	C/CS mount
Iris control	P-iris

Functions	
Privacy masks	5
Text and picture overlay	Date, time, date & time, text string (15 characters)
Video motion detection	On, Off, By schedule
Video motion detection alarm	Alarm output, record video clip, send alarm message, upload image
Network failure detection	On, Off, By schedule
Network failure detection alarm	Alarm output, record video clip, send alarm message
Tamper detection	On, Off, By schedule
Tamper detection alarm	Alarm output, record video clip, send alarm message, upload image
Time laps	On/Off
Time laps action	Upload image
Audio detection	On, Off, By schedule
Audio detection action	Alarm output, record video clip, send alarm message, upload image
Recording	On, Off, By schedule
Recording destination	SD card/ Network share

Image control	
Wide dynamic range	On/Off
WDR value	120dB (Shutter WDR)
Exposure	Auto, Manual
White balance	Auto, ATW, Manual, One push
Contrast	Manual
Brightness	Manual
Saturation	Manual
Hue	Manual
Sharpness	Manual
Day/Night function	Auto / night / day / smart
Noise reduction	Off, 3DNR (low, medium, high), 2DNR (On/Off), ColorNR (low, medium, high)
Backlight compensation	On/Off
Digital zoom	10x
Image rotation	Normal, Flip, Mirror, 180° Rotate

BC860
Technical specifications

Video	
Compression algorithm(s)	H.264 (baseline / main / high profile); MJPEG
Number of compression instances	Quad stream. Any combination of H.264 streams with possibly one MJPEG stream.
Output streams	Any output stream can be freely configured to one of the resolution/frame rate formats.
Supported resolutions	2048x1536, 1280x1024, 1280x720, 1024x768, 800x600, 720x480, 640x480, 352x240
Compression capabilities	(indication, other combinations possible)

Resolution format	format 1	format 2	format 3	format 4
H.264 instances in 50/60fps	1920x1080	-	-	-
	1920x1080	720x480	-	-
	1280x1024	1280x720	352x240	-
	1280x720	1024x768	800x600	352x240
H.264 instances in 25/30fps	2048x1536	-	-	-
	2048x1536	1280x1024	-	-
	2048x1536	1280x1024	720x480	-
	2048x1536	1280x1024	640x480	352x240

MJPEG	One of the above resolution formats in each instance can be MJPEG instead of H.264 if the resolution is lower than or equal to 1920x1080
Compression bit rate control	Constant bit rate (CBR), variable bit rate (VBR), LBR
Output bit rate (per H.264 stream)	Up to 20480 kbit/s
Total H.264 output	26624 kbit/s
Number of video output streams	Up to 20 (RTSP)
Total output data rate (max)	50000 kbit/s
Video frame rate	1 to 60 fps / 1 to 50 fps
Analogue video output	PAL/NTSC
- Connector type	BNC (1.0 Vpp in 75 Ω)

Audio	
Two-way audio	Line in, Line out
Compression	G.711 (μ-law, a-law) / G.726
Bit rate	G.711: 64 Kbps G.726: 16 Kbps, 24 Kbps, 32 Kbps, 40 Kbps
Sample rate	G.711: 8 KHz / G.726: 8 KHz
Input level, Output level	Adjustable gain
Connector type	Female phone jack, ø 3.5 mm (2x)

Data	
Serial port	RS-485, 2-wire
Protocols	Pelco D, Pelco P
Connector type	Multifunction terminal block (D+, D-)

Alarm inputs/output	
Input	0 - 5 V, 10 kΩ pull-up
Output	1x Photo relay output 300 Vdc/ac
Operational modes	Normally open; normally closed
Connector type	Multifunction terminal block (I1+, I- I2+, O+, O-)

Storage	
Storage options	Supports up to 128 GB capacity of SD/SDHC/SDXC memory (fat32)
Network storage	NAS

BC860

Technical specifications

Network	
Interface(s)	10/100 Ethernet
Network protocols	ARP, DHCP, FTP, ICMP, IEEE 802.1 X, IPv4/IPv6, PPPoE, QoS, RTP, RTSP, SMTP, SNMP, TCP/IP, UDP, UPnP
Connector type	RJ-45

Management	
Supported browsers	Internet Explorer (6.0+), Chrome, Firefox, Safari
Security	User account, HTTPS, IP Filter, IEEE 802.1x
Protocols	UPnP, SNMP, ONVIF Profile S
Password levels	User and Administrator
User accounts	20

Powering	
Power consumption	Max. 8 W
Power supply	12 Vdc / 24 Vdc / 24 Vac / PoE (IEEE 802.3af)
Connector type	Barrel connector (5.5 x 2.1 mm) Adapter to 2-pin terminal block included

Environmental	
Relative humidity	90% or less (no condensation)
Operating Temperature	-20°C ~ +60°C

Mechanical	
Weight	0.36 kg (0.79 lbs)
Dimensions (W x H x D)	76 x 52 x 152 mm (3.0 x 2.0 x 6.0 in)
Color	Grey/Black

Ordering information	
BC860	Network box camera, 3MP, Day/night, H.264/MJPEG, P-Iris, WDR, ABF

Accessories		
WM04A		Wall mount, Indoor, box camera

Dimensons
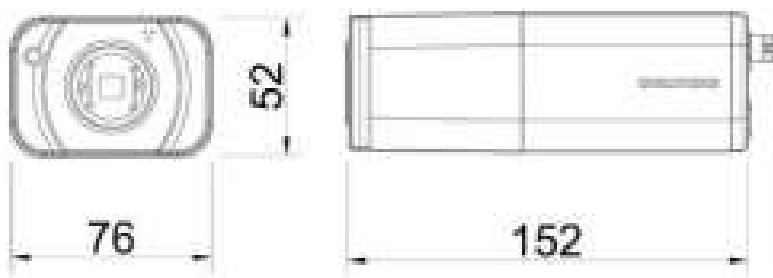
52

76

152

FC CE RoHS COMPLIANT

TKH GROUP SECURITY SOLUTIONS

SIQURA

S I Q U R A

STJCA

IP box camera, 3MP CMOS, Day/night, H.265/H.264/MJPEG P-iris

DESCRIPTION

o   STJCA   Dg k b V   8r   k6

                                        8o   R   S   X

                            8

FEATURES

1/3 Progressive scan CMOS imager

3MP @ 30 fps HDR

100Mb SFP slot

H.265/H.264/MJPEG video compression

120 dB WDR (HDR)

Auto Back Focus, Auto Focus

P-iris for an optimal exposure

Day/Night with IR-cut filter

ONVIF Profile S, G and Q

V

o   STJCA   Dg k bV   8r   k6
                                              8o   R   S   X
          8

q   nXk
V   BAAg   nXk   TRoF
                                    8X   n
          nXk   8

g   6
o   E   b 8CGF5b 8CGE
g dkWt 8g   5
                                          8W   6
                                          8

i
g   STJCA
      8c   5   i h qcXk   n5
k   a   k   l   8

c
o   STJCA   9   5
          6   8S
              8o   STJCA   8n
r Vm   8o   5   r Vm   bVm5

          8o   8c
      5   STJCA   6   1bfT2   6
1SfT2B

k
r   8

Camera

Image sensor	1/3 Progressive scan CMOS
Effective pixels	2056 (H) x 1553(V), 3Mp
Minimum scene illumination	0.04 lux color, 0.002 lux (b/w)
Shutter speed	1 - 1/10,000 s
Lens mount	CS mount
Iris control	P-iris
(back-)Focus control	ABF (Auto Back Focus)

Functions

Privacy masks	8 colors, 5 masks
Text and picture overlay	Date, time, date & time, subtitle, image
Video motion detection	On / off / by schedule
Video motion detection alarm	Alarm output, record video clip, send alarm message, upload image
Network failure detection	On / off / by schedule
Network failure detection alarm	Alarm output, record video clip, send alarm message, upload image
Tamper detection	On / off / by schedule
Tamper detection alarm	Alarm output, record video clip, send alarm message, upload image

Image control

Wide dynamic range	
- gamma WDR	80 dB
- dual shutter WDR (also called HDR)	120 dB (default on limits frame rate to 30 fps)
Exposure	Auto / Manual
White balance	Auto / ATW / Manual / One push
Image settings	Contrast Brightness Saturation Hue Sharpness
Day/Night function	Auto / night / day
	Configurable day/night threshold levels/ IR light compensation
Noise reduction	3DNR, 2DNR, Color

Low, medium, high (w/ Motion Compensation)

Backlight compensation	On/Off
Digital zoom	10 x
Image rotation	0°, 90, 180, 270 rotation

Video

Compression algorithm(s)	H.265, H.264 (main / high profile); MJPEG			
Number of compression instances	Any combination of H.265 or H.264 streams with possibly one MJPEG stream.			
Supported resolutions	2065x1553 (3MP); 1080p30,1280x1024; 720p30; 1024x768; 800x600;			
	720x567(D1); 640x480 (VGA); 352x288 (CIF)			
Max streaming (H264/H265/MJPEG) 60fps	1080 x 720	640x408		
30fps	2048x1536	800x600	352x240	
30fps	1920x1080	1920x1080	800x600	352x240
30fps	1920x1080	1280x720	1280x720	1024x768

Specs

Video

Compression bit rate control	Constant bit rate (CBR), variable bit rate (VBR),
	Low bit rate (LBR)
Number of video output streams	Up to 20 (RTSP)
Total output data rate (max)	60 Mb/s
Video frame rate (max)	1 to 60 fps / 1 to 50 fps
Analog video output	PAL/NTSC
- Connector type	BNC (1.0 Vpp in 75)

Audio

Two-way audio	Line in / line out
Compression	G.711 (µ-law, a-law) / G.726 / AAC / PCM
Connector type	Female phone jack, 3.5 mm (2x)

Data

Serial port	RS-485, 2-wire
Protocols	Pelco D, Pelco P
Connector type	Terminal block

Alarm inputs/output

Input	2x 0 - 5 V, 10 k pull-up
Output	1x Photo relay output 300 Vdc/ac
Operational modes	Normally open; normally closed
Connector type	Terminal block

Storage

Storage options	Micro SD/SDHC/SDXC card (128 GB max); NAS

Network

Interface(s)	100 Mb Ethernet SFP
Network protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE,
	IGMP, IEEE 802.1x, QoS
Connector type	SFP slot

Management

Supported browsers	Internet Explorer 10+ (Chrome, Firefox, Edge: no OCX support)
Security	HTTPS, IP Filter, IEEE 802.1x
Protocols	UPnP, SNMP, ONVIF Profile S, G and Q
Password levels	User and Administrator
User accounts	20

Powering

Power	24 Vac / 12 Vdc
Power consumption	< 13.6 W

Specs

Powering	
Connector type	2 pin terminal block

Environmental	
Operating temperature	-30 C to +55 C (-22 F to +131F)
Relative humidity	10% to 90%, no condensation

Mechanical	
Dimensions (camera body)	150 x 82 x 52 mm (5.9 x 3.2 x 7.1 in) (without lens)
Weight	395 g (0.87 lbs)
Color	Black/Grey

Ordering information	
BC920	IP box camera, 3MP CMOS, Day/night, H.265/H.264/MJPEG P-iris, SFP, ABF

Accessories	
RL2812P	CS-mount lens, P-iris, 3MP, 2.8 -12 mm, f/1.4
RL0560P	CS-mount lens, P-iris, 2MP, 5.0 -60 mm, f/1.6
RL1250P	CS-mount lens, P-iris, 3MP, 12 -50 mm, f/1.5
ECOplug	Ethernet over Coax SFP Module
XSNet SFP	XSNet SFP modules

DIMENSIONS IN MM

RELATED

Siqura SFP Module
SFP modules for Ethernet over fiber

Siqura ECO-plug
Ethernet over Coax 100Mb SFP Module

STJIA

4K Network box camera, H.265/H.264/MJPEG, DC-Iris, ABF

DESCRIPTION

o   STJIA   I g k bV   6   6
       Ee   8c   5
                         i h qⅩk   l   5   8

FEATURES

4K resolution, 8 MP @ 30 fps

CS mount

Auto back focus (ABF)

Quad-stream H.265, H.264 and MJPEG video

120 dB High Dynamic Range

24 Vac, 12 Vdc, PoE

ONVIF Profile S, G and Q

V

g 6   6
o   6   b 8CGF5b 8CGE
g ck Wa 8g   5   5
                                                              8o   Ee   l g
            CF9DA   r Vm1 bVm5   2
                                          8

i
g   STJI A
      8c   5   i h qcXk   l
                        5   a   n
      qg n   8

c
o   STJI A   8T   Ee
                                                                                bVm
        8S   6   b   6   6
                    8c   DV
                        8

k
o   STJI A   BCq   5CEq   5   k W8

Camera

Image sensor	1/1.8" CMOS
Effective pixels	3864(H) x 2180(V)
Minimum scene illumination	0.04 Lux color, 0.002 Lux B/W, f/1.6
Shutter speed	1 to 1/10.000 sec
IR function	Auto, Night, Day, Smart
Lens	CS mount
Iris control	DC Iris

Image control

Dynamic range	120 dB (HDR)
Exposure control	P-Iris / Auto-Iris
White balance	Auto, ATW, One push, Manual
Image settings	Sharpness, Brightness, Contrast, Color, EV
SNR	Better than 54dBw
Noise reduction	2DNR, 3DNR, motion compensated noise reduction
Image rotation	90°, 180°, 270° rotation
Digital zoom	10x

Functions

Text overlay	Date, time, date & time, 5x subtitle (16 characters each),
	text string (15 characters), image, image transparency
Analytics	Motion detection, tampering, audio detection
Event actions	Contact activation; edge recording; FTP upload;
	Notification (FTP, HTTP, e-mail)

Video

Compression algorithm(s)	H.265, H.264, MJPEG		
Number streams	4x, individually configurable H.265/H.264/MJPEG streams in resolution, frame rate and bandwidth.		
Supported resolutions	3840x2160, 3200x1800, 1920x1080, 1280x1024, 1280x720, 1024x768,		
	800x600, 720x480, 640x480, 352x240		
Max streaming (H264/H265/MJPEG)			
60fps	1920x1080	1920x1080	352x240
30fps (HDR)	3840x2160	800x600	
30fps (HDR)	3200x1800	1920x1080	800x600
30fps (HDR)	1920x1080	1920x1080	1920x1080	1920x1080
Compression bit rate control	Constant bit rate (CBR), variable bit rate (VBR), Low bit rate (LBR)		
Max frame rate MJPEG	1080p (1920x1080) @ 30 fps		
Compression bit rate control	Low bit rate (LBR), constant bit rate (CBR), variable bit rate (VBR)		
Output bit rate (per stream)	Up to 10240 kbit/s		
Number of clients	Up to 20 (RTSP)		
Total output data rate (max)	50000 kbit/s		

Audio

Specs

Audio	
Two-way audio	Line in, Line out
Compression	G.711 (µ-law, a-law) / G.726 / AAC / PCM
Input level, Output level	Adjustable gain
Connector type	Female phone jacks, 3.5 mm

Alarm inputs/output	
Input	2
Output	1
Connector type	Terminal block

Storage	
Storage options	Supports up to 128 GB capacity of SD/SDHC/SDXC memory (vFAT/EXT4)
Network storage	NAS

Network	
Interface(s)	100/1000 Mb Ethernet
Network protocols	IPv4/v6, TCP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SNMP, SMTP, DHCP,
	UPnP, PPPoE, IGMP, IEEE 802.1x, QoS
Connector type	RJ-45

Management	
Supported browsers	Internet Explorer 9, 10 and 11

(limited support for Edge, Chrome, Firefox, Safari)	
Security	HTTPS, IP Filter, IEEE 802.1x, digest authentication
Protocols	UPnP, SNMP, ONVIF Profiles S, G, and Q, Siqura API
Password levels	User and Administrator
User accounts	20

Powering	
Power consumption	Max. 13.68 W
Power	24 Vac / 12 Vdc / 802.3af PoE class 0
Connector type	1x 3 Pin terminal block

Environmental	
Operating temperature	-30°C to 55°C(-22°F to 131°F)
Relative humidity	10% to 90%, no condensation

Mechanical	
Dimensions	150x82x52 mm
Weight	395 g
Color	grey/black
Ingress protection	IP20

Specs

Mechanical	

Ordering information	
BC980	4K Network box camera, H.265/H.264/MJPEG, DC-Iris, ABF

Accessories	

TBD	

Specs

DIMENSIONS IN MM

82.0

52.4

150.3
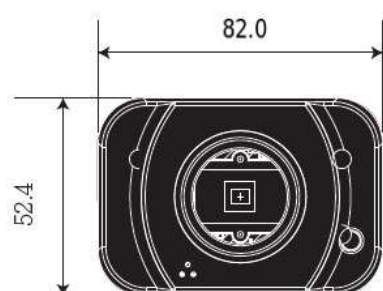
SIQURA

Cámaras Tipo Bullet

SIQURA

Pc9779TB4SX

Network bullet camera, 4.0 mm fixed lens, 2MP, H.265/H.264

DESCRIPTION

k   Pc9779TB4SX   x 94   x   Xg y   zx   x   '   x   ' 4x   ' B
        '   z   x   x   x '   x   x ' z x   x   5k
zx   x x x   '   x   '   x x   z   x   '   z
        5X   '   z '   '   x   x   x '   x
z   5

FEATURES

Compact Full-HD bullet camera

Ultra low-light CMOS sensor

2MP @ 25/30 fps (1920x1080)

4mm fixed lens

120 dB WDR

Built-in IR illuminator (30 m)

Multi-codec multi-stream: H.265, H.264, MJPEG

Intelligent VCA

IP67

ONVIF Profile S and G

R   z

d   4 z ' -   4   x
k   zx   x zx   ' x   x   W59DC3W59DB   d agSV 5d   z   y   x
            3 x   x 3x '   z '   zx y z   '   x   '
x ' z '   z x   5

W   S z   z m'   Q '   WSmQ0
W59DC   WSmQ   x '   z   x ' x ' 3   zz   W59DB5X z   x
W59DC   xy ' y   z   x   x   x   '   x 3
  y x x   ' '   x   x   x   y   x 5k   x   yx ' ' x '
   z '   xz 5

f   x ' x '
k   Pc9779TB4SXzx   x   y   x '   x '   x x
j   x   g   x   X   xz /j gX0 f e mXT5k   y   zx   x   '   f e mXT
g   j x ' g   V 5

m'   x x   z
k   zx   x   x   x   '   x x   x
   x '   z   x   x   x 5k   zx   x   x   x   3y   x   x x
x ' xz '   z 5

X x   x z
k   Pc9779TB x   x X 3PcQ x ' AR   ' z   x
   x   x '   5

Sx   x x
k   z   xz y   zx y   ' x   x   5X   '   x y   x 4
zxy   x   x x   x 5

Camera

Image sensor	1/2.8" Ultra-low light CMOS
Lens	4mm, F/1.6
Focus	Fixed focus
Field of view	86.4 horizontal
Minimum illumination	Color: 0.005 lux, B/W: 0.001 lux, 0 lux with IR (F/1.2)
Day/Night	IR-cut filter with auto switch
IR illuminator wavelength	850 nm
IR Distance	Up to 30 m
Wide dynamic range (WDR)	120 dB
Shutter speed	1/3 s to 1/100,000 s
Slow shutter	Supported

Video

Video compression	H.265 MP, H.264 HP/MP, MJPEG
Video Output	512 Kbps 24 Mbps
Region of interest	1 region per stream
Max. resolution	1920x1080 at 30 fps
	(640x360@30 for MJPEG)
Frame rate	25/30 fps
Number of simultaneous streams	3
- Main stream	1920x1280@25/30fps; 1280x960@25/30fps; 1280x720@25/30fps
- Sub stream	640x480@25/30 fps; 640x360@25/30fps; 352x288@25fps or 352x240@30fps
- Third Stream*	1920x1280@25/30fps;1280x720@25/30fps; 640X360@25/30; 352x288@25fps
	or 352x240@30fps
Image enhancement	3D DNR, Back-light compensation
Image setting	Rotate mode**, saturation, brightness, contrast, sharpness
Day/Night switch	Auto/Scheduled
Privacy mask	Yes
Video output	not supported
Note*	Enabling the Third-Stream, disables the face detection.
Note**	The combination WDR and rotation limits the frame rate to 20 fps

Network

Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE,
	NTP, UPnP, SNMP, IGMP, 802.1x, QoS, IPv4/v6, Bonjour, ONVIF, PSIA, CGI
Security	3-level user authentication, 802.1x, Watermark, IP address filtering
API	ONVIF (Profile S, Profile G), Siqura Programming Interface
Communication interface	1x 10/100 Base T/TX (RJ-45)

Analytics

Behavior analytics	Line crossing detection, intrusion detection, unattended baggage detection,
	object removal detection
Face detection	supported

Specs

Analytics	
Alarm trigger	Motion detection, Tampering alarm, Network disconnect, IP address conflict, illegal login, disk full, disk error

Storage	
Network storage	NAS (NFS, SMB/CIFS), ANR
On-board storage	Built-in micro SD/SDHC/SDXC slot, up to 128 GB

Powering	
Power supply	12 Vdc 25% (Barrel connector), PoE (802.3af, class 3)
Power consumption	5 W at 12 Vdc; 6.5 W at PoE

Environmental	
Ingress protection level	IP67
Operating temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Relative humidity	+5% to 100%

Housing	
Material	Die cast aluminum
Dimensions	diameter 70mm x 155.03 mm (diameter 2.76" x 6.1")
Weight	410 g (0.9 lbs.)
Color	RAL 9003 (signal white)

Ordering information	
BL2002F4-EI	Network bullet camera, 4.0 mm fixed lens, 2MP, H.265/H.264

DIMENSIONS (IN MM)

155.03(6.10")

81.09(3.19")

3-Φ4.5

Φ55(2.17")

Φ70(2.76")
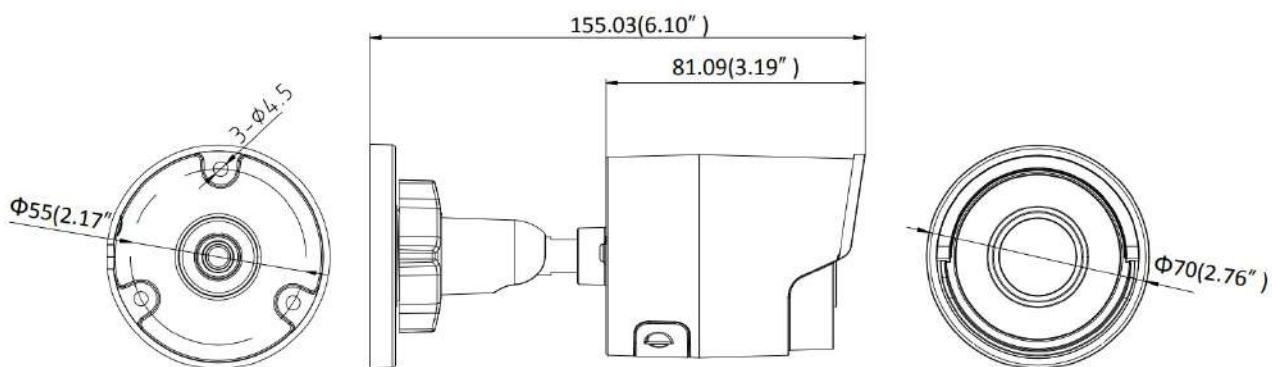
Pc9779cgi

LPR bullet camera, 8-32 mm motorized lens, 2MP, H.265/H.264

DESCRIPTION

k   Pc9779cgi   x   94   x   X̌g y   zx   x   y   4   cgi 5k
  z   z   x   z   x   OX̌x
xzz xz   y 5k   y   4 X̌   x   x' x
   y   x ' y x x z '   x   877   5k   x   F   Å9
           ' x   z   x   x   x '   x   x ' z x
   x   5k   zx   x x '   x   '   x x   z   x   '   z
              5X̌   '   z '   '   x   x   x '
     x   z   5

FEATURES

1/1.8 ultra-low light CMOS imager

2MP @ 60 fps (1920x1080)

Motorized zoom (8 - 32 mm)

AI: LPR, perimeter and exception detection

Multi-codec multi-stream: 6x H.265, H.264, MJPEG

140 dB triple exposure WDR

Built-in IR illuminator (100 m)

IP67, IK10

ONVIF Profile S and G

R z

c z x z
n x xzz xz GF, Pc9779cgi zx z x y ' x x ' 5X
zx z x x x y ' x ' y xz ' z x 5k zx x zx y
' x' z x x x ' y ' z 5X x' y x
' ' zx ' cgi zx x 3 Pc9779cgi zx y ' x x QQk m
zx x x ' ' z 5

d 4 z ' - 4 x
k zx x zx xy x x C' W59DC3W59DB x ' d agSV
x 5j x 94 x 4WR /8G97 87F70x D7 5d z y x
3 x x 3x ' z ' zx y z ' x ' x '
z ' z x 5

W S z z m' Q ' WSmQ0
W59DC WSmQ x ' z x ' x ' 3 zz W59DB5X z x
W59DC xy ' y z x x x ' x 3
y x x ' ' x x x y x 5k x yx ' ' x '
z ' xz 5

f e mXT
d x x x xy x x Pc9779cgi x ' x x
5X x ' x ' 3 Pc9779cgi z x f e mXT /g j 6
g V05

X x x z
k Pc9779cgi x x x z x x 3 z x x X3
R 3PcQ x ' AR ' z 5

Sx x x
k Pc9779cgi ' x y 4 z y x x x x x ' '
' x x z y 5

Camera

Image sensor	1/1.8" Ultra-low light CMOS
Lens	Motorized 8 to 32 mm, F/1.6
Focus	Autofocus, Semi-auto, manual
Field of view	42.5° to 13.4° horizontal,
Min. illumination	Color: 0.002 lux, B/W: 0.0004 lux (F/1.2 AGC ON)
Day/Night	IR-cut filter with auto switch
Built-in IR illuminator	Working distance: Up to 100 m
	Wavelength: 850 nm
WDR	140 dB
Shutter speed	1 s to 1/100,000 s
Slow shutter	Supported

Video

Video compression	H.265 MP, H.264 HP/MP/BP, MJPEG
Video bit rate	32 Kbps 16 Mbps
Max resolution	1920x1080 at 60 fps
	(704x576 @ 25/30fps for MJPEG)
Frame rate	25/30/50/60 fps
Number of simultaneous streams	10
- Main (H.265/H.264 60fps)	1920x1080, 1280x960, 1280x720
- Sub (H.265/H.264/MJPEG 25/30fps)	704x576, 640x480
- 3rd (H.265/H.264/MJPEG 25/30fps)	1920x1080, 1280x960, 1280x720, 704x576, 640x480
- 4th (H.265/H.264/MJPEG 25/30fps)	1920x1080, 1280x720, 704x576, 640x480
- 5th (H.265/H.264/MJPEG 25/30fps)	704x576, 640x480
- Cust. (H.265/H.264/MJPEG 25/30fps)	1920x1080, 1280x720, 704x576, 640x480
	listed max resolutions cannot work at the same time
Image enhancement	BLC, HLC, 3D DNR, EIS, Defog, Lens correction
Image setting	Rotate mode, saturation, brightness, contrast, sharpness
Day/Night switch	Auto/Scheduled/Triggered by Alarm In/Triggered by video

Video output: 1 Vp-p; BNC (75)

Network

Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE,
	NTP, UPnP, SNMP, SMTP, IGMP, 802.1x, QoS, IPv4/v6, Bonjour, ONVIF, PSIA, CGI
Security	3-level user authentication, 802.1x,, IP address filtering, digest authentication
API	ONVIF (Profile S, Profile G), Siqura Programming Interface
Communication interface	1x 10/100/1000 Base T/TX (RJ-45)

Alarm I/O

Alarm trigger	Motion detection, Tampering alarm, Network disconnect, IP address conflict,
	illegal login, disk full, disk error, License plate in white or black list
Alarm in	2x input

Specs

Alarm I/O	
Alarm out	2x output (up to 24 Vdc 1 A or 110 Vac 500 mA)

Storage	
Networked storage	NAS (NFS, SMB/CIFS), ANR
On-board storage	Built-in micro SD/SDHC/SDXC slot, up to 256 GB

Powering	
Power supply	12 Vdc 20% (terminal block), PoE (802.3at class 4)
Power consumption	1.2 A max, Max. 14 W

Environmental	
Ingress protection level	IP67
Impact protection	IK10
Operating temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Relative humidity	+5% to 100%

Housing	
Material	Die cast aluminum
Dimensions	diameter 140 x 351 mm (5.5" x 13.8"),
	Package: 405 x 190 x 180 mm, (15.9" x 7.5" x 7.1")
Weight	Approx. 2.5 kg (5.51 lbs.)
	Package: 2.75 kg (6.06 lb.)
Color	RAL 9003 (signal white)

Ordering information	
BL2002LPR	LPR bullet camera, 8-32 mm motorized lens, 2MP, H.265/H.264

DIMENSIONS IN MM (INCH)

351[13.8]

236[9.3]

Ø140[5.5]

41[1.6]

151[5.9]

99[3.9]
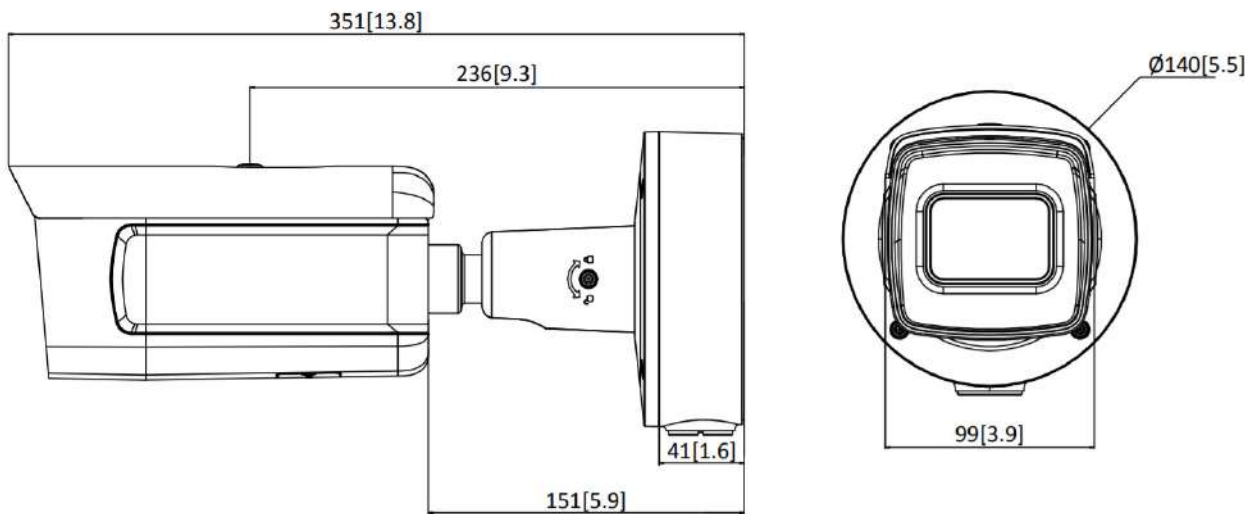
RELATED

Siqura PM10
Pole mount for BL/FD200xM1 series cameras

Siqura WM20
Corner mount for BL/FD200xM1 series cameras

Pc9779d 84SX

Bullet camera, 2.8-12 mm motorized lens, 2MP, H.265/H.264

DESCRIPTION

k   Pc9779d 84SX   x 94   x   Xg y   zx   x   '   z   x   x   x
x   5O   ' x   95F   89   '   x   z   x   x
x '   x   x ' z x   x   5k   zx   x x x   '   x
'   x x   z   x   '   z   5X   '   z '
'   x   x   x '   x   z   5

FEATURES

1/2.8 ultra-low light CMOS imager
2MP @ 25/30 fps (1920x1080)
Motorized zoom (2.8 - 12 mm)
120 dB WDR
Built-in IR illuminator (50 m)
Intelligent VCA
Multi-codec multi-stream: H.265, H.264, MJPEG
IP67, IK10
ONVIF Profile S and G

R z

d 4 z ' -   4   x
k   zx   x zx   ' x   x   W5DC3W5DB   d agSV 5d   z   y   x
           3 x   x 3x '   z '   zx y z   '   x   '
x '   z '   z   x   5

W   S z   z m'   Q '   MSmQ0
W5DC   WSmQ. x '   z   x ' x ' 3   zz   W5DB5X z   x
W5DC   xy '   y   z   x   x   x   '   x 3
  y   x   x   ' '   x   x   x   y x 5k   x   yx ' ' x '
  z '   xz 5

f e mXT
d   x x x xy   x   x   Pc9779d 84SX x '   x x
      5X   x ' x ' 3   Pc9779d 84SX z   x   f e mXT /g   j
6g   V05

m'   x x   z
k   zx   x   x   x   mQO   x   x '   z
x   x   x 5k   zx   x x' '   x   x   y x   x x   x ' xz ' z   5

X x   x z
k   Pc9779d 8 x   x   x z   x   x 3 z   x   x X 3PcQ
x ' AR   ' z   5

Sx   x x
k   Pc9779d 84SX   '   x y 4   z   y   x   x x   x x '
'   '   x   x   z   y 5

Camera

Image sensor	1/2.8" Ultra-low light CMOS
Lens	Motorized 2.8 to 12 mm, F/1.4
Focus	Autofocus
Field of view	105 to 35 horizontal, 56° to 20° vertical
Min. illumination	Color: 0.0068 lux, B/W: 0.0013 lux, 0 lux with IR (F/1.4)
Day/Night	IR-cut filter with auto switch
Built-in IR illuminator	Working distance: Up to 50m
	Wavelength: 850nm
WDR	120dB
Shutter speed	1/3 s to 1/100,000 s
Slow shutter	Supported

Video

Video compression	H.265 MP, H.264 HP/MP, MJPEG
Video Output	512 Kbps 24 Mbps
Region of interest	1 region per stream
Max resolution	1920x1080 at 30 fps
	(640x360 for MJPEG)
Frame rate	25/30 fps
Number of simultaneous streams	3
- Main stream	1920x1280@25/30fps; 1280x960@25/30fps; 1280x720@25/30fps
- Sub stream	640x360@25/30fps; 352x288@25fps or 352x240@30fps
- Third Stream*	1920x1280@25/30fps;1280x720@25/30fps; 640X360@25/30; 352x288@25fps
	or 352x240@30fps
Image enhancement	3D DNR
Image setting	Rotate mode**, saturation, brightness, contrast, sharpness
Day/Night switch	Auto/Scheduled/Triggered by Alarm In
Privacy mask	Yes

Video output: 1 Vp-p; 2-pin to BNC patch cable (For test/installation only)

Note*	Enabling the Third-Stream, disables the face detection.
Note**	The combination WDR and rotation limits the frame rate to 20 fps

Network

Protocols	TCP/IP, UDP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE,
	NTP, UPnP, SNMP, IGMP, 802.1x, QoS, IPv4/v6, Bonjour, ONVIF, PSIA, CGI
Security	3-level user authentication, 802.1x, Watermark, IP address filtering
API	ONVIF (Profile S, Profile G), PSIA, Siqura Programming Interface
Communication interface	1x 10/100 Base T/TX (RJ-45)

Audio

Audio	1x 3.5 mm audio in (mic in/line in) ; 1x 3.5 mm audio out interface
Compression	G.711, G.726, MP2L2

Specs

Audio	
Enhancement	Environmental noise cancellation

Analytics	
Behavior analytics	Line crossing detection, intrusion detection, unattended baggage detection, object removal detection
Face detection	supported

Alarm I/O	
Alarm trigger	Motion detection, Tampering alarm, Network disconnect, IP address conflict, illegal login, disk full, disk error, Alarm I/O
Alarm in	1x input
Alarm out	1x output (up to 24 Vdc 1 A or 110 Vac 500 mA)

Storage	
Networked storage	NAS (NFS, SMB/CIFS), ANR
On-board storage	Built-in micro SD/SDHC/SDXC slot, up to 128 GB

Powering	
Power supply	12 Vdc 25% (terminal block), PoE (802.3at)
Power consumption	1.2 A max, Max. 14.5W

Environmental	
Ingress protection level	IP67
Impact protection	IK10
Operating temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Relative humidity	+5% to 100%

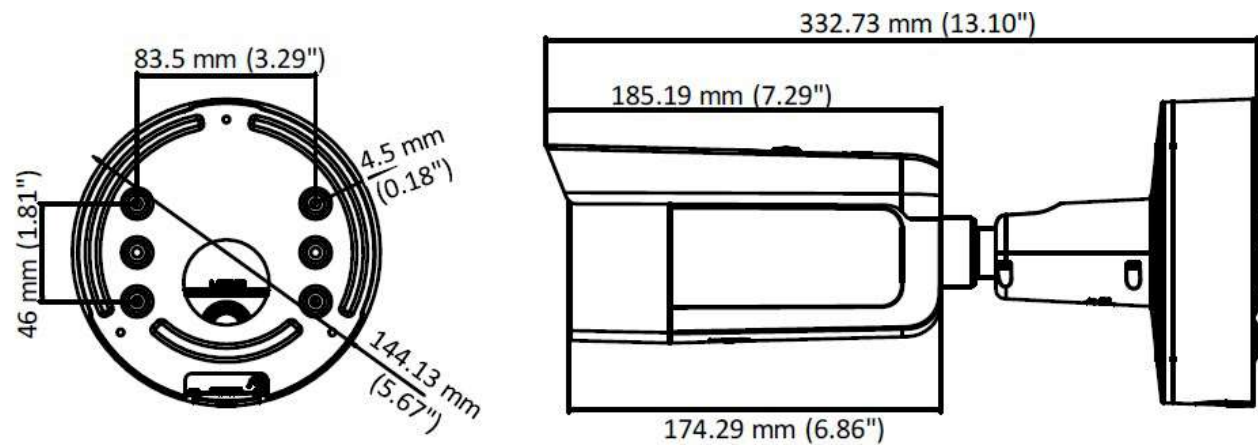| Housing	
Material	Die cast aluminum
Dimensions	diameter144.13 x 332.73 mm (5.67" x 13.10")
Weight	1890 g (4.17 lbs.)
Color	RAL 9003 (signal white)

Ordering information	
BL2002M1-EI	Bullet camera, 2.8-12mm motorized lens, 2MP, H.265, IP66, IR

Siqura Accessoires	
PM10	Pole mount for BL/FD2000 series cameras
WM20	Corner mount for BL/FD2000 series cameras

DIMENSIONS (IN MM)

83.5 mm (3.29")

46 mm (1.81")

4.5 mm (0.18")

144.13 mm (5.67")

332.73 mm (13.10")

185.19 mm (7.29")

174.29 mm (6.86")
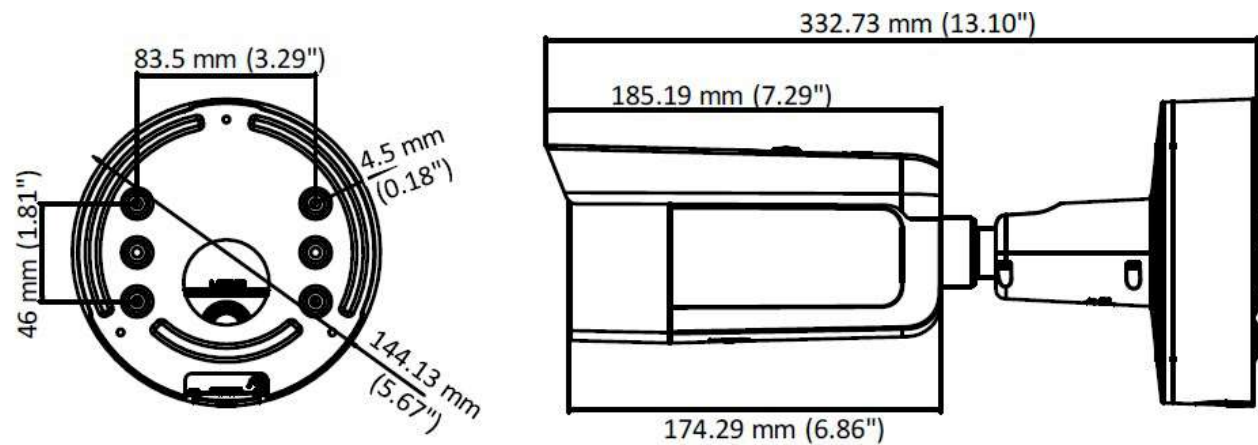
RELATED

Siqura WM20
Corner mount for BL/FD200xM1 series cameras

Siqura PM10
Pole mount for BL/FD200xM1 series cameras

SIQURA

Pc977Cd 84SX

Bullet camera, 2.8-12 mm motorized lens, 5MP, H.265/H.264

DESCRIPTION

k   Pc977Cd 84SX   x C4   x   Xg y   zx   x   '   '   x   '   x
x   x   5O   ' x   9F   89   ' x   z   x   x
x '   x   x ' z   x   x   5k   zx   x x x '   x
'   x x   z   x   '   z   5X   '
z '   '   x   x   x '   x   z   5

FEATURES

1/2.9 ultra-low light CMOS imager

5MP @ 20 fps (2944x1656)

Motorized zoom (2.8 - 12 mm)

120 dB WDR

Built-in IR illuminator (50 m)

Intelligent VCA

Multi-codec multi-stream: H.265, H.264, MJPEG

IP67, IK10

ONVIF Profile S and G

R z

d 4 z ' - 4 x
k zx x zx ' x x W5DC3W5DB d agSV 5d z y x
3 x x 3x ' z ' zx y z ' x '
x ' z ' z x 5

W S z z m' Q ' ΛΛSmQ0
W5DC W5mQ x ' z x 'x ' 3 zz W5DB5X z x
W5DC xy ' y z x x x ' x 3
y x x ' ' x x x y x 5k x yx ' ' x '
z ' xz 5

f e mXT
d x x x xy x x Pc9779d 84SX x ' x x
5X x 'x ' 3 Pc9779d 84SX z x f e mXT /g j
6g V 05

m' x x z
k zx x x x mQO x x ' z
x x x 5k zx x x'' x x y x x x x ' xz ' z 5

X x x z
k Pc977Cd 8 x x x z x x 3 z x x X 3PcQ
x ' AR ' z 5

Sx x x
k Pc977Cd 84SX ' x y 4 z y x x x x x '
' ' x x z y 5

Camera

Image sensor	1/2.9" Ultra-low light CMOS
Lens	Motorized 2.8 to 12 mm, F/1.4
Focus	Autofocus
Field of view	88° to 29° horizontal, 47.5° to 16.5° vertical
Min. illumination	Color: 0.014 lux, B/W: 0.0028 lux, 0 lux with IR (F/1.4)
Day/Night	IR-cut filter with auto switch
Built-in IR illuminator	Working distance: Up to 50 m
	Wavelength: 850 nm
WDR	120 dB
Shutter speed	1/3 s to 1/100,000 s
Slow shutter	Supported

Video

Video compression	H.265 MP, H.264 HP/MP, MJPEG
Video Output	512 Kbps 24 Mbps
Region of interest	1 region per stream
Max resolution	2944 x 1656 at 20 fps; 2560 x 1440 at 30 fps
	(640x360 for MJPEG)
Frame rate	25/30 fps
Number of simultaneous streams	3
- Main stream	:2944x1656@20fps; 2560x1440@25/30; 1920x1080@25/30fps; 1280x720@25/30fps
- Sub stream	640x360@25/30fps; 352x288@25fps or 352x240@30fps
- Third* Stream	1280x720@25/30fps; 640X360@25/30; 352x288@25fps or 352x240@30fps
Image enhancement	3D DNR
Image setting	Rotate mode**, saturation, brightness, contrast, sharpness
Note*	Enabling the Third-Stream, disables the face detection.
Note**	The combination WDR and rotation limits the frame rate to 20 fps
Day/Night switch	Auto/Scheduled/Triggered by Alarm In
Privacy mask	Yes
Video output	1 Vp-p; 2-pin to BNC patch cable (For test/installation only,)

Network

Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE,
	NTP, UPnP, SNMP, IGMP, 802.1x, QoS, IPv4/v6, Bonjour, ONVIF, PSIA, CGI
Security	3-level user authentication, 802.1x, Watermark, IP address filtering
API	ONVIF (Profile S, Profile G), PSIA, Siqura Programming Interface
Communication interface	1x 10/100 Base T/TX (RJ-45)

Audio

Audio	1x 3.5 mm audio in (mic in/line in) ; 1x 3.5 mm audio out interface
Compression	G.711, G.726, MP2L2
Enhancement	Environmental noise cancellation

Analytics

Specs

Analytics

Behavior analytics	Line crossing detection, intrusion detection, unattended baggage detection, object removal detection
Face detection	supported

Alarm I/O

Alarm trigger	Motion detection, Tampering alarm, Network disconnect, IP address conflict, illegal login, disk full, disk error, Alarm I/O
Alarm in	1x input
Alarm out	1x output (up to 24 Vdc 1 A or 110 Vac 500 mA)

Storage

Networked storage	NAS (NFS, SMB/CIFS), ANR
On-board storage	Built-in micro SD/SDHC/SDXC slot, up to 128 GB

Powering

Power supply	12 Vdc 25% (terminal block), PoE (802.3at)
Power consumption	1.2 A max, Max. 14.5W

Environmental

Ingress protection level	IP67
Impact protection	IK10
Operating temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Relative humidity	+5% to 100%

Housing

Material	Die cast aluminum
Dimensions	diameter144.13 x 332.73 mm (5.67" x 13.10")
Weight	1890 g (4.17 lbs.)
Color	RAL 9003 (signal white)

Ordering information

BL2005M1-EI	Bullet camera, 2.8-12mm motorized lens, 5MP, H.265/H.264

Siqura Accessoires

PM10	Pole mount for BL/FD2000 series cameras
WM20	Corner mount for BL/FD2000 series cameras

DIMENSIONS (IN MM)

83.5 mm (3.29")

4.5 mm (0.18")

46 mm (1.81")

144.13 mm (5.67")

332.73 mm (13.10")

185.19 mm (7.29")

174.29 mm (6.86")

RELATED

Siqura WM20
Corner mount for BL/FD200xM1 series cameras

Siqura PM10
Pole mount for BL/FD200xM1 series cameras

PcF97md 8X

4MP IP Bullet Camera with IR

DESCRIPTION

k   PcF97d 8X   '   z   x   x   x   z   '   x   y   4   X
        x   x   ' x   x   z ' x   6   z   x   5n   zxy   4   x   x   '   y xz   3
XgDE z   z   x   '   '   3   x   x   x   x   '   x   3x   '
x'   5k   4WR y   zx   x   x   y x   '   '   z   z   y
x   x' 4   x   W5DB x   '   d agSV   '   5d   z   y   x
                x   '   x   x   zx   y   z   '   x   '   x   '
    z   '   '   x   '   5

FEATURES

1/3" Progressive scan CMOS imager

3.0 - 9.0 mm Motorised varifocal lens

4MP @ 15 fps frame rate

Quad-stream H.264 and MJPEG video

120 dB WDR

Day/Night with IR-cut filter

Built-in IR illuminator (effective distance: 40 m)

IP67 Ingress protection rating

IK10

24 Vac / 24 Vdc / 12 Vdc / 802.3af PoE

ONVIF Profile S, G, Q conformant

SIQURA

R z

Camera

Image sensor	1/3 Progressive scan CMOS
Effective pixels	2688(H) x 1520(V)
Minimum scene illumination	0.1 lux colour, 0.01 lux (b/w), 0 lux with IR
Shutter speed	1 - 1/10000 s
Lens	3.0 to 9.0 mm, F1.7
Lens type	DC Auto iris, motorised zoom, push-to-focus
Horizontal field of view	109° (W) - 33° (T)

Functions

Privacy masks	5
Text and picture overlay	Date, time, date & time, 3x subtitle (16 characters each),
	text string (25 characters), image, image transparency
Video motion detection	On / off / by schedule
Video motion detection alarm	Alarm output, record video clip, send alarm message, upload image
Network failure detection	On / off / by schedule
Network failure detection alarm	Alarm output, record video clip, send alarm message
Tamper detection	On / off / by schedule
Tamper detection alarm	Alarm output, record video clip, send alarm message, upload image
Periodical event	On/Off
Periodical event action	Upload image
Recording	On / off / by schedule
Recording destination	SD card/ Network share

Image control

Wide dynamic range	On/Off
- WDR value	>120 dB (in WDR dual shutter mode)
Exposure	Auto (P-iris priority, iris size, max gain and min shutter speed configurable) Manual
White balance	Auto, ATW, Manual, One push
Contrast	Manual
Brightness	Manual
Saturation	Manual
Hue	Manual
Sharpness	Manual
Day/Night	Auto / night / day / light sensor / LED on / LED off/ Configurable day/night threshold levels/ IR light co
Noise reduction	Off, 3DNR (low, medium, high), 2DNR (On/Off), ColorNR (low, medium, high)
Backlight compensation	On/Off
Digital zoom	10x
Image rotation	Normal / Flip / Mirror / 90° (clockwise, counterclockwise) and 180° Rotate

Video

Compression algorithm(s)	H.264 (baseline / main / high profile); MJPEG
Number of compression instances	Quad stream. Any combination of H.264 streams with possibly one MJPEG stream.
Output streams	Any output stream can be freely configured to one of the resolution/frame rate formats.

Specs

Video

Video				
Supported resolutions	2688x1512 (4MP); 2560x1440; 2304x1296 (3MP); 1920x1080 (1080p); 1280x1024;			
	1280x720 (720p); 1024x768; 800x600; 720x576 (D1); 640x480; 352x288 (CIF)			
Compression capabilities	(indication, other combinations possible)			
Resolution format	format 1	format 2	format 3	format 4
H.264 in 15 fps	2688x1512	1280x720	---	---
H.264 @ 50/60fps	2304x1296	800x600	---	---
	1920x1080	1280x1024	352x288	---
	1920x1080	1280x720	720x576	352x288
H.264 @ 25/30fps	1280x720	640x480	352x288	---
H.264 @ 25/30fps WDR 2	1920x1080	720x576 (15fps)	352x288 (15fps)	---
MJPEG	One of the above resolution formats in each instance can be MJPEG instead of			
	H.264 if the resolution is lower than or equal to 1920x1080			
Compression bit rate control	Constant bit rate (CBR), Variable bit rate (VBR), Low bit rate (LBR)			
Output bit rate (per H.264 stream)	Up to 20480 kbit/s			
Total H.264 output	26624 kbit/s			
Number of video output streams	Up to 20 (RTSP)			
Total output data rate	(max) 50000 kbit/s			
Video frame rate	1 to 60 fps / 1 to 50 fps			
Analogue video output	PAL/NTSC			
Connector type	BNC (1.0 Vpp in 75) on breakout cable			

Audio

Audio	
Two-way audio	line in / line out
Compression	G.711 (µ-law, a-law) / G.726 / AAC / PCM
Bit rate	G.711: 64 Kbps G.726: 16 Kbps, 24 Kbps, 32 Kbps, 40 Kbps
	AAC: 128 Kbps PCM: 128 Kbps, 256 Kbps, 384 Kbps, 768 Kbps
Sample rate	G.711: 8 KHz / G.726: 8 KHz / AAC: 48 KHz / PCM: 8, 16, 24, 48 KHz
Input level, Output level	Adjustable gain
Connector type	Female phone jack, 3.5 mm (2x) on breakout cable

Alarm inputs/output

Alarm inputs/output	
Input	2x 0 - 5 V, 10 k pull-up
Output	1x Photo relay output 300 Vdc/ac
Operational modes	Normally open; normally closed
Connector type	5 pin terminal block on breakout cable

Storage

Storage	
Storage options	Micro SDXC card, 64 GB

Network

Network	
Interface(s)	10/100 Ethernet
Network protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP,
	PPPoE, IGMP, PNAC (IEEE 802.1x), QoS

Specs

![SIQURA logo]

Network	
Connector type	RJ-45 on breakout cable

Management	
Supported browsers	Internet Explorer (6.0+), Chrome, Firefox, Safari
Security	HTTPS, IP Filter, PNAC (IEEE 802.1x)
Protocols	UPnP, SNMP, ONVIF Profile S
Password levels	User and Administrator
User accounts	20

Powering	
Power consumption	
- System	Max. 3.0 W
- IR LED	Max. 4 W
- Heater	Max. 4 W (cold start: 8.5 W)
- Motorised lens	Max. 0.55 W
Power	24 Vac / 24 Vdc / 12 Vdc / 802.3af PoE
Connector type	2-pin terminal block on break-out cable

Environmental	
Start-up temperature	-55 C (-67 F)
Operating temperature	-50 C to +55 C (-58 F to +131F)
Relative humidity	10% to 90%, no condensation

Mechanical	
Dimensions (camera body)	diameter 84 x 175 mm (diameter 3.3 x 6.9 in) with sunshield
Weight	0.84 kg (1.85 lbs)
Colour	RAL 9003 (Signal white)
Built-in IR illuminator	
- Working distance	Up to 40 m
- Wavelength	850 nm
- Number of LEDs	6
Break-out cable length	50 cm
Ingress protection	IP67
Impact rating	IK10 (front glass excluded)

Ordering information	
BL820v2M1IR	Network bullet camera, 3-9mm motorized zoom, 4MP, H.264/MJPEG, IR

Accessories	
JB07/BL	Junction box for BL8xx
PM09B/BL	Pole mount junction box for BL8xx

BL820V2M1IR
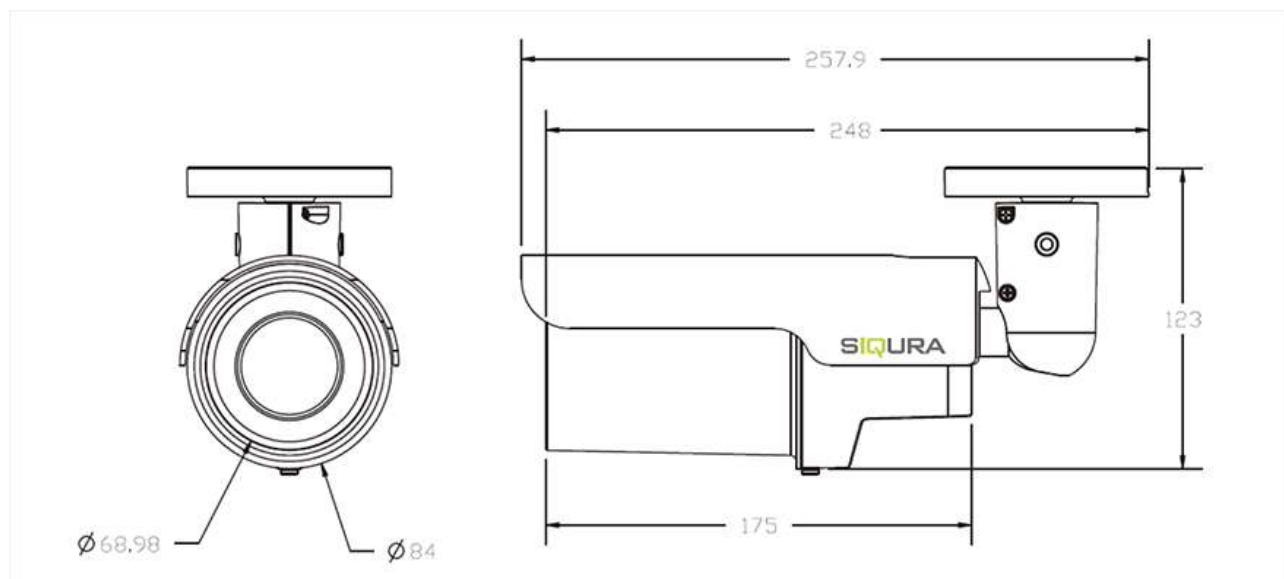
BL880v2M1IR

4K Network bullet camera, 4-8mm motorized, H.265/H.264/MJPEG

- ✓ 4K resolution, 8 MP @ 25 fps
- ✓ 4-8 mm motorized varifocal lens
- ✓ Quad-stream H.264 and MJPEG video
- ✓ 120 dB multi-exposure WDR (HDR)
- ✓ Built-in IR illuminator
- ✓ IP66 ingress protection
- ✓ IK10 impact rating
- ✓ 24 Vac, 12 Vdc, 802.3at PoE
- ✓ ONVIF Profile S, G and Q

Description
The BL880v2M1IR is an 8MP HD bullet camera with built-in IR illumination providing 4K razor sharp images under any lighting condition. With its cable-managed bracket, IP66 construction, IK10 vandal resistant housing and motorized lens, installation is fast and easy, and remote adjustment is simple.

Multi-stream high definition
The camera has quad-stream capability for simultaneous streaming of H.265, H.264 or MJPEG. Multiple combinations of resolution and frame rate can be configured to satisfy different live viewing and recording scenarios. 8 Mpixel resolution is available at 25/30 fps. Each selected resolution-frame rate combination can be freely set to a stream number.

Open standards
Multiple options are available to easily integrate the BL880v2M1IR to a video management system. In support of open standards, the camera is compliant with the ONVIF Profile S, G and Q specification.

Image enhancement
The BL880v2M1IR provides automatic day/night functionality with configurable thresholds and built-in IR illuminator, for use in low-light situations up to 40m. Backlight compensation enhances image visibility in difficult lighting situations. The BL880v2M1IR high dynamic range uses multiple exposures to merge in a single frame, creating more image detail under challenging light conditions.

Power source choices
The BL880v2M1IR can be powered by 12 Vdc, 24 Vac, or over the network with 802.3at-compliant PoE sources.

SIQURA

BL880v2M1IR

Technical specifications

Camera	
Image sensor	1/2" CMOS
Effective pixels	3872(H) x 2192(V)
Minimum scene illumination	0.1 Lux color, 0.01 Lux b/w, F/1.6 0 lux with IR
Shutter speed	1 to 1/10.000 sec
IR illumination	850 nm, up to 40 m
IR function	Auto, Night, Day, Light sensor, Light On, Light Off, Smart
Lens	Motorized varifocal
Focal length	4 to 8 mm F/1.6
Horizontal field of view	126° (Wide) to 59° (Tele)
Lens material	High-grade optical glass

Image control	
Dynamic range	120 dB (HDR)
Exposure control	P-Iris / Auto-Iris
White balance	Auto, ATW, One push, Manual
Image settings	Sharpness, Brightness, Contrast, Color, EV
SNR	Better than 50dB
Noise reduction	2DNR, 3DNR, motion compensated noise reduction
Image rotation	90°, 180°, 270° rotation
Digital zoom	10x

Functions	
Text overlay	Date, time, date & time, 5x subtitle (16 characters each), text string (15 characters), image, image transparency
Analytics	Motion detection, tampering, audio detection
Event actions	Contact activation; edge recording; FTP upload; Notification (FTP, HTTP, e-mail)

Video	
Compression algorithm(s)	H.265, H.264, MJPEG
Number streams	4x, individually configurable H.265/H.264/MJPEG streams in resolution, framerate and bandwidth.
Supported resolutions	3840x2160, 3200x1800, 1920x1080, 1280x1024, 1280x720, 1024x768, 800x600, 720x480, 640x480, 352x240
Max frame rate H.265 + HDR	4K (3840x2160) @ 25 fps 4K (3840x2160) @ 20 fps + 720p (1280x720) @ 30fps 6M (3200x1800) @ 30 fps + 720p (1280x720) @ 30fps
Max frame rate H.264 + HDR	4K (3840x2160) @ 30 fps 4K (3840x2160) @ 20 fps + 720p (1280x720) @ 30fps 6M (3200x1800) @ 30 fps + 720p (1280x720) @ 30fps
Max frame rate MJPEG	1080p (1920x1080) @ 30 fps
Compression bit rate control	Low bit rate (LBR), constant bit rate (CBR), variable bit rate (VBR)
Output bit rate (per stream)	Up to 20480 kbit/s
Number of video output streams	Up to 20 (RTSP)
Total output data rate (max)	50000 kbit/s

Audio	
Two-way audio	Line in, Line out
Compression	G.711 (µ-law, a-law) / G.726 / AAC / PCM
Input level, Output level	Adjustable gain
Connector type	Female phone jacks, ø 3.5 mm on breakout cable

BL880v2M1IR

Technical specifications

Alarm inputs/output	
Input	2
Output	1
Connector type	Terminal block on breakout cable

Storage	
Storage options	Supports up to 128 GB capacity of SD/SDHC/SDXC memory (vFAT/EXT4)
Network storage	NAS

Network	
Interface(s)	10/100 Ethernet
Network protocols	IPv4/v6, TCP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SNMP, SMTP, DHCP, UPnP, PPPoE, IGMP, IEEE 802.1x, QoS
Connector type	RJ-45 on breakout cable

Management	
Supported browsers	Internet Explorer 9, 10 and 11 (limited support for Edge, Chrome, Firefox, Safari)
Security	HTTPS, IP Filter, IEEE 802.1x, digest authentication
Protocols	UPnP, SNMP, ONVIF Profiles S, G, and Q, Siqura API
Password levels	User and Administrator
User accounts	20

Powering	
Power consumption	Max. 13.68 W
Power	24 Vac / 12 Vdc / 802.3af PoE class 0
Connector type	3 Pin terminal block on breakout cable

Environmental	
Operating temperature	-55°C~55°C(-67°F~131°F)
Relative humidity	10% to 90%, no condensation

Mechanical	
Dimensions	Ø 92 x 216.6 mm
Weight	780 g
Color	RAL 9003 (Signal white)
Ingress protection	IP66
Impact rating	IK10

Ordering information	
BL880v2M1IR	4K Network bullet camera 4-8mm motorized H.265/H.264/MJPEG

Accessories

JB07/BL		Junction box for BL8xx
PM09B/BL		Pole mount junction box for BL8xx

S I Q U R A

PcGF7

4K Network bullet camera, 4-8mm motorized, H.265/H.264/MJPEG

D E S C R I P T I O N

k   PcGF7   x   Fd g WR y   zx   x   y   4 X   x   '   x
  x   Bb   x   ' ' z   z '   5X   zxy 4 x x '
y xz   3y   4 X 3   x   x ' x ' x   x z 3 x   ' x zx   x
x   x   '   x   zx   5O   '   ' y   f e m X g   h z   x z 3
   x x   x x ' x 5

F E A T U R E S

4K resolution, 8 MP @ 30 fps

4-8 mm motorized varifocal lens

Quad-stream H.265, H.264 and
MJPEG video

120 dB High Dynamic Range

Built-in IR illuminator

IP66 ingress protection

IK10 impact rating

24 Vac, 12 Vdc, PoE

ONVIF Profile S, G and Q

R   z

d   4   x   4 z ' z
k   zx   x   x   x' 4   x   zx xy   x   x   W5 DC3W5 DB x '
d agSV 5d   z   y   x   3 x   x 3x '   z '   zx y   z   '
         x   y   x ' z '   z   x   5k   Bb   F d
x x xy   x 9C6A7   n Ri /   WRi 3   0
      y   x' ' x   z   '   x 5

P   4 X   x
n   x   '   x z   B7   zx   x x   X   x   y   4 5k
                      z   x   x   '   z   '
  y   z   x '   '   z   yx x z '

f   x ' x '
d   x   x x xy   x   x   PcGF7   x '   x x
    5X   x ' x ' 3   zx   x   z   x   f e mx T g   h
           y   x x   3   V   zx   z '   x '   j   x
x ' md j z   x   y   5

X x   x z
k   PcGF7   x' x z '   x   z   z   5Q   x ' '   x ' Bb   x
      x   '   x   z x   x   '   WRi
    x   5Pxz 4   x ' W   4   z   x   x   z   x   4   y   '   z
          x   5X x' '   zx   x   '   AR   z   x '
  ' z   y   x   5

g   z   z   z
k   PcGF7 zx   y   ' y   89 m' z39B mxz3   g S5

Camera

Image sensor	1/1.8" CMOS
Effective pixels	3864(H) x 2180(V)
Minimum scene illumination	0.04 Lux color, 0.002 Lux B/W, f/1.6
	0 lux with IR
Shutter speed	1 to 1/10.000 sec
IR illumination	850 nm, up to 40 m
IR function	Auto, Night, Day, Light sensor, Light On, Light Off, Smart
Lens	Motorized varifocal
Focal length	4 to 8 mm, f/1.6
Horizontal field of view	113° (Wide) to 59° (Tele)
Lens material	High-grade optical glass

Image control

Dynamic range	120 dB (HDR)
Exposure control	P-Iris
White balance	Auto, ATW, One push, Manual
Image settings	Sharpness, Brightness, Contrast, Color, EV
SNR	Better than 54dBw
Noise reduction	2DNR, 3DNR, motion compensated noise reduction
Image rotation	90°, 180°, 270° rotation
Digital zoom	10x

Functions

Text overlay	Date, time, date & time, 5x subtitle (16 characters each),
	text string (15 characters), image, image transparency
Analytics	Motion detection, tampering, audio detection
Event actions	Contact activation; edge recording; FTP upload;
	Notification (FTP, HTTP, e-mail)

Video

Compression algorithm(s)	H.265, H.264, MJPEG		
Number streams	4x, individually configurable H.265/H.264/MJPEG streams in resolution, frame rate and bandwidth.		
Supported resolutions	3840x2160, 3200x1800, 1920x1080, 1280x1024, 1280x720, 1024x768,		
	800x600, 720x480, 640x480, 352x240		
Max streaming (H264/H265/MJPEG)			
60fps	1920x1080	1920x1080	352x240
30fps (HDR)	3840x2160	800x600	
30fps (HDR)	3200x1800	1920x1080	800x600
30fps (HDR)	1920x1080	1920x1080	1920x1080	1920x1080
Compression bit rate control	Constant bit rate (CBR), variable bit rate (VBR), Low bit rate (LBR)		
Max frame rate MJPEG	1080p (1920x1080) @ 30 fps		
Compression bit rate control	Low bit rate (LBR), constant bit rate (CBR), variable bit rate (VBR)		
Output bit rate (per stream)	Up to 10240 kbit/s		

Specs

Video

Number of clients	Up to 20 (RTSP)
Total output data rate (max)	50000 kbit/s

Audio

Two-way audio	Line in, Line out
Compression	G.711 (μ-law, a-law) / G.726 / AAC / LPCM
Input level, Output level	Adjustable gain
Connector type	Female phone jacks, 3.5 mm on breakout cable

Alarm inputs/output

Input	2
Output	1
Connector type	Terminal block on breakout cable

Storage

Storage options	Supports up to 128 GB capacity of SD/SDHC/SDXC memory (vFAT/EXT4)
Network storage	NAS

Network

Interface(s)	100/1000 Mb Ethernet
Network protocols	IPv4/v6, TCP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SNMP, SMTP, DHCP,
	UPnP, PPPoE, IGMP, IEEE 802.1x, QoS
Connector type	RJ-45 on breakout cable

Management

Supported browsers	Internet Explorer 9, 10 and 11
	(limited support for Edge, Chrome, Firefox, Safari)
Security	HTTPS, IP Filter, IEEE 802.1x, digest authentication
Protocols	UPnP, SNMP, ONVIF Profiles S, G, and Q, Siqura API
Password levels	User and Administrator
User accounts	20

Powering

Power consumption	Max. 13.68 W
Power	24 Vac / 12 Vdc / 802.3af PoE class 0
Connector type	1x 3 Pin terminal block on breakout cable

Environmental

Operating temperature	-55°C to 60°C (-67°F to 140°F)
Relative humidity	10% to 100%, with condensation

Mechanical

Dimensions	diameter 92 x 220 mm

Specs

Mechanical	
Weight	780 g
Color	RAL 9003 (Signal white)
Ingress protection	IP66
Impact rating	IK10

Ordering information	
BL980	4K Network bullet camera, 4-8mm motorized, H.265/H.264/MJPEG

Accessories	
JB07/BL	Junction box for BL8xx
PM09B/BL	Pole mount junction box for BL8xx

Cámaras de Domo Fijo

SIQURA

TR >99>T>5SX

Network fixed dome, 2.8 mm fixed lens, 2MP, H.265/H.264

DESCRIPTION

k   TR >99>T>5SX   x >5   x   Xg   ' '   zx   x   '   x   ' 5x   '
>6F   '   z   x   x   x '   x   x ' z x   x   6
k   zx   x x x   '   x   '   x x   z   x   '   z
                6X   '   z '   '   x   x   x '
      x   z   6

FEATURES

Compact Full-HD fixed dome camera

Ultra low-light CMOS sensor

2MP @ 25/30 fps (1920x1080)

2.8 mm fixed lens

120 dB WDR

Built-in IR illuminator (30 m)

Multi-codec multi-stream: H.265, H.264, MJPEG

Intelligent VCA

IP67 and IK10

ONVIF Profile S and G

R   z

d 5 z ' .   5   x
k   zx   x zx   ' x   x   W6>DC4W6>DB   d agSV 6d   z   y x
              4 x   x 4x '   z '   zx y z   '   x   '
x ' z '   z x   6

W   S z   z m'   Q '   0WSmQ1
W6>DC   WSmQ   x '   z   x ' x ' 4   zz   W6>DB6X z   x
W6>DC   xy '   y   z   x   x   x   '   x   4
  y x x   ' '   x   x   x   y x 6k   x   y x ' ' x '
  z '   xz 6

f   x ' x '
k   TR >99>T>5SXzx   x   y   x '   x '   x x
j   x   g   x   X   xz 0 gX   f e mXT6k   ' '   zx   x   '
f e mXT g   j x ' g   V 6

m'   x x   z
k   zx   x   x   x   '   x x   x
    x '   z   x   x   x 6k   zx   x   x   x   4y   x   x x
x ' xz '   z   6

X x   x z
k   TR >99>T>5SX   x   x X   y   5 X   x   A9   4PcQ x ' AR
  ' z   x   x   x '   x   6

S x   x x
k   z   xz '   zx   x zx y   ' x   x   6X   '   x y   x 5
   zxy   x   x x   x 6

Camera

Image sensor	1/2.8" Ultra-low light CMOS
Lens	Fixed 2.8 mm, F/1.6
Field of view	108
Min. illumination	Color: 0.005 lux, B/W: 0.001 lux, 0 lux with IR (F/1.2)
Day/Night	IR-cut filter with auto switch
Built-in IR illuminator	Working distance up to 30 m
	Wavelength 850 nm
WDR	120 dB
Shutter speed	1/3 s to 1/100,000 s
Slow shutter	Supported

Video

Video compression	H.265 MP, H.264 MP/HP, MJPEG
Video Output	512 Kbps 24 Mbps
Region of interest	1 region per stream
Max resolution	1x 1920x1080 at 30 fps
	(640x360@30 for MJPEG)
Frame rate	25/30 fps
Number of simultaneous streams	3
- Main stream	1920x1280@25/30fps; 1280x960@25/30fps; 1280x720@25/30fps
- Sub stream	640x480@25/30 fps; 640x360@25/30fps; 352x288@25fps or 352x240@30fps
- Third Stream*	1920x1280@25/30fps;1280x720@25/30fps; 640X360@25/30; 352x288@25fps
	or 352x240@30fps
Image enhancement	3D DNR, Back Light Compensation
Image setting	Rotate mode**, saturation, brightness, contrast, sharpness
Day/Night switch	Auto/Scheduled
Privacy mask	Yes
Video output	Not supported
Note*	Enabling the Third-Stream, disables the face detection.
Note**	The combination WDR and rotation limits the frame rate to 20 fps

Network

Protocols	TCP/IP, UDP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE,
	NTP, UPnP, SNMP, IGMP, 802.1x, QoS, IPv4/v6, Bonjour, ONVIF, PSIA, CGI
Security	3-level user authentication, 802.1x, Watermark, IP address filtering
API	ONVIF (Profile S, Profile G), Siqura Programming Interface
Communication interface	1x 10/100 Base T/TX (RJ-45)

Analytics

Behavior analytics	Line crossing detection, intrusion detection, unattended baggage detection,
	object removal detection
Face detection	supported
Alarm trigger	Motion detection, Tampering alarm, Network disconnect, IP address conflict,

Specs

Analytics

	illegal login, disk full, disk error

Storage

Networked storage	NAS (NFS, SMB/CIFS), ANR
On-board storage	Built-in micro SD/SDHC/SDXC slot, up to 128 GB

Powering

Power supply	12 Vdc 25% (Barrel connector), PoE (802.3af class3)
Power consumption	5 W for 12 Vdc; 6.5 W for PoE

Environmental

Ingress protection level	IP67
Impact protection	IK10
Operating temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Relative humidity	+5% to 100%

Housing

Material	Die cast aluminum
Dimensions	diameter111 x 82.4 mm (diameter 4.4"x 3.2")
Weight	500 g (1.1 lbs)
Color	RAL 9003 (signal white)

Ordering information

FD2002F2-EI	Network fixed dome, 2.8 mm fixed lens, 2MP, H.265/H.264

DIMENSIONS (IN MM)

ns

Ø111(4.4")

82.4(3.2")

Ø79.1(3.1")

Ø100.4(4")
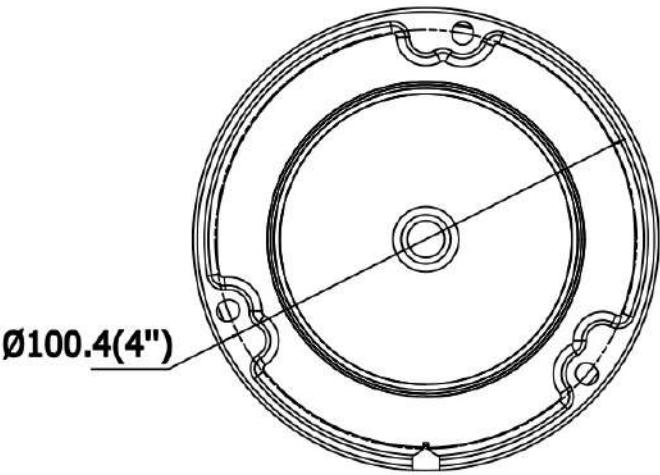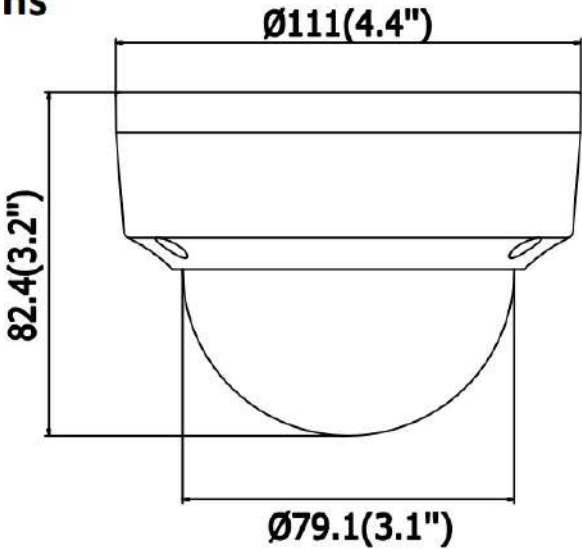
TR >99>d <5SX

Fixed dome, 2.8-12 mm motorized lens, 2MP, H.265/H.264

DESCRIPTION

k   TR >99>d <5SX   x >5   x   Xg   ' '   zx   x   '   z x   x

x   x   6O   '   x   >6F   <>   ' x   z   x   x

   x '   x   x ' z x   x   6k   zx   x x x   '   x

            '   x x   z   x   '   z   6X   '

   z '   '   x   x   x '   x   z   6

FEATURES

1/2.8 ultra-low light CMOS imager
2MP @ 25/30 fps (1920x1080)
Motorized zoom (2.8 - 12 mm)
120 dB WDR
Built-in IR illuminator (30 m)
Intelligent VCA
Multi-codec multi-stream: H.265, H.264, MJPEG
IP67, IK10
ONVIF Profile S and G

Camera

Image sensor	1/2.8" Ultra-low light CMOS
Lens	Motorized 2.8 to 12 mm, F/1.4
Focus	Autofocus
Field of view	105° to 35° horizontal, 56° to 20° vertical
Minimum illumination	0.0068 lux color; 0.0013 lux (b/w); 0 lux with IR (F/1.4)
Day/Night	IR-cut filter with auto switch
IR distance	Up to 30 m
IR illuminator wavelength	850 nm
Wide dynamic range (WDR)	120 dB
Shutter speed	1/3 s to 1/100,000 s
Slow shutter	Supported

Video

Video compression	H.265 MP, H.264 MP/HP, MJPEG
Video Output	512 Kbps 24 Mbps
Region of interest	1 region per stream
Max. resolution	1920x1080 at 30 fps
	(640x360 for MJPEG)
Frame rate	25/30 fps
Number of simultaneous streams	3
- Main stream	1920x1280@25/30fps; 1280x960@25/30fps; 1280x720@25/30fps
- Sub stream	640x360@25/30fps; 352x288@25fps or 352x240@30fps
- Third Stream*	1920x1280@25/30fps;1280x720@25/30fps; 640X360@25/30; 352x288@25fps
	or 352x240@30fps
Image enhancement	3D DNR
Image setting	Rotate mode**, saturation, brightness, contrast, sharpness
Day/Night switch	Auto/Scheduled/Triggered by Alarm In
Privacy mask	Yes
Video output	1 Vp-p; 2-pin to BNC patch cable (For test/installation only)
Note*	Enabling the Third-Stream, disables the face detection.
Note**	The combination WDR and rotation limits the frame rate to 20 fps

Network

Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE,
	NTP, UPnP, SNMP, IGMP, 802.1x, QoS, IPv4/v6, Bonjour, ONVIF, PSIA, CGI
Security	3-level user authentication, 802.1x, Watermark, IP address filtering
API	ONVIF (Profile S, Profile G), PSIA, Siqura Programming Interface
Communication interface	1x 10/100 Base T/TX (RJ-45)

Audio

Audio	1x 3.5 mm Audio in (Mic in/Line in) ; 1x 3.5 mm Audio out interface
Compression	G.711, G.726, MP2L2
Enhancement	Environmental noise cancellation

Specs

Audio	

Analytics	
Behavior analytics	Line crossing detection, intrusion detection, unattended baggage detection, object removal detection
Face detection	supported

Alarm I/O	
Alarm trigger	Motion detection, Tampering alarm, Network disconnect, IP address conflict, illegal login, disk full, disk error, Alarm I/O
Alarm in	1x input
Alarm out	1x output (up to 24 Vdc 1 A or 110 Vac 500 mA)

Storage	
Networked storage	NAS (NFS, SMB/CIFS), ANR
On-board storage	Built-in micro SD/SDHC/SDXC slot, up to 128 GB

Powering	
Power supply	12 Vdc 25% (terminal block), PoE (802.3at)
Power consumption	1.2 A max, Max. 14.5W

Environmental	
Ingress protection level	IP67
Impact protection	IK10
Operating temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Relative humidity	+5% to 100%

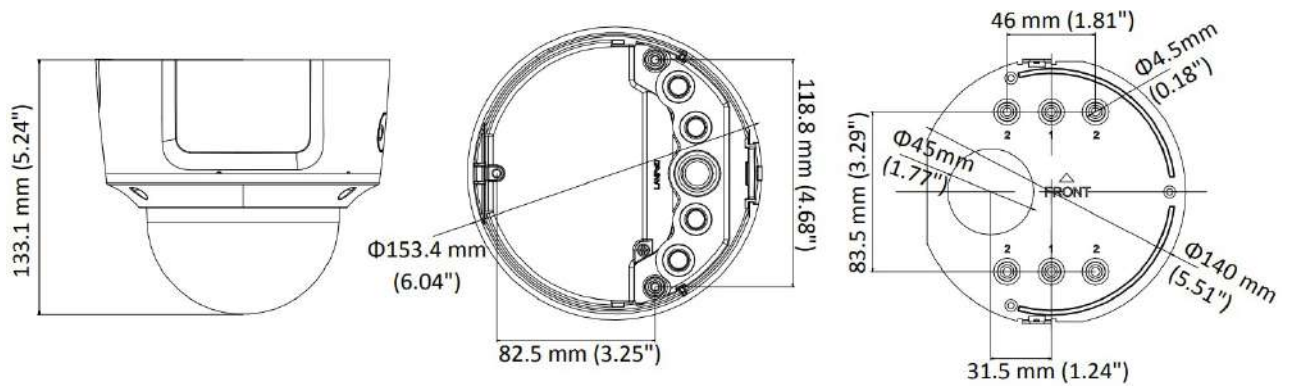| Housing	
Material	Die cast aluminium
Dimensions	diameter 153.4 x 133.1 mm (6.04" 5.24")
Weight	1287 g (2.84 lbs)
Color	RAL 9003 (signal white)

Ordering information	
FD2002M1-EI	Fixed dome, 2.8-12 mm motorized lens, 2MP, H.265/H.264

Siqura Accessories	
PM10	Pole mount for BL/FD2000 series cameras
WM20	Corner mount for BL/FD2000 series cameras
WM21	Wall mount for FD2002/2005
CM21	Ceiling pendant mount for FD2002/2005

DIMENSIONS (IN MM)

RELATED

Siqura CM21
Ceiling pendant mount for FD200xM1

Siqura CM22
In-ceiling mount for FD200xM1

Siqura PM10
Pole mount for BL/FD200xM1 series cameras

Siqura WM20
Corner mount for BL/FD200xM1 series cameras

Siqura WM21
Wall mount for FD200xM1

TR >99Cd <5SX

Fixed dome, 2.8-12 mm motorized lens, 5MP, H.265/H.264

DESCRIPTION

k   TR >99Cd <5SX   x C5   x   Xg   ' '   zx   x   '   ' x '   x

x   x   6O   ' x   >6F   <>   ' x   z   x   x

x '   x   x ' z x   x   6k   zx   x x x   '   x

'   x x   z   x   '   z   6X   '

z '   '   x   x   x '   x   z   6

FEATURES

1/2.9" ultra-low light CMOS imager

5MP @ 20fps (2944 x 1656)

Motorized zoom (2.8 - 12 mm)

120 dB WDR

Built-in IR illuminator (30 m)

Intelligent VCA

Multi-codec H.265, H.264, MJPEG

IP67, IK10

ONVIF Profile S and G

R z

d 5 z ' . 5 x
k zx x zx ' x x W6>DC4W6>DB d agSV 6d z y x
4 x x 4x ' z ' zx y z ' x '
x ' z ' z x 6

W S z z m' Q ' 0WSmQ1
W6>DC WSmQ x ' z x ' x ' 4 zz W6>DB6X z x
W6>DC xy ' y z x x x ' x 4
y x x ' ' x x x y x 6k x yx ' ' x '
z ' xz 6

f e mXT
d x x x xy x x TR >99Cd <5SX x ' x x
6X x ' x ' 4 TR >99Cd <5SX z x f e mXT0g j
8 g V 16

m' x x z
k zx x x x mQO x x ' z
x x x 6k zx x x'' x x y x x x x ' xz ' z 6

X x x z
k TR >99Cd < x x x z x x 4 z x x X4
PcQ x ' AR ' z 6

S x x x
k TR >99Cd <5SX ' x y 5 z y x x x x x '
' ' x x z y 6

Camera

Image sensor	1/2.9" Ultra-low light CMOS
Lens	Motorized 2.8 to 12 mm, F/1.4
Focus	Autofocus
Field of view	88 to 27 horizontal, 48° to 16° vertical
Minimum illumination	Color: 0.014 lux, B/W: 0.0028 lux, 0 lux with IR (F/1.4)
Day/Night	IR-cut filter with auto switch
IR distance	Up to 30 m
IR illuminator wavelength	850 nm
Wide dynamic range (WDR)	120 dB
Shutter speed	1/3 s to 1/100,000 s
Slow shutter	Supported

Video

Video compression	H.265 MP, H.264 MP/HP, MJPEG
Video Output	512 Kbps 24 Mbps
Region of interest	1 region per stream
Max. resolution	2944 x 1656 at 20 fps; 2560 x 1440 at 30 fps
	(640x360 for MJPEG)
Frame rate	25/30 fps
Number of simultaneous streams	3
- Main stream	:2944x1656@20fps; 2560x1440@25/30; 1920x1080@25/30fps; 1280x720@25/30fps
- Sub stream	640x360@25/30fps; 352x288@25fps or 352x240@30fps
- Third Stream*	1280x720@25/30fps; 640X360@25/30; 352x288@25fps or 352x240@30fps
Image enhancement	3D DNR
Image setting	Rotate mode**, saturation, brightness, contrast, sharpness
Note*	By enabling the Third-Stream, face detection is not supported
Note**	The combination WDR and rotation = on limits the frame rate to 20 fps
Day/Night switch	Auto/Scheduled/Triggered by Alarm In
Privacy mask	Yes
Video output	1 Vp-p; 2-pin to BNC patch cable (For test/installation only)

Network

Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE,
	NTP, UPnP, SNMP, IGMP, 802.1x, QoS, IPv4/v6, Bonjour, ONVIF, PSIA, CGI
Security	3-level user authentication, 802.1x, Watermark, IP address filtering
API	ONVIF (Profile S, Profile G), PSIA, Siqura Programming Interface
Communication interface	1x 10/100 Base T/TX (RJ-45)

Audio

Audio	1x 3.5 mm Audio in (Mic in/Line in) ; 1x 3.5 mm Audio out interface
Compression	G.711, G.726, MP2L2
Enhancement	Environmental noise cancellation

Analytics

Specs

Analytics	
Behavior analytics	Line crossing detection, intrusion detection, unattended baggage detection, object removal detection
Face detection	supported

Alarm I/O	
Alarm trigger	Motion detection, Tampering alarm, Network disconnect, IP address conflict, illegal login, disk full, disk error, Alarm I/O
Alarm in	1x input
Alarm out	1x output (up to 24 Vdc 1 A or 110 Vac 500 mA)

Storage	
Networked storage	NAS (NFS, SMB/CIFS), ANR
On-board storage	Built-in micro SD/SDHC/SDXC slot, up to 128 GB

Powering	
Power supply	12 Vdc 25% (terminal block), PoE (802.3at)
Power consumption	1.2 A max, Max. 14.5W

Environmental	
Ingress protection level	IP67
Impact protection	IK10
Operating temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Relative humidity	+5% to 100%

Housing	
Material	Die cast aluminium
Dimensions	diameter 153.4 x 133.1 mm (6.04" 5.24")
Weight	1287 g (2.84 lbs)
Color	RAL 9003 (signal white)

Ordering information	
FD2002M1-EI	Fixed dome, 2.8-12 mm motorized lens, 2MP, H.265/H.264

Siqura Accessories	
PM10	Pole mount for BL/FD2000 series cameras
WM20	Corner mount for BL/FD2000 series cameras
WM21	Wall mount for FD2002/2005
CM21	Ceiling pendant mount for FD2002/2005

DIMENSIONS (IN MM)

RELATED

Siqura CM21
Ceiling pendant mount for FD200xM1

Siqura CM22
In-ceiling mount for FD200xM1

Siqura PM10
Pole mount for BL/FD200xM1 series cameras

Siqura WM20
Corner mount for BL/FD200xM1 series cameras

Siqura WM21
Wall mount for FD200xM1

TR F>9m>d <Ẍ

4MP IP Fixed Dome Camera with IR

DESCRIPTION

k TR F>9 >d <Ẍ   x Bd g WR y   zx   x   XgDDx ' Xb<9 x '   x '
y 5 Ẍ   x   6k zx x x   x' 5 x zx xy   x
  x   W6>DB8W6>DB   W6>DB8d agSV 6d   z y x   x '
 x   x zx y z   '   x '   x '   z '
 z x   6B d   x x xy x <C   4x   5WR <9F9   x x A9
zx y z y '   x j oVO   x x A9   6Sxz   z '   5 x
 x z   y x   zx y   x   x   y 6 J y 8L
k TR F>9 >d <Ẍ   '   5   x z n R i   x >   z x
  z x   '   zx   y ' x   x '
 x x 6

FEATURES

1/3" Progressive scan CMOS imager
3.0 - 9.0 mm Motorised varifocal lens
4MP @ 15 fps frame rate
Quad-stream H.264 and MJPEG video
120 dB WDR
Day/Night with IR-cut filter
Built-in IR illuminator up to 40 m
IP66 Ingress protection rating
IK10
24 Vac / 24 Vdc / 12 Vdc / 802.3af PoE
ONVIF Profile S, G, Q conformant

Camera

Image sensor	1/3 Progressive scan CMOS
Effective pixels	2688(H) x 1520(V)
Minimum scene illumination	0.1 lux colour, 0.01 lux (b/w), 0 lux with IR
Shutter speed	1 - 1/10000 s
Lens	3.0 to 9.0 mm, F1.7
Lens type	DC Auto iris, motorised zoom, push-to-focus
Horizontal field of view	109° (W) - 33° (T)

Functions

Privacy masks	5
Text and picture overlay	Date, time, date & time, 3x subtitle (16 characters each),
	text string (25 characters), image, image transparency
Video motion detection	On / off / by schedule
Video motion detection alarm	Alarm output, record video clip, send alarm message, upload image
Network failure detection	On / off / by schedule
Network failure detection alarm	Alarm output, record video clip, send alarm message
Tamper detection	On / off / by schedule
Tamper detection alarm	Alarm output, record video clip, send alarm message, upload image
Periodical event	On/Off
Periodical event action	Upload image
Recording	On / off / by schedule
Recording destination	SD card/ Network share

Image control

Wide dynamic range	
- gamma WDR	On/Off
- dual shutter WDR	On/Off (>120 dB)
Exposure	Auto (P-iris priority, iris size, max gain and min shutter speed configurable) / Manual
White balance	Auto, ATW, Manual, One push
Contrast	Manual
Brightness	Manual
Saturation	Manual
Hue	Manual
Sharpness	Manual
Day/Night function	Auto / night / day / light sensor / LED on / LED off
	Configurable day/night threshold levels/ IR light compensation
Noise reduction	Off, 3DNR (low, medium, high), 2DNR (On/Off), ColorNR (low, medium, high)
Backlight compensation	On/Off
Digital zoom	Up to 10x
Image rotation	Normal / Flip / Mirror / 90° (clockwise, counterclockwise) and 180° Rotate

Video

Compression algorithm(s)	H.264 (baseline / main / high profile); MJPEG

Specs

Video

Video	
Number of compression instances	Quad stream. Any combination of H.264 streams with possibly one MJPEG stream.
Output streams	Any output stream can be freely configured to one of the resolution/frame rate formats.
Supported resolutions	2688x1512 (4MP); 2560x1440; 2304x1296 (3MP); 1920x1080 (1080p); 1280x1024;
	1280x720 (720p); 1024x768; 800x600; 720x576 (D1); 640x480; 352x288 (CIF)
Compression capabilities	(indication, other combinations possible)

Resolution format	format 1	format 2	format 3	format 4
H.264 in 15 fps	2688x1512	1280x720	---	---
H.264 @ 50/60fps	2304x1296	800x600	---	---
	1920x1080	1280x1024	352x288	---
	1920x1080	1280x720	720x576	352x288
H.264 @ 25/30fps	1280x720	640x480	352x288	---
H.264 @ 25/30fps WDR 2	1920x1080	720x576 (15fps)	352x288 (15fps)	---

MJPEG	One of the above resolution formats in each instance can be MJPEG instead of
	H.264 if the resolution is lower than or equal to 1920x1080
Compression bit rate control	Constant bit rate (CBR), Variable bit rate (VBR), Low bit rate (LBR)
Output bit rate (per H.264 stream)	Up to 20480 kbit/s
Total H.264 output	26624 kbit/s
Number of video output streams	Up to 20 (RTSP)
Total output data rate (max)	50000 kbit/s
Video frame rate	1 to 60 fps / 1 to 50 fps
Analogue video output	PAL/NTSC
Connector type	BNC (1.0 Vpp in 75)

Audio

Audio	
Two-way stereo	audio Microphone in / line in / line out
Compression	G.711 (μ-law, a-law) / G.726 / AAC / PCM
Bit rate	G.711: 64 Kbps G.726: 16 Kbps, 24 Kbps, 32 Kbps, 40 Kbps AAC: 128 Kbps
	PCM: 128 Kbps, 256 Kbps, 384 Kbps, 768 Kbps
Sample rate	G.711: 8 KHz / G.726: 8 KHz / AAC: 48 KHz / PCM: 8, 16, 24, 48 KHz
Input level, Output level	Adjustable gain
Connector type	Multifunction terminal block (Audio In L, Audio In R, GND, Audio Out L, Audio Out R)

Alarm inputs/output

Alarm inputs/output	
Input	1x 0 - 5 V, 10 k pull-up
Output	1x Photo relay output 300 Vdc/ac
Operational modes	Normally open; normally closed
Connector type	Multifunction terminal block (Alarm In+, Alarm In-, Alarm Out+, Alarm Out-)

Storage

Storage	
Storage options	Micro SDXC card, 64 GB

Network

Network	
Interface(s)	10/100 Ethernet

Specs

Network

Network protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, IGMP, PNAC (IEEE 802.1x), QoS
Connector type	RJ-45

Management

Supported browsers	Internet Explorer (6.0+), Chrome, Firefox, Safari
Security	HTTPS, IP Filter, PNAC (IEEE 802.1x)
Protocols	UPnP, SNMP, ONVIF Profile S
Password levels	User and Administrator
User accounts	20

Powering

Power consumption	
- System	Max. 3.7 W
- IR LED	Max. 4 W
- Heater	Max. 4 W (cold start: 8.5 W)
- Motorised lens	Max. 0.55 W
Power	24 Vac / 24 Vdc / 12 Vdc / 802.3af PoE
Connector type	2-pin terminal block

Environmental

Start-up temperature	-55 C (-67 F)
Operating temperature	-50 C to +50 C (-58 F to +122F)
Relative humidity	10% to 90%, no condensation

Mechanical

Dimensions (camera body)	diameter 133.8 x 117.4 mm (diameter 5.2 x 4.6 in)
Weight	0.76 kg (1.68 lbs)
Colour	RAL 9003 (Signal white)
Built-in IR illuminator	
- Working distance	Up to 40 m
- Wavelength	850 nm
- Number of LEDs	6
Ingress protection	IP66 Impact rating Ik10

Ordering information

FD820v2M1IR	Network Outdoor fixed dome, 3-9mm motorized zoom, 4MP, H.264/MJPEG, IR
TA01/FD	Tube adapter/pendant mount for FD8xx
WM01A	Wall mount bracket CM02 Ceiling Mount, Straight Tube, 50cm
WM19FD/FD	Wall mount for FD8xx
DC21C-R	Dome cover, rain wash, for FD8xx
CM13/FD	Flush mount kit for FD8xx

Accessoires

Specs

Accessoires	
TA01/FD	Tube adapter/pendant mount for FD8xx
WM01A	Wall Mount Bracket
CM02	Ceiling Mount, Straight Tube, 50cm
WM19/FD	Wall Mount for FD8xx
DC21C-R	Rain-Wash-Vandal Resistant Clear Dome Cover
CM13/FD	Flush-Mount Adapter

FD820V2M1IR DIMENSION IN MM
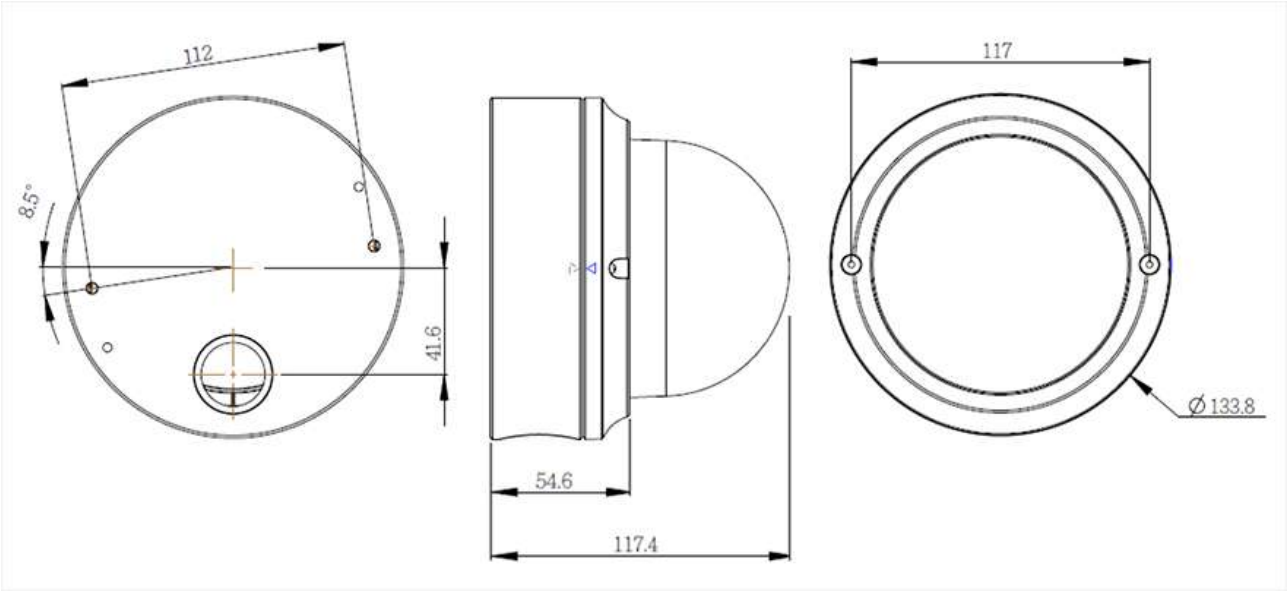
TR G>9

3MP fixed dome, 3-9 mm motorized, H.265/H.264/MJPEG, SFP

DESCRIPTION

k   TR G>9   x A d g WR   ' '   z x   x   y   5 X   x   '
z   x   x   '   x   z   '   6n   X g D D z   z   4 X b < 9   x ' x
      x   x '   '   4   x x   x   x '   x   4 x '
x'   6

FEATURES

1/2.8 Progressive scan CMOS imager

3.0 to 9.0 mm motorized varifocal lens

3MP @ 30 fps HDR

100Mb SFP slot

H.265/H.264/MJPEG video compression

120 dB WDR (HDR)

Built-in IR illuminator (effective distance: 40 m)

Day/Night with IR-cut filter

IP66, IK10 vandal proof

ONVIF Profile S, G and Q

R   z

k   TRG>9   x Ad g   ' '   Xg5zx   x   y   5 X   x   x ' x   y   j Tg
   xz 6

m   x   j Tg z   z
R   <99d y j Tg   zx   x zx y z   z '   '   z   y   QOkC
S   z x 6T   xz   j   x zx   '   x z
   z   j Tg   '   6

d   5   x   '
k   zx   x x   zx xy   x   x   B '   x   W6>DC4W6>DB x '
d agSV 6d   z   y x   z ' 4   x ' x   x   zx y z   '
   x   '   x ' z '   z x   6Sxz   z '   5 x
   x z   y x   zx y   x   x   y 6

f   x ' x '
d   x   x x xy   x   x   TRG>9   x '   x x
   6X   x ' x ' 4   zx   x z   x   f e mXg   j 4
g   V x ' g   h   z zx   6

X x   x z
k   TRG>9   '   x   x z ' x 8   z   x   z   xy   ' 4
     5   x   6Pxz   z   x   x z   x   y   '   z
   x   6k   TR   '   '   ' '   x z x   6j   x   n R i
     x   x   x   x 6k   z ' 4 ' x   n R i   W R i 4   z   x
'   zx   y ' x   x '   x x   z   ' x 6
k   x   x y   '   y   x   6X x ' '   4
TRG>9   x ' z   x   0W cQ1 x ' y xz 5   z   x   0P cQ16

g   xz   x
n   xz   x   x   zx z   z   x   xz 6

Camera

Image sensor	1/3 Progressive scan CMOS
Effective pixels	2065x1553, 3Mp
Minimum scene illumination	0.04 lux color, 0.002 lux (b/w)
Shutter speed	1 - 1/10,000 s
Lens	3.0 to 9.0 mm, F1.7
Lens type	Auto P-iris, motorized zoom
Horizontal field of view	110° (wide) to 38°(tele)
Focus	Push-to-focus

Functions

Privacy masks	8 colors, 5 masks
Text and picture overlay	Date, time, date & time, subtitle, image
Video motion detection	On / off / by schedule
Video motion detection alarm	Alarm output, record video clip, send alarm message, upload image
Network failure detection	On / off / by schedule
Network failure detection alarm	Alarm output, record video clip, send alarm message, upload image
Tamper detection	On / off / by schedule
Tamper detection alarm	Alarm output, record video clip, send alarm message, upload image

Image control

Wide dynamic range	
- gamma WDR	80 dB
- dual shutter WDR (HDR)	120 dB (default on limits frame rate to 30 fps)
Exposure	Auto, Manual
White balance	Auto, ATW, Manual, One push
Image settings	Contrast, Brightness, Saturation, Hue, Sharpness
Day/Night function	Auto, night,day
	Configurable day/night threshold levels, IR light compensation
Noise reduction	3DNR, 2DNR, Color
	Low, medium, high (w/ Motion Compensation)
Backlight compensation	On/Off
Digital zoom	10 x
Image rotation	0°, 90, 180, 270 rotation

Video

Compression algorithm(s)	H.265, H.264 (main / high profile); MJPEG			
Number of compression instances	Any combination of H.265 or H.264 streams with possibly one MJPEG stream.			
Supported resolutions	22065x1553 (3MP); 1080p30,1280x1024; 720p60; 1024x768; 800x600;			
	720x567(D1); 640x480 (VGA); 352x288 (CIF)			
Max streaming (H264/H265/MJPEG) 60fps	1080 x 720	640x408		
30fps	2065x1553	800x600	352x240	
30fps	1920x1080	1920x1080	800x600	352x240
30fps	1920x1080	1280x720	1280x720	1024x768

Specs

Video	
Compression bit rate control	Constant bit rate (CBR), variable bit rate (VBR),
	Low bit rate (LBR)
Number of video output streams	Up to 20 (RTSP)
Total output data rate (max)	60 Mb/s
Video frame rate	1 to 60 fps / 1 to 50 fps
Analog video output	PAL/NTSC
- Connector type	BNC (1.0 Vpp in 75)

Audio	
Two-way audio	Line in / line out
Compression	G.711 (µ-law, a-law) / G.726 / AAC / PCM
Connector type	Female phone jack, 3.5 mm (2x)

Data	
Serial port	RS-485, 2-wire
Protocols	Pelco D, Pelco P
Connector type	Terminal block

Alarm inputs/output	
Input	2x 0 - 5 V, 10 k pull-up
Output	1x Photo relay output 300 Vdc/ac
Operational modes	Normally open; normally closed
Connector type	Terminal block

Storage	
Storage options	Micro SD/SDHC/SDXC card (128 GB max); NAS

Network	
Interface(s)	100 Mb Ethernet SFP
Network protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE,
	IGMP, IEEE 802.1x, QoS
Connector type	SFP slot

Management	
Supported browsers	Internet Explorer 10+ (Chrome, Firefox, Edge: no OCX support)
Security	HTTPS, IP Filter, IEEE 802.1x
Protocols	UPnP, SNMP, ONVIF Profile S, G and Q
Password levels	User and Administrator
User accounts	20

Powering	
Power	24 Vac / 12 Vdc
Power consumption	< 13.6 W

Specs

Powering	
Connector type	2 pin terminal block

Environmental	
Operating temperature	-55 C to +55 C (-67 F to +131F)
Relative humidity	10% to 90%, no condensation

Mechanical	
Dimensions (camera body)	diameter 150.5 x 125,5 mm (diameter 5.9 x 4.9 in)
Weight	0.82 kg (1.81 lbs)
Color	RAL 9003 (Signal white)
Built-in IR illuminator	
- Working distance	Up to 40 m
- Wavelength	850 nm
- Number of LEDs	8
Ingress protection	IP66
Impact rating	IK10

Ordering information	
FD920	Fixed dome, 3MP, 3-9mm motorized, H.265/H.264, SFP, IR, IK10

Accessories	
ECOplug	Ethernet over Coax SFP Module
XSNet SFP series	Small Form-Factor Pluggables
WM02/FD-SFP	Tube adapter/pendant mount for FD-SFP
WM01A	Wall mount bracket
CM01	Ceiling Mount, Straight Tube, 25cm
CM02	Ceiling Mount, Straight Tube, 50cm

DIMENSIONS IN MM
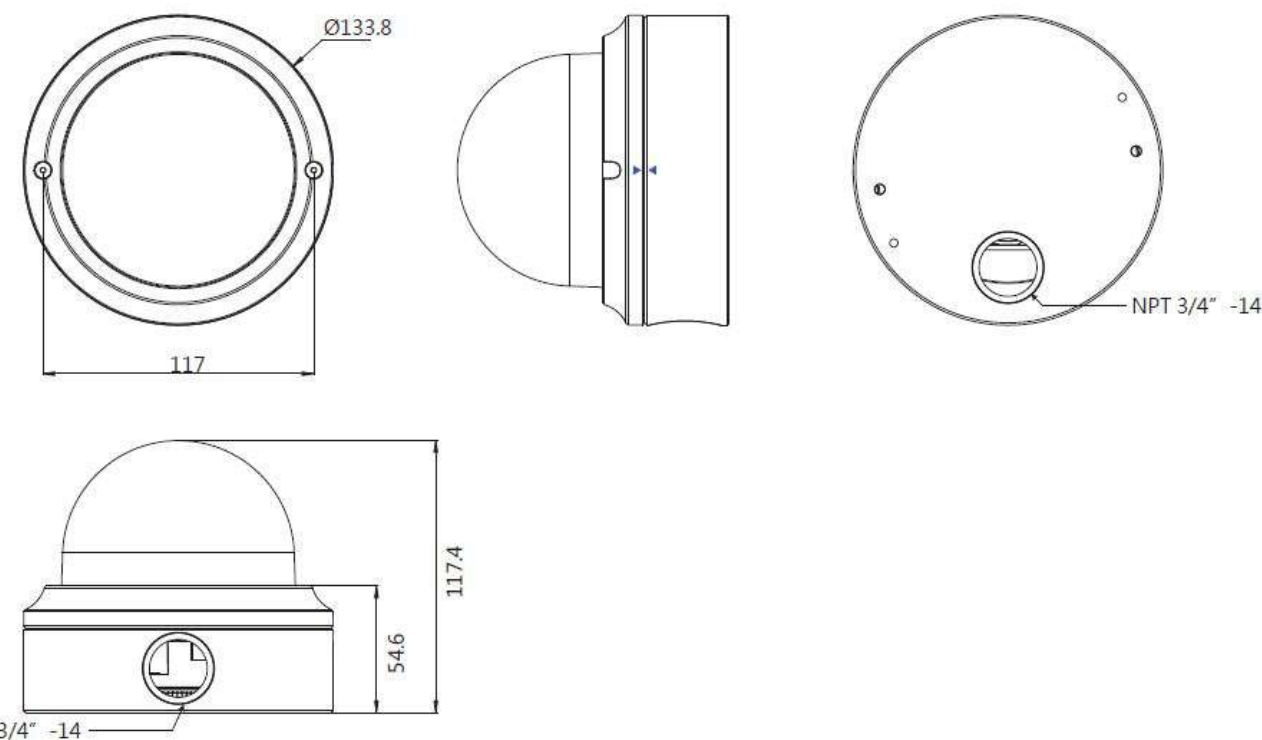
Mounting pattern in mm
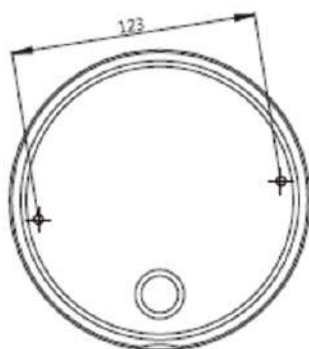
123

R E L A T E D

Siqura SFP Module
SFP modules for Ethernet over fiber

Siqura ECO-plug
Ethernet over Coax 100Mb SFP Module

Cámaras de 360°

SIQURA

FD360IR-E

High-definition 6 MP outdoor fisheye camera with D/N and IR

- ✓ 1/1.8" Progressive CMOS
- ✓ 6MP @ 30 fps
- ✓ Quad-stream H.264 and MJPEG video
- ✓ Day/Night with IR-cut filter
- ✓ Built-in IR illuminator (effective distance: 5 m)
- ✓ 24 Vdc, 12 Vdc, PoE (802.3af)
- ✓ ONVIF Profile S conformant

Description
The FD360IR-E is an 6MP HD fish-eye camera with built-in IR illumination providing clear images under any lighting condition. With its cable-managed bracket, IP66 construction, IK10 vandal resistant housing and fixed lens, installation is fast and easy, and remote adjustment is simple.

Multistream high definition
The camera has quad-stream capability for simultaneous streaming of H.264/H.264 or H.264/MJPEG. Multiple combinations of resolution and frame rate can be configured to satisfy different live viewing and recording scenarios. 6 Mpixel resolution is available at 30 fps, a full-HD 1080p stream at 60 fps can be combined with a HD stream at 60 fps. Each selected resolution-frame rate combination can be freely set to a stream number.

Open standards
Multiple options are available to easily integrate the FD360IR-E to a video management system. In support of open standards, the camera is compliant with the ONVIF Profile S specification.

Image enhancement
The FD360IR-E provides automatic day/night functionality with configurable thresholds and build-in IR illuminator, for use in low-light situations. Backlight compensation enhances image visibility in difficult lighting situations. The FD360IR-E provides two modes for wide dynamic range. The first mode uses different gain ratios for different illumined areas to bring details in the darker areas of an image without saturation in the brighter parts. The second mode uses a 2 shutter mechanism which applies two different exposure settings to capture both darker and lighter areas with excellent details. The resulting image is the optimal aggregation of both exposures. The available image enhancement methods ensure quality pictures at all times.

Power source choices
The FD360IR-E can be powered by 12 Vdc, 24 Vdc, or over the network with 802.3af-compliant PoE sources.

Privacy masks
Privacy masks cover sections of the image. This feature is often requested for such situations as city centre surveillance and point of sale keypads.

SIQURA

FD360IR-E

Technical specifications

Camera	
Image sensor	1/1.8" Progressive CMOS 6 MP
Effective pixels	3072(H) x 2048(V)
Minimum scene illumination	0. 04 Lux @ F2.0 colour, 0.002 lux @ F2.0 (b/w), 0 lux with IR
Shutter speed	1 ~ 1/10.000 sec
Lens	1.55 mm, F2.0
Lens type	Fixed Iris
Horizontal field of view	185°

Functions	
Privacy masks	5
Text and picture overlay	Date, time, date & time, text string (40 characters), subtitles (3 boxes, 40 characters each)
Video motion detection	On, Off, By schedule
Video motion detection alarm	Alarm output, record video clip, send alarm message, upload image
Network failure detection	On, Off, By schedule
Network failure detection alarm	Alarm output, record video clip, send alarm message
Tamper detection	On, Off, By schedule
Tamper detection alarm	Alarm output, record video clip, send alarm message, upload image
Time laps	On/Off
Time laps action	Upload image
Recording	On, Off, By schedule
Recording destination	SD card/ Network share

Image control	
Wide dynamic range	Off, low, mid, high
Exposure	Auto, Manual
White balance	Auto, ATW, Manual, One push
Contrast	Manual
Brightness	Manual
Saturation	Manual
Hue	Manual
Sharpness	Manual
Day/Night function	Auto, Night, Day, Light sensor, IR light compensation, Configurable day/ night threshold levels, Smart
Noise reduction	Off, 3DNR (low, medium, high), 2DNR (On/Off), ColorNR (low, medium, high)
Backlight compensation	On/Off
Image rotation	Normal, Flip, Mirror, 180° Rotate, 90° clockwise, 90° counterclockwise

FD360IR-E

Technical specifications

Video	
Compression algorithm(s)	H.264 (baseline / main / high profile); MJPEG
Number of compression instances	Quad stream. Any combination of H.264 streams with possibly one MJPEG stream.
Output streams	Any output stream can be freely configured to one of the resolution/frame rate formats.
Supported resolutions	3072x2048; 2048x2048; 1920x1080 (1080p); 1600x1200; 1408x1408; 1280x1024; 1280x720 (720p); 1024x768; 960x960; 960x720; 960x554; 800x600; 720x480 (D1); 640x480; 352x240
Compression capabilities	
In-camera dewarping	H.264 in 2048x2048 or MJPEG in 1080p (25/30fps) H.264 in 2048x2048 (20fps) + H.264 or MJPEG in 1080p (20fps)
Back-end dewarping	H.264 in 3072x2048 or MJPEG in 1080p (25/30fps) H.264 in 3072x2048 + H.264 or MJPEG in 720p (25/30fps) H.264 in 1080p (50/60fps) + H.264 in 1280x1024 (25/30fps) + H.264 or MJPEG in 720p (25/30fps) H.264 in 1080p (50/60fps) + H.264 in 1280x1024 (25/30fps) + H.264 in 720p (25/30fps) + H.264 or MJPEG D1 (25/30fps)
MJPEG	One of the above resolution formats in each instance can be MJPEG instead of H.264 if the resolution is lower than or equal to 1920x1080
Compression bit rate control	Constant bit rate (CBR), variable bit rate (VBR)
Output bit rate (per H.264 stream)	Up to 20480 kbit/s
Total H.264 output	26624 kbit/s
Number of video output streams	Up to 20 (RTSP)
Total output data rate (max)	50000 kbit/s
Video frame rate	1 to 30 fps / 1 to 25 fps

Audio	
Two-way audio	Line in, Line out
Compression	G.711 (µ-law, a-law) / G.726 / AAC / PCM
Bit rate	G.711: 64 Kbps G.726: 16 Kbps, 24 Kbps, 32 Kbps, 40 Kbps AAC: 128 Kbps PCM: 128 Kbps, 256 Kbps, 384 Kbps, 768 Kbps
Sample rate	G.711: 8 KHz / G.726: 8 KHz
Input level, Output level	Adjustable gain
Connector type	Female phone jack, ø 3.5 mm on breakout cable

Alarm inputs/output	
Input	0 - 5 V, 10 kΩ pull-up
Output	Photo relay output 300 Vdc/ac
Operational modes	Normally open; normally closed
Connector type	Multifunction terminal block (D+, D-)

Storage	
Storage options	Supports up to 64 GB capacity of SD/SDHC/SDXC memory (fat32)
Network storage	NAS

Network	
Interface(s)	10/100/1000 Ethernet
Network protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, IGMP, PNAC (IEEE 802.1x), QoS
Connector type	RJ-45 on breakout cable

FD360IR-E

Technical specifications

Management	
Supported browsers	Internet Explorer (6.0+), Chrome, Firefox, Safari
Security	HTTPS, IP Filter, PNAC (IEEE 802.1x)
Protocols	UPnP, SNMP, ONVIF Profile S
Password levels	User and Administrator
User accounts	20

Powering	
Power consumption	Max. 9 W
Power	12 Vdc / 24 Vdc / PoE (802.3af)
Connector type	

Environmental	
Operating temperature	-10°C ~ +50°C (14ºF to 122ºF)
Relative humidity	10% to 90%, no condensation

Mechanical	
Dimensions	117 x 43 mm (4.61 x 1.69 In)
Weight	0.47 kg (1.04 lbs)
Color	RAL 9003 (Signal white)
Built-in IR illuminator	
- Working distance	Up to 5 m
- Wavelength	850 nm
- Number of LEDs	4
Ingress protection	IP66
Impact rating	IK10

Ordering information	
FD360IR-E	High-definition 6 MP outdoor fisheye camera with D/N and IR
WM09	Wall mount
CM16	Flush mount kit for FD360

Accessories	
WM09	Wall mount for FD810/CD810/CD820/FD360E/IFD8xx
CM16	Flush mount kit for FD360

Dimensions
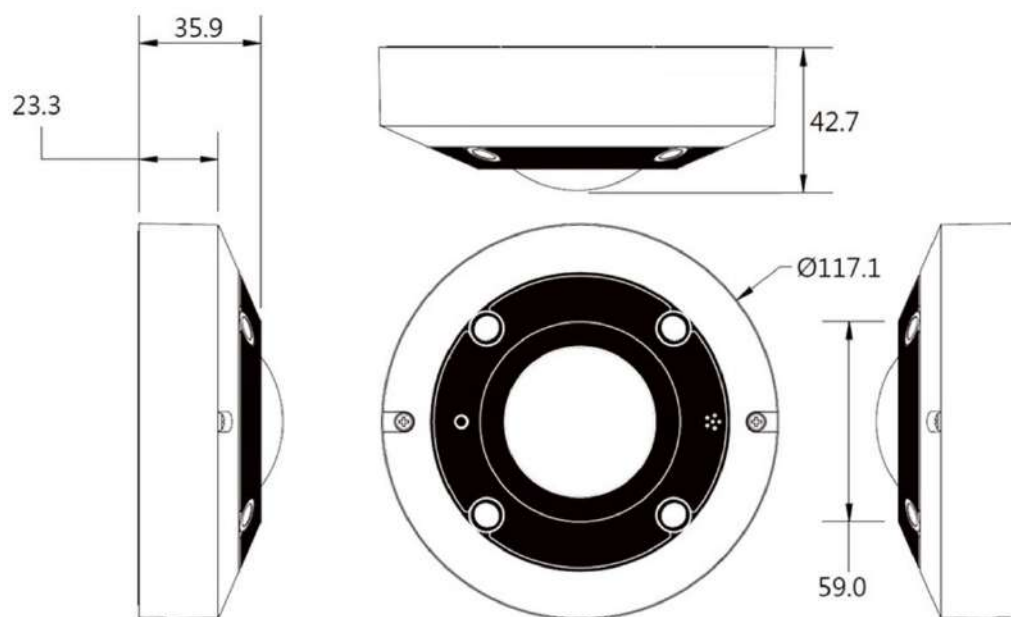
FD360IR-E-12

Network fisheye camera 12MP real time, multiple dewarped H.264/MJPEG, IR, IP66

- ✓ 1/1.7″ Progressive CMOS
- ✓ 12MP @ 20 fps
- ✓ Quad-stream H.264 and MJPEG video
- ✓ Day/Night with IR-cut filter
- ✓ Built-in IR illuminator (effective distance: 5 m)
- ✓ 24 Vdc, 12 Vdc, PoE (802.3af)
- ✓ ONVIF Profile S conformant

Description

The FD360IR-E-12 is an 12MP HD fisheye camera with built-in IR illumination providing clear images under any lighting condition. With its cable-managed bracket, IP66 construction, IK10 vandal resistant housing and fixed lens, installation is fast and easy, and remote adjustment is simple.

Multistream high definition

The camera has quad-stream capability for simultaneous streaming of H.264/H.264 or H.264/MJPEG. Multiple combinations of resolution and frame rate can be configured to satisfy different live viewing and recording scenarios. 12 Mpixel resolution is available at 20 fps, a full-HD 1080p stream at 60 fps can be combined with a HD stream at 60 fps. Each selected resolution-frame rate combination can be freely set to a stream number.

Open standards

Multiple options are available to easily integrate the FD360IR-E-12 to a video management system. In support of open standards, the camera is compliant with the ONVIF Profile S specification.

Image optimalisation

The FD360IR-E-12 provides automatic day/night functionality with configurable thresholds and build-in IR illuminator, for use in low-light situations. Backlight compensation enhances image visibility in difficult lighting situations. The FD360IR-E-12 provides two modes for wide dynamic range. The first mode uses different gain ratios for different illumined areas to bring details in the darker areas of an image without saturation in the brighter parts. The second mode uses a 2 shutter mechanism which applies two different exposure settings to capture both darker and lighter areas with excellent details. The resulting image is the optimal aggregation of both exposures. The available image optimalisation methods ensure quality pictures at all times.

Power source choices

The FD360IR-E-12 can be powered by 12 Vdc, 24 Vdc, 24 Vac, or over the network with 802.3af-compliant PoE sources.

Privacy masks

Privacy masks cover sections of the image. This feature is often requested for such situations as city centre surveillance and point of sale keypads.

SIQURA

FD360IR-E-12

Technical specifications

Camera	
Image sensor	1/1.7" Progressive CMOS 12 MP
Effective pixels	4000(H) x 3000(V)
Minimum scene illumination	0. 01Lux @ F2.8 color, 0.01 lux @ F2.8 (b/w), 0 lux with IR
Shutter speed	1 ~ 1/10.000 sec
Lens	1.65 mm, F2.8
Lens type	Fixed Iris
Horizontal field of view	190°

Functions	
Privacy masks	5
Text and picture overlay	Date, time, date & time, text string (15 characters), subtitles (5 boxes, 16 characters each)
Video motion detection	On, Off, By schedule
Video motion detection alarm	Alarm output, record video clip, send alarm message, upload image
Network failure detection	On, Off, By schedule
Network failure detection alarm	Alarm output, record video clip, send alarm message, upload image
Tamper detection	On, Off, By schedule
Tamper detection alarm	Alarm output, record video clip, send alarm message, upload image
Time laps	On/Off
Time laps action	Upload image
Recording	On, Off, By schedule
Recording destination	SD card/ Network share
Audio detection	On, Off, By schedule
Audio detection alarm	Alarm output, record video clip, send alarm message, upload image

Image control	
Wide dynamic range	Off, low, mid, high
Exposure	Auto, Manual
White balance	Auto, ATW, Manual, One push
Contrast	Manual
Brightness	Manual
Saturation	Manual
Hue	Manual
Sharpness	Manual
Day/Night function	Auto, Night, Day, Light sensor, IR light compensation, Configurable day/ night threshold levels, Smart
Noise reduction	Off, 3DNR (low, medium, high), 2DNR (On/Off), ColorNR (low, medium, high)
Backlight compensation	On/Off
Image rotation	Normal, Flip, Mirror, 180° Rotate, 90° clockwise, 90° counterclockwise

Video				
Compression algorithm(s)	H.264 (baseline / main / high profile); MJPEG			
Number of compression instances	Quad stream. Any combination of H.264 streams with possibly one MJPEG stream.			
Output streams	Any output stream can be freely configured to one of the resolution/frame rate formats.			
Supported resolutions	4000x3000, 3840x2160, 3200x1800, 2048x1536, 1920x1080, 1280x1024, 1280x720, 1024x768, 800x600, 720x480, 640x480, 352x240			
Compression capabilities	(indication, other combinations possible)			
Resolution format	format 1	format 2	format 3	format 4
H.264 instances in 20fps	4000x3000			
H.264 instances in 50/60fps	1920x1080	-	-	-
	1920x1080	1280x1024	-	-
	1920x1080	1280x1024	640x480	-
	1280x1024	1280x720	1024x720	720x480
H.264 instances in 25/30fps	3840x2160	-	-	-
	3200x1800	1280x720	-	-
H.264 instances in 15fps	4000x3000	1920x1080	-	-
	3840x2160	1920x1080	720x480	-
MJPEG	One of the above resolution formats in each instance can be MJPEG instead of H.264 if the resolution is lower than or equal to 1920x1080			
Compression bit rate control	Constant bit rate (CBR), variable bit rate (VBR)			
Output bit rate (per H.264 stream)	Up to 20480 kbit/s			
Total H.264 output	26624 kbit/s			
Number of video output streams	Up to 20 (RTSP)			
Total output data rate (max)	50000 kbit/s			
Video frame rate	1 to 60 fps / 1 to 50 fps			

Audio	
Two-way audio	Line in, Line out
Compression	G.711 (µ-law, a-law) / G.726
Bit rate	G.711: 64 Kbps G.726: 16 Kbps, 24 Kbps, 32 Kbps, 40 Kbps
Sample rate	G.711: 8 KHz / G.726: 8 KHz
Input level, Output level	Adjustable gain
Connector type	Female phone jack, ø 3.5 mm on breakout cable

Alarm inputs/output	
Input	0 - 5 V, 10 kΩ pull-up
Output	Photo relay output 300 Vdc/ac
Operational modes	Normally open; normally closed
Connector type	Multifunction terminal block (D+, D-)

Storage	
Storage options	Supports up to 128 GB capacity of SD/SDHC/SDXC memory (fat32)
Network storage	NAS

FD360IR-E-12

Technical specifications

Network	
Interface(s)	10/100/1000 Ethernet
Network protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, IGMP, PNAC (IEEE 802.1x), QoS
Connector type	RJ-45 on breakout cable

Management	
Supported browsers	Internet Explorer (6.0+), Chrome, Firefox, Safari
Security	HTTPS, IP Filter, PNAC (IEEE 802.1x)
Protocols	UPnP, SNMP, ONVIF Profile S
Password levels	User and Administrator
User accounts	20

Powering	
Power consumption	Max. 7.1 W
Power	12 Vdc / 24 Vdc / PoE (802.3af)
Connector type	

Environmental	
Operating temperature	-10°C ~ +50°C (14ºF to 122ºF)
Relative humidity	10% to 90%, no condensation

Mechanical	
Dimensions	117 x 43 mm (4.61 x 1.69 In)
Weight	0.330 kg (0.73 lbs)
Color	RAL 9003 (Signal white)
Built-in IR illuminator	
- Working distance	Up to 5 m
- Wavelength	850 nm
- Number of LEDs	4
Ingress protection	IP66
Impact rating	IK10

Ordering information	
FD360IR-E-12	Network fisheye camera 12MP real time, multiple dewarped H.264/MJPEG, IR, IP66
WM09	Wall mount
CM16	Flush mount kit for FD360

Accessories

WM09		Wall mount for FD810/CD810/CD820/FD360E/IFD8xx
CM16		Flush mount kit for FD360

Dimensions

35.9

23.3

42.7

Ø117.1

59.0
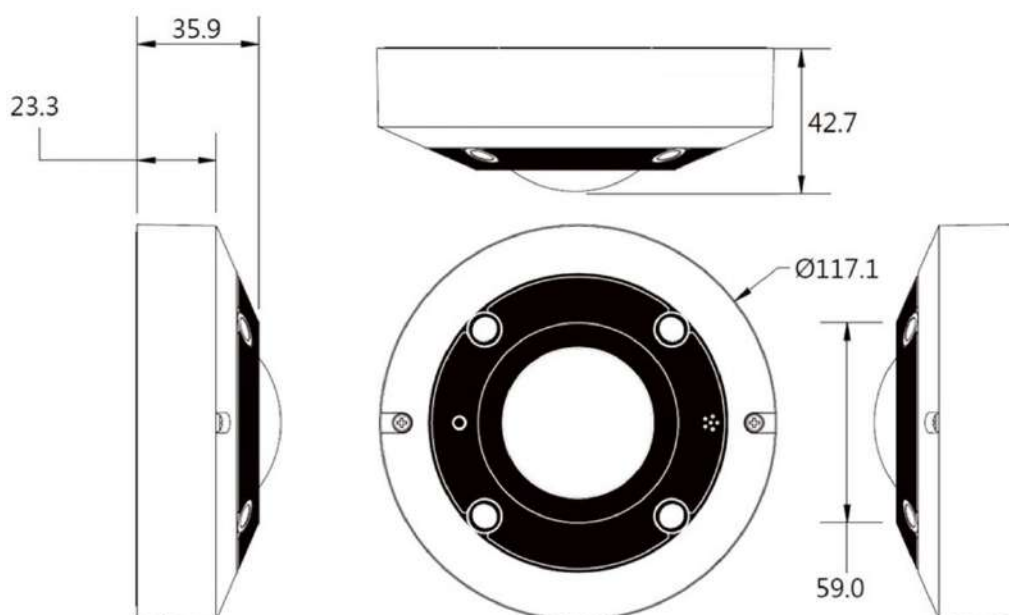
SIQURA

Cámaras Domo PTZ de Alta Velocidad

SIQURA

HSD820V2H3-E

High-speed outdoor dome, 1080p, 30x Optical Zoom, SFP interface

- ✓ 1/2.8" Progressive scan CMOS
- ✓ 2 MP @ 60 fps
- ✓ 30x Optical zoom / 12x digital zoom
- ✓ Combo port with SFP slot
- ✓ 120 dB WDR
- ✓ Quad-stream H.264 and MJPEG video
- ✓ 360° Continuous rotation
- ✓ 256 Presets / 8 programmable cruises
- ✓ 16 Privacy masks, mosaic masking supported
- ✓ ONVIF Profile S conformant
- ✓ NTCIP protocol support

Description
The HSD820v2H3-E is an outdoor high-speed PTZ dome camera with exceptional imaging controls providing HD pictures (1080p) for highly detailed surveillance footage..

High-speed dome
The HSD820v2H3-E high-speed PTZ dome camera has a 30x autofocus zoom lens with 12x digital zoom. Precision 400° per second pan and tilt drive technology offer almost instant preset positioning. Support for many presets, cruises, and sequences provides for highly flexible manual or automatic operation.

Multistream high definition
The camera has quad-stream capability for simultaneous streaming of H.264/H.264 or H.264/MJPEG. Multiple combinations of resolution and frame rate can be configured to satisfy different live viewing and recording scenarios. At 60 fps, full-HD 1080p streaming with a VGA second stream is possible. Each selected resolution-frame rate combination can be freely set to a stream number.

Open standards
Multiple options are available to easily integrate the HSD820v2H3-E to a video management system. In support of open standards, the camera is compliant with the ONVIF Profile S specification.

Image optimalisation
The HSD820v2H3-E provides automatic day/night functionality with configurable
Backlight compensation enhances image visibility in difficult lighting situations. The HSD820v2H3-E provides two modes for wide dynamic range. The first mode uses different gain ratios for different illumined areas to bring details in the darker areas of an image without saturation in the brighter parts. The second mode uses a 2-shutter mechanism, which applies two different exposure settings to capture both darker and lighter areas with excellent details. The resulting image is the optimal aggregation of both exposures. The available image optimalisation methods ensure quality pictures at all times.
The camera is equipped with an electronic image stabiliser to provide stable pictures even at the highest zoom ratio.

Privacy masks
Privacy masks cover sections of the image. This feature is often requested for such situations as city centre surveillance and point of sale keypads.

Fiber connectivity
In addition to the RJ-45 interface, an SFP interface comes standard with the HSD820v2H3-E for direct connection of fiber to the camera. The XSNet™ range of SFP modules, with options for both single mode and multimode is available.

HSD820V2H3-E

Technical specifications

Camera

Image sensor	1/2.8" Progressive scan CMOS
Effective pixels	1920 (H) x 1080 (V)
Minimum scene illumination	0.35 lux color, 0.09 lux (b/w), 1/30 s shutter, 30 IRE, F1.4
Shutter speed	1 - 1/10000 s
Lens	30x Optical zoom, F1.4 (wide), F4.7 (tele)
Lens focal length	4.4 to 132 mm
Horizontal field of view	60.5° (W) – 2.3° (T)

Pan / Tilt

Pan travel	360° Continuous
Tilt travel	-10°~190°
Preset speed	5°~400°/s
Manual speed	0.5°~90°/s
Presets	256 Presets
Preset accuracy	0.225°
Preset position calibration	Day of week and time
Cruise	8
Sequence	8
Autopan	4
Speed by zoom	On/Off
Resume after power loss	Yes
Home function	Preset, sequence, autopan, cruise
Autoflip	Off / mechanical flip / image flip
Auto calibration	Pan and tilt position by schedule
PTZ position OSD	Off / on / compass only

Functions

Privacy masks	16
Text and picture overlay	Date, time, date & time, 3x subtitle (72 characters each), text string (72 characters), preset title, image, image transparency
Video motion detection	On / off / by schedule
Video motion detection alarm	Alarm output, record video clip, send alarm message, upload image
Network failure detection	On / off / by schedule
Network failure detection alarm	Alarm output, record video clip, send alarm message, upload image
Periodical event	On/Off
Periodical event action	Upload image
Audio detection	On / off / by schedule
Audio detection alarm	Alarm output, record video clip, send alarm message, upload image
Recording	On / off / by schedule
Recording destination	SD card/ Network share

HSD820V2H3-E

Technical specifications

Image control

Wide dynamic range	On/Off
WDR value	>120 dB (in WDR dual shutter mode)
Backlight compensation	On/Off
White balance	Auto/indoor/outdoor/ATW/One Push/manual
Exposure control	Full Auto, Shutter Priority, P-Iris, Iris Priority, Manual
Sharpness	Manual
Exposure compensation	Manual
Saturation	Manual
Hue	Manual
Brightness	Manual
Contrast	Manual
Day/Night function	Auto/night/day
Noise reduction	Off, 3DNR (low, medium, high), 2DNR (On/Off), ColorNR (low, medium, high)
Auto defog	On/off
Image stabilisation	On/off
Digital zoom	12x
Image rotation	Normal / flip / mirror / rotate clockwise 90º / rotate 180º / rotate counter-clockwise 90º

Video

Compression algorithm(s)	H.264 (baseline / main / high profile); MJPEG			
Supported resolutions	1920x1080 (1080p); 1280x1024; 1280x720 (720p); 1024x768; 800x600; 720x576 (D1); 640x480; 352x288 (CIF)			
Quad streaming:	Stream 1	Stream 2	Stream 3	Stream 4
H.264 instances in 50/60fps	1920x1080	-	-	-
(at lower frame rate higher resolution	1920x1080	640x480	-	-
may be possible)	1920x1080	640x480 @30fps	352x288 @30fps	-
H.264 instances in 25/30fps	1920x1080	1920x1080	-	-
(at lower frame rate higher resolution	1920x1080	1280x1024	1280x720	-
may be possible)	1920x1080	1280x1024	1280x720	352x288
MJPEG	One of the above resolution formats in each instances can be MJPEG instead of H.264			
Compression bit rate control	Constant bit rate (CBR), variable bit rate (VBR), LBR			
Output bit rate (per H.264 stream)	Up to 26624 kbit/s			
Number of video output streams	Up to 20 (RTSP)			
Total output data rate (max)	50000 kbit/s			
Video frame rate	1 to 60 fps / 1 to 50 fps			
Analogue video output	PAL/NTSC			
Connector type	BNC (1.0 Vpp in 75 Ω)			

Audio

Two-way stereo audio	Line in / line out
Compression	G.711 (μ-law, a-law) / G.726 / AAC / PCM
Bit rate	G.711: 64 Kbps G.726: 16 Kbps, 24 Kbps, 32 Kbps, 40 Kbps AAC: 128 Kbps PCM: 128 Kbps, 256 Kbps, 384 Kbps, 768 Kbps
Sample rate	G.711: 8 KHz / G.726: 8 KHz / AAC: 48 KHz / PCM: 8, 16, 24, 48 KHz
Input level, Output level	Adjustable gain
Connector type	Multifunction terminal block (input/output/ground)

HSD820V2H3-E

Technical specifications

Alarm input/output	
Inputs	4x input 0 – 5 V (internal 10 kΩ pull up)
Input type	Normally open / Normally close
Triggered actions	Enable alarm output, send message/notification, upload image, PTZ (Preset/Sequence/Autopan/Cruise), record clip
Outputs	2x Relay, (30 Vdc @ 2 A or 125 Vac @ 0.5 A)
Connector type	Multifunction terminal block (4x input / ground / 2 outputs)

Storage	
Storage options	Micro SDXC card, 64 GB

Network	
Interface(s)	10/100/1000 Mb Ethernet (RJ-45) 100/1000 Mb Ethernet (SFP)
Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, IGMP, PNAC (IEEE 802.1x), QoS
Password levels	User and Administrator
Supported browsers	Internet Explorer (6.0+), Chrome, Firefox, Safari
User accounts	20

Powering	
Power consumption	55 W PoE / 57 W
Power	19.2 - 28.8 Vac / 28 - 48 Vdc / 802.3bt (75 W) Power-over-Ethernet
Connector type	

Environmental	
Operating temperature	-40 °C to +50 °C (-40 °F to +122 °F)
Ingress protection	IP66

Mechanical	
Dimensions	Ø192 × 292 mm (Ø7.6 × 11.5 in)
Weight	2.3 kg (5.1 lbs)
Housing	Aluminium
Color	RAL 9003 (signal white)
Sunshield	ABS / Polycarbonate blend
Bubble	Optically clear polycarbonate
Impact rating	IK10

Order information	
HSD820v2H3-E	High-speed PTZ dome camera, Multiple H.264, 1080p, 30x Opt.Zoom, Outdoor, SFP, DC09

Accessories

WM01A		Bracket, Short Wall Mount, with gasket kit
WM07A		Bracket, Long Wall Mount, with gasket kit
PM01		Bracket, Pole Mount, Thin
PM01 SAE304		Bracket, Pole Mount, Stainless Steel 304
PTM01		Bracket, Adapter, 1 1/2Inch NPT
ECO plug kit /40cm		Ethernet over Coax 100Mb SFP Module, incl. 40cm cable and ferrite cable clamp
XSNet SFP …….		Singlemode or multimode SFP, single or dual fiber, LC, 100Mb or 1000Mb)
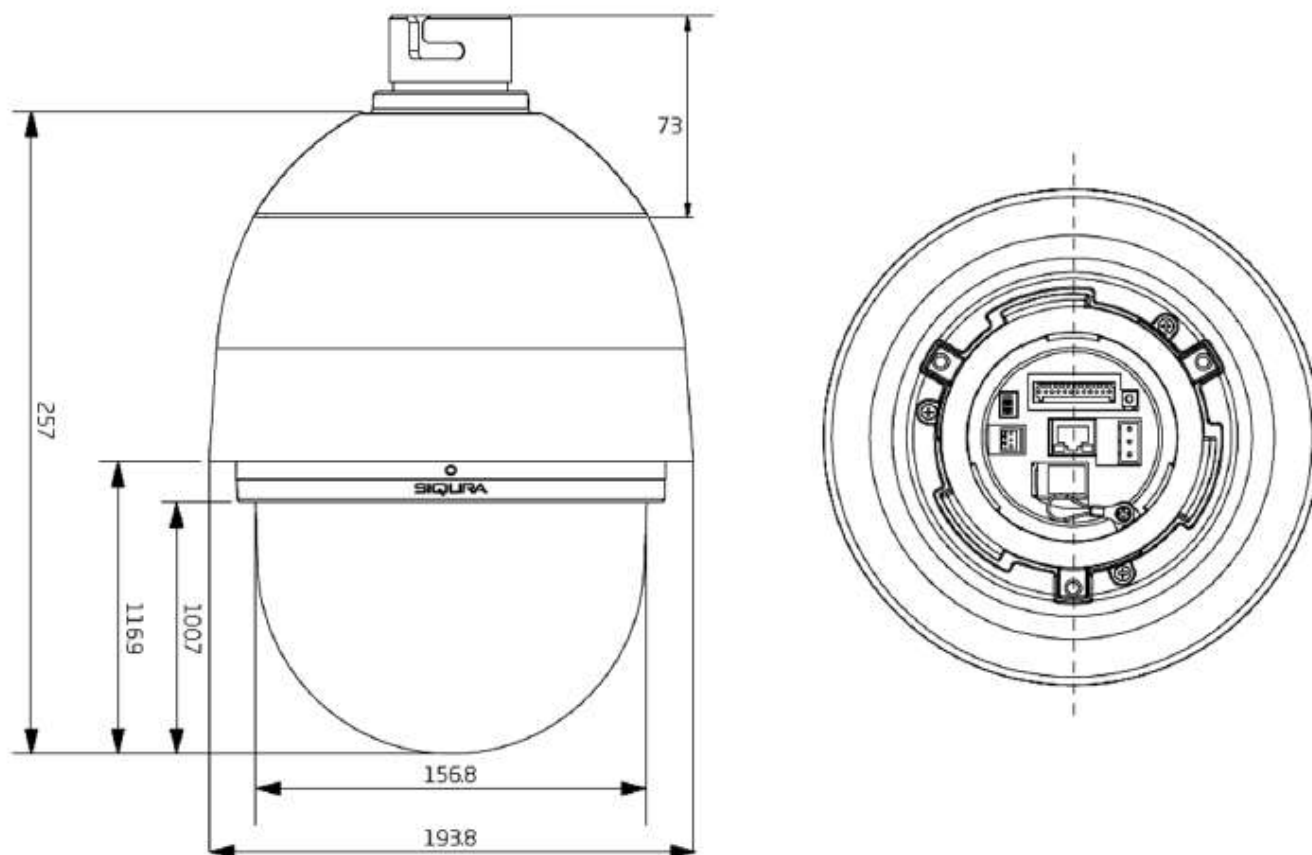
Dimensions

dP E88

3MP PTZ dome camera with 30x zoom

DESCRIPTION

h×y dP E88   u ; a d ʊd   x   dhn wu y u   × ; 8   wu   y 5i   '   ×y
  u y   hy w×   ' 3 dP E88 y zz wy   y   y   ×y   vu x   x ×v   yu 4   y
T 5 B@6T 5 BA   yu   5U ʊdBB   u y   zu x ʊW98   u xu   y   u   ×   '   u y
     uv y z   x   u' y 5

FEATURES

1/2.8 inch Progressive scan CMOS imager

Quad stream H.264, H.265 and MJPEG

3MP @ 30 fps HDR

30x optical zoom, 10x digital zoom

120 dB WDR (HDR)

Support EIS

PT servo feedback

IP66, IK10 vandal proof

ONVIF Profile S, G and Q

P y w

d y   u g ywzwu

a   4 yu   ×'×xyz
h×y   y' u yx wu y u×u u   4 yu wu uv   z   u y   yu   ' zT 5 BA3
T 5 B@   a VdCS 5 i   @w v u   z y   u x zu y u y wu vy w z' yx
   u z x zyy   y y   'u x yw x ' wy u   5

c y   u xu x
a   y   u y u u uv y   yu   y' u y ×y dP E88   u xy   u u'y y
   y 5U   z y   u xu x 3 ×y dP E88   w   u   ×u u 'y zj a g. 3
       c b j UR /d   z y g3S 3u x e 0u x ×y g   u MdU5

dh gy   zy yx v uw
h×y dP E98 u u x   u y w   yx v   y   zy yx v uw 3 yy   '   uw z ×y dhn
      u u   y 5b   y x z ' dhn ×yux x y   × w 3 v u   u xu   5
k ×y   ×y ×yux   z wyx z   3   y   yx u y 5

d y   wy wx wy
h×y dP E88 wu vy   y yx   ×9: j x w3 :@j uw   y ×y y   ×d C2   wy 5

Camera

Image sensor	1/2.8" Progressive scan CMOS
Effective pixels	2065x1553
Min. illumination	0.04 lux Color, 0.002 lux B/W (F/1.6)
Shutter speed	1 to 1/10,000 sec
Day/Night	IR-cut filter
Lens	30x zoom
Iris	P-iris and auto-iris
Focal length	4.3mm to 129 mm (F/1.6)
Horizontal field of view	62° (W) to 2.0° (T)
Lens material	High-grade optical glass

PTZ

Pan range	360° Continuous rotation
Tilt range	-20° to +100°
Number of presets	256
Preset speed	280°/s
Manual speed	0.1°/s to 90°/s Pan; 0.1°/s to 55°/s Tilt
Preset accuracy	0.16°
Features	Speed by zoom
Sequence Scan	8
Cruise Scan	8
Autopan	4
Body material	Aluminum alloy, ABS
Internal demister/heater	Standard

Image control

Dynamic range (WDR)	120 dB, dual exposure HDR
White balance	Auto, ATW, Manual, One push
Image settings	Contrast Brightness Saturation Hue Sharpness
SNR	Better than 54dB
Noise reduction	3DNR, 2DNR, Color Low, mid, high (w/ Motion Compensation)
Image Stabilization	Yes (Digital)
Digital zoom	10x
Text and picture overlay	Compass, date & time, 4x line (40 characters each),
	preset title, image, image transparency
Privacy masks	16
Image rotation	90°, 180°, 270° rotation

Video

Video compression	H.265, H.264 (main or high profile); MJPEG
Number of compression instances	Any combination of H.265 or H.264 streams with possibly
	one MJPEG stream.
Supported resolutions	2065x1553 (3MP); 1920x1080;1280x1024; 1280x720; 1024x768; 800x600;

Specs

Video

	720x567(D1); 640x480 (VGA); 352x288 (CIF)			
Max streaming (H264/H265/MJPEG)				
60fps	2048x1536	1280x720		
60fps	2048x1536	800x600	720x480	352x240
30fps	2048x1536	1920x1080	1280x1024	1280x1024
30fps (dual shutter WDR)	2048x1536	1920x1080	1280x1024	720x480
Compression bit rate control	Constant bit rate (CBR), variable bit rate (VBR), Low bit rate (LBR)			
Number of video output streams	Up to 20 (RTSP)			
Total output data rate (max)	60 Mb/s			
Video frame rate	1 to 60 fps, 1 to 50 fps			
Analog video output	PAL/NTSC (BNC)			

Audio

Audio compression	G.711, G.726, AAC, LPCM
Audio Input	Line in
Audio Output	Line out

Analytics

Event detection	Motion Detection; Audio detection
Event Triggers	External Input, Analytics, Network Failure Detection,
	Periodical Event, Manual Trigger

Network

Local storage	Micro SD/SDHC/SDXC up to 128 GB;
Network storage	NAS (Support NFS, SMB/CIFS)
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP,
	RTSP, RTCP, RTP, TCP/IP, DHCP, PPPoE, Diamond*, NTCIP*.
Security	User authentication, IP filtering, Digest authentication (RTSP, HTTP)
	HTTPS encryption (TLS1.2); IEEE 802.1x port-based network access control
Standard	ONVIF (Profile S, Profile G, Profile Q), Siqura API
Web browser	IE 9, 10 and 11; limited support for Edge, Chrome, Firefox
Network interface	10/100 Mb (RJ45)

Environmental

Ingress protection level	IP66
Ambient temperature	-40 °C to +50 °C (-40 °F to +122 °F)
Relative humidity	5 to 100%
Power supply	12Vdc, 24 Vac, 802.3at, class 4
Power consumption	Max. 25.4 W

Mechanical

Interfaces	
- Ethernet	RJ45

Specs

Mechanical	
- Alarm in / out	4x / 2x Terminal Block
- 12Vdc	Terminal Block
- 24Vac	Terminal Block
- Audio in / out	terminal Block
- Video out	BNC Connector
- RS485	Terminal Block
Dimensions	diameter 210 x 279 mm with Sunshield
Weight	2.9 kg
Impact Rating	IK10
Color	RAL 9003 (signal white)

Ordering information	
PD900	3 Mp intelligent IP outdoor PTZ camera 30x zoom

DIMENSION IN MM
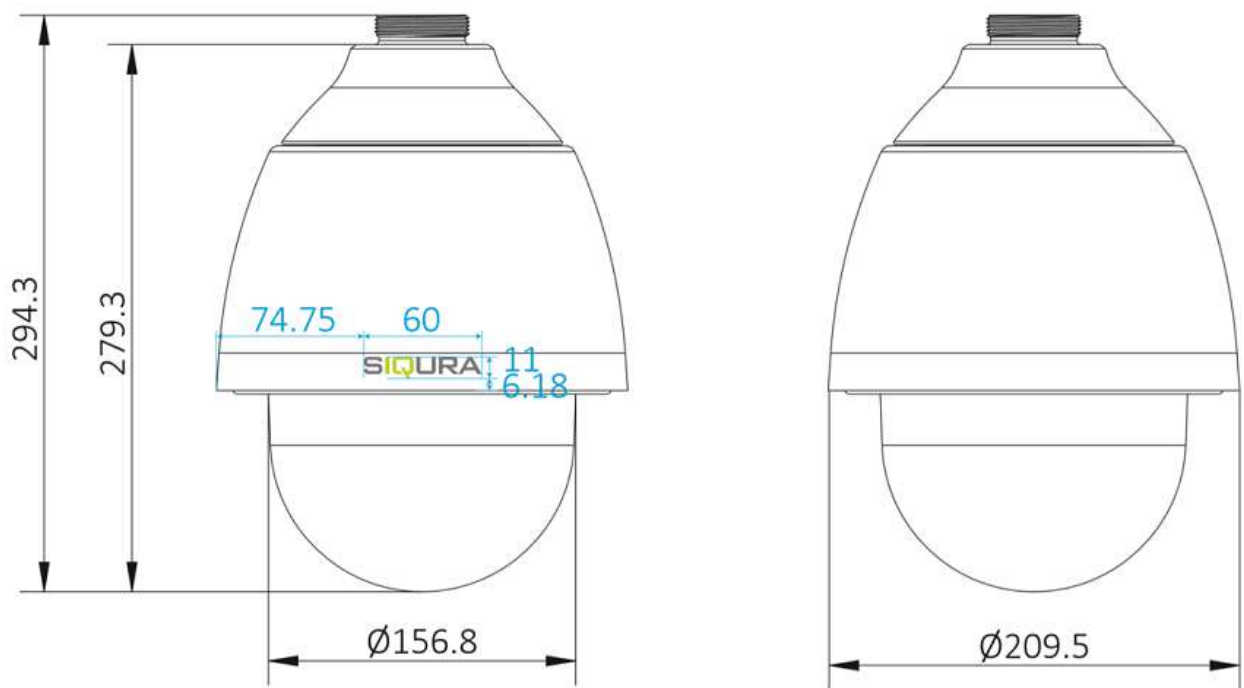
RELATED

Siqura PTZ dome accessoires
PTZ dome mounting accessories

dP E98

3MP bubbleless PTZ dome camera with 40x zoom

DESCRIPTION

h×y dP E98 u ; 4 y ' u   y ld   x   dh n x   y wu y u   ×   u v vv y 5M
    y z × ' × 4' u x y @8   wu   y y   y   ×u u x wyu   u ' y   y u
    x y u ' y 5N   4 ld z   y   y u   5 h×y × ' × 4 yy x u 3 3u x
    yw×u   u x u   4 z w ' y   u u y   u x   u v y z w y x   u ' y 5P y
        y y   z y y x v u w w   ×y wu y u   u u   u u   ' u /dh0
        5k ×y z w y x u u z   ' u   ×y wu y u   y
    y x u y   5

FEATURES

1/2.8 inch Progressive scan CMOS imager

Quad stream H.264, H.265 and MJPEG

3MP @ 30 fps HDR

40x optical zoom, 10x digital zoom

20° tilt above horizon without optical distortion

120 dB WDR (HDR)

Supports EIS

Built-in IR illumination up to 200 m

PT servo feedback

ONVIF Profile S, G and Q

P y w

h×y dP E98 u ; a d y ' y d x   ×' ×4 yyx dhn x   y w y u   ×v   4 4
      u   u x @8   w   5b   y   v y   y   w x   ×y   '
u   ×y ×   w y ' x y x   u y   ×y v vv y x y   y v vv y4
  y   xy ' 5

dh gy   z yyx v u w
h×y dP E98 u u x   u y w   y x v   y   z yyx v u w 3 yy   '   u w   z ×y dhn
        u u   y 5b   y x z ' dhn ×yux x y   × w 3 v u   u xu   5
k ×y   ×y ×yux   z w yx z   3   y   y x u y 5

a   4 yu ×' ×xyz
h×y y' u yx w   y u ×u   4 yu w uv   z   u y   yu ' z T 5 BA3
T 5 B@   a VdOS 5 i   @w   v u   z y   u x zu y u y w vy w z' yx
   u z x zy y   y y   ' u x yw x ' w y u   5

c y   u xu x
a   y   u y u u uv y   yu   y' u y ×y dP E98   u xy   u u' y y
   y 5U   z y   u xu x 3 ×y dP E98   w   u   ×u u ' y zj a g. 3
      c b j R /d   z y   g3S 3u x e 0u x ×y g   u Md 5

d y   wy w × wy
h×y dP E98 w vy   y yx   ×9: j xw3 : @j u w   y ×y y   × T 4d Q   wy 5
D8: 5 v h y ; F u B8 k 0

Camera

Image sensor	1/2.8" Progressive scan CMOS
Effective pixels	2065x1553
Min. illumination	0.04 lux Color, 0.002 lux B/W (F/1.6)
Shutter speed	1 to 1/10,000 sec
Day/Night	IR-cut filter
Lens	40x zoom
IR Illumination	850 nm
IR illumination distance	200m
Iris	P-iris and auto-iris
Focal length	4.3mm to 170 mm (F/1.6)
Horizontal field of view	62° (W) to 2.0° (T)
Lens material	High-grade optical glass

PTZ

Pan range	360° Continuous rotation
Tilt range	-20° to +100°
Number of presets	256
Preset speed	280°/s
Manual speed	0.1°/s to 90°/s Pan; 0.1°/s to 55°/s Tilt
Preset accuracy	0.16°
Features	Speed by zoom
Sequence Scan	8
Cruise Scan	8
Autopan	4
Body material	Aluminum alloy, ABS
Internal demister/heater	Standard

Image control

Dynamic range (WDR)	120 dB, dual exposure HDR
White balance	Auto, ATW, Manual, One push
Image settings	Contrast Brightness Saturation Hue Sharpness
SNR	Better than 54dB
Noise reduction	3DNR, 2DNR, Color Low, mid, high (w/ Motion Compensation)
Image Stabilization	Yes (Digital)
Digital zoom	10x
Text and picture overlay	Compass, date & time, 4x line (40 characters each),
	preset title, image, image transparency
Privacy masks	16
Image rotation	90°, 180°, 270° rotation

Video

Video compression	H.265, H.264 (main or high profile); MJPEG
Number of compression instances	Any combination of H.265 or H.264 streams with possibly

Specs

Video

	one MJPEG stream.			
Supported resolutions	2065x1553 (3MP); 1080p30,1280x1024; 720p30; 1024x768; 800x600;			
	720x567(D1); 640x480 (VGA); 352x288 (CIF)			
Max streaming (H264/H265/MJPEG)				
60fps	2048x1536	1280x720		
60fps	2048x1536	800x600	720x480	352x240
30fps	2048x1536	1920x1080	1280x1024	1280x1024
30fps (dual shutter WDR)	2048x1536	1920x1080	1280x1024	720x480
Compression bit rate control	Constant bit rate (CBR), variable bit rate (VBR), Low bit rate (LBR)			
Number of video output streams	Up to 20 (RTSP)			
Total output data rate (max)	60 Mb/s			
Video frame rate	1 to 60 fps, 1 to 50 fps			
Analog video output	PAL/NTSC (BNC)			

Audio

Audio compression	G.711, G.726, AAC, LPCM
Audio Input	Line in
Audio Output	Line out

Analytics

Event detection	Motion Detection; Audio detection
Event Triggers	External Input, Analytics, Network Failure Detection,
	Periodical Event, Manual Trigger

Network

Local storage	Micro SD/SDHC/SDXC up to 128 GB;
Network storage	NAS (Support NFS, SMB/CIFS)
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP,
	RTSP, RTCP, RTP, TCP/IP, DHCP, PPPoE, Diamond*, NTCIP*.
Security	User authentication, IP filtering, Digest authentication (RTSP, HTTP)
	HTTPS encryption (TLS1.2); IEEE 802.1x port-based network access control
Standard	ONVIF (Profile S, Profile G, Profile Q), Siqura API
Web browser	IE 9, 10 and 11; limited support for Edge, Chrome, Firefox
Network interface	10/100 Mb (RJ45)

Environmental

Ingress protection level	IP66
Ambient temperature (NEMA TS-2)	-40 °C to +74 °C (-40 °F to +165 °F)
Relative humidity	5 to 100%
MTBF (@40°C)	>200,000 h
Vibration (NEMA TS-2)	5 to 30 Hz, 0.5 g during 1 h. (x, y, and z)
Shock (NEMA TS-2)	10 g (x, y, and z)
Max wind velocity	225 km/h (150 mph)

Specs

Environmental	
Power supply	12Vdc, 24 Vac, Ultra PoE
Power consumption	Max. 39 W

Mechanical	
Interfaces	
- Ethernet	RJ45
- Alarm in / out	4x / 2x Terminal Block
- 12Vdc	Terminal Block
- 24Vac	Terminal Block
- Audio in / out	terminal Block
- Video out	BNC Connector
- RS485	Terminal Block
Dimensions	diameter 207.4 x 300.4 mm with Sunshield
Weight	3.8 kg
Impact rating	Top housing: IK10; Lower rotating parts: IK08
Color	RAL 9003 (signal white)

Ordering information	
PD910	3 Mp intelligent IP outdoor PTZ camera 40x zoom

DIMENSIONS IN MM
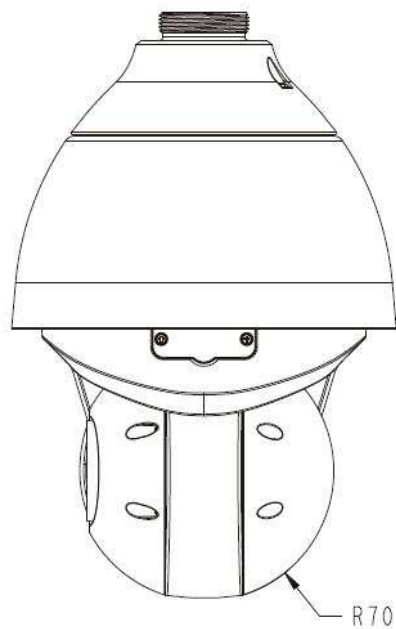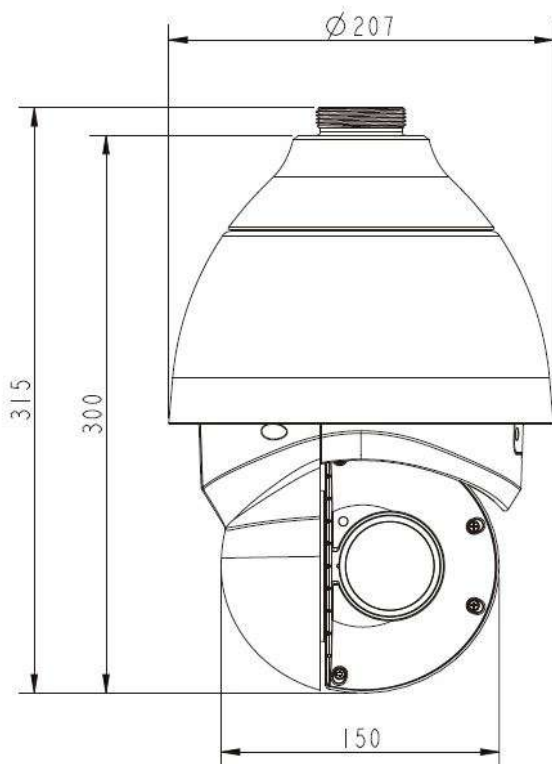
RELATED

Siqura PTZ dome accessoires
PTZ dome mounting accessories

dP E: 8

3MP bubbleless PTZ dome camera with 40x zoom with SFP and IR

DESCRIPTION

h×y dP E: 8   u ; 4   y ' u   y ⫫l   x   dh n x   y ᴡu   y u   ×   u v   vv y 5M
     y z   × ' ×4' u x y ⊘8   ᴡu   y   y   y   ×u   u x ᴡyu   u ' y   y   u
   x y   u ' y 5N   4   ⫫ z   y   y u   5 h×y × ' ×4   y yx   u 3   3u x
     yᴡ×u   u x u   4   w ' y   u   u y   u x   uv yz w yx   u ' y 5P   y
       y   y   z yyx v u ᴡ w   ×y ᴡu   y u   u   u   u u   ' u /dh0
        5k ×y   z   ᴡyx u   u z   ' u   ×y ᴡu   y u   y
     yx u y   5h×y dP E: 8 ⍟ ×y   y   y zuᴡy ᴡu   v y   u   yx z   f V⊘A   '
d ⍟   u   y   gRd ᴡu' y 5h×y 988 a v6 gRd   zzy   u u ' y   zx   yᴡ   z vy   3
u   y   u w   yᴡ   x   yᴡ   ᴡu   ' ×y ⍟⍟c 4   ' 5

FEATURES

3MP 1/2.8 inch Progressive scan CMOS imager

Quad stream H.264, H.265 and MJPEG

PT servo feedback

Swappable 100 Mb SFP slot or RJ45

40x optical zoom, 10x digital zoom

20° tilt above horizon without optical distortion

120 dB WDR (HDR)

Built-in IR illumination up to 200 m

ONVIF Profile S, G and Q

P y w

d y   u   x w z   u
h×y dP E: 8   u; a d   y ' y Ud   x   x' ×4 yyx dhn x   y wu y u   ×v   4 Uf4
        u   u x @8   wu   5b   y   v y   y   wu x   ×y   '
u ×y ×   Uf wu y ' x y x   u y   ×y v vv y x y   y v vv y4
y   xy ' 5

dh gy   z yy x v u w
h×y dP E: 8   u   u x   u y w   yx v   y   z yy x v u w 3 yy '   uw z ×y dhn
        u u   y 5b   y x z ' dhn ×yux x y   × w 3 v u   u xu   5
k ×y   ×y ×yux   z wyx z   3   y   yx u y 5

j y   u y gRd w   yw
h×y wu y u   y zuwy wu vy   u yx vy yy u f V@A3   ' d C8   u y
988a v gRd   5k × ×y gRd   ×y wu y u wu vy w   ywyx y ×y x yw   zvy
wu v   ' g   u   y CC c 4 ' z Q ×y y 4 y 4 wu 5R   yuw×   g   u
wu   xy z u w   yzzyw y gRd   x y5

a   4 yu   ×' × xy z
h×y   y' u yx wu y u×u   4 yu wu uv   z   u y   yu ' zT 5 BA3
T 5 B@   a VdCS 5 i   @w   v u   z y   u xzu y u y wu vy w z' yx
u z x zyy y   y y ' u x yw x ' wy u   5

c y   u xu x
a   y   u y u u uv y   yu   y' u y ×y dP E: 8   u   xy   u u' y y
y 5U   z   y   u xu x 3 ×y dP E: 8   w   u   ×u u ' y zj a g. 3
c b j UR /d z y g3S 3u x e 0u x ×y g   u MdU5

d y   wy w× wy
h×y dP E: 8 wu vy   y yx   ×9: j x w3 : @j uw   y ×y y   ×T 4d Q   wy 5
/D8: 5 v h   y ; F u B8 k 0

Camera

Image sensor	1/2.8" Progressive scan CMOS
Effective pixels	2065x1553
Min. illumination	0.04 lux Color, 0.002 lux B/W (F/1.6)
Shutter speed	1 to 1/10,000 sec
Day/Night	IR-cut filter
Lens	40x zoom
IR Illumination	850 nm
IR illumination distance	200m
Iris	P-iris and auto-iris
Focal length	4.3mm to 170 mm (F/1.6)
Horizontal field of view	62° (W) to 2.0° (T)
Lens material	High-grade optical glass

PTZ

Pan range	360° Continuous rotation
Tilt range	-20° to +100°
Number of presets	256
Preset speed	280°/s
Manual speed	0.1°/s to 90°/s Pan; 0.1°/s to 55°/s Tilt
Preset accuracy	0.16°
Features	Speed by zoom
Sequence Scan	8
Cruise Scan	8
Autopan	4
Body material	Aluminum alloy, ABS
Internal demister/heater	Standard

Image control

Dynamic range (WDR)	120 dB, dual exposure HDR
White balance	Auto, ATW, Manual, One push
Image settings	Contrast Brightness Saturation Hue Sharpness
SNR	Better than 54dB
Noise reduction	3DNR, 2DNR, Color Low, mid, high (w/ Motion Compensation)
Image Stabilization	Yes (Digital)
Digital zoom	10x
Text and picture overlay	Compass, date & time, 4x line (40 characters each), preset title, image, image transparency
Privacy masks	16
Image rotation	90°, 180°, 270° rotation

Video

Video compression	H.265, H.264 (main or high profile); MJPEG
Number of compression instances	Any combination of H.265 or H.264 streams with possibly

Specs

Video

	one MJPEG stream.			
Supported resolutions	2065x1553 (3MP); 1080p30,1280x1024; 720p30; 1024x768; 800x600;			
	720x567(D1); 640x480 (VGA); 352x288 (CIF)			
Max streaming (H264/H265/MJPEG)				
60fps	2048x1536	1280x720		
60fps	2048x1536	800x600	720x480	352x240
30fps	2048x1536	1920x1080	1280x1024	1280x1024
30fps (dual shutter WDR)	2048x1536	1920x1080	1280x1024	720x480
Compression bit rate control	Constant bit rate (CBR), variable bit rate (VBR), Low bit rate (LBR)			
Number of video output streams	Up to 20 (RTSP)			
Total output data rate (max)	60 Mb/s			
Video frame rate	1 to 60 fps, 1 to 50 fps			
Analog video output	PAL/NTSC (BNC)			

Audio

Audio compression	G.711, G.726, AAC, LPCM
Audio Input	Line in
Audio Output	Line out

Analytics

Event detection	Motion Detection; Audio detection
Event Triggers	External Input, Analytics, Network Failure Detection,
	Periodical Event, Manual Trigger

Network

Local storage	Micro SD/SDHC/SDXC up to 128 GB;
Network storage	NAS (Support NFS, SMB/CIFS)
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP,
	RTSP, RTCP, RTP, TCP/IP, DHCP, PPPoE, Diamond*, NTCIP*.
Security	User authentication, IP filtering, Digest authentication (RTSP, HTTP)
	HTTPS encryption (TLS1.2); IEEE 802.1x port-based network access control
Standard	ONVIF (Profile S, Profile G, Profile Q), Siqura API
Web browser	IE 9, 10 and 11; limited support for Edge, Chrome, Firefox
Network interface	10/100 Mb (RJ45) or empty SFP cage

Environmental

Ingress protection level	IP66
Ambient temperature (NEMA TS-2)	-40 °C to +74 °C (-40 °F to +165 °F)
Relative humidity	5 to 100%
Power supply	24 Vac, Ultra PoE
Power consumption	Max. 39 W

Mechanical

Specs

Mechanical	
Interfaces	
- Ethernet	RJ45
- Alarm in / out	4x / 2x Terminal Block
- 12Vdc	Terminal Block
- 24Vac	Terminal Block
- Audio in / out	terminal Block
- Video out	BNC Connector
- RS485	Terminal Block
Dimensions	diameter 207.4 x 300.4 mm with Sunshield
Weight	3.8 kg
Impact rating	Top housing: IK10; Lower rotating parts: IK08
Color	RAL 9003 (signal white)

Ordering information	
PD920	3 Mp intelligent IP outdoor PTZ camera 40x zoom with SFP

DIMENSIONS IN MM
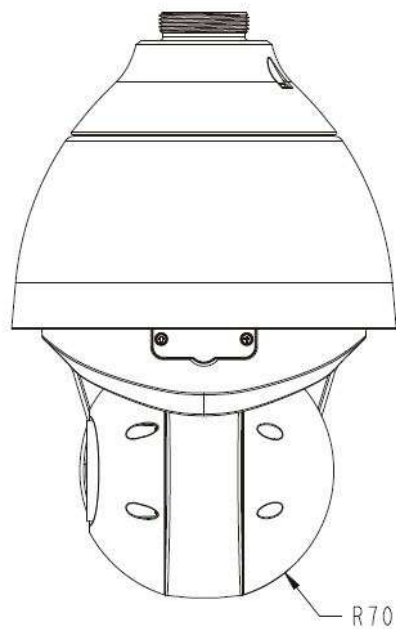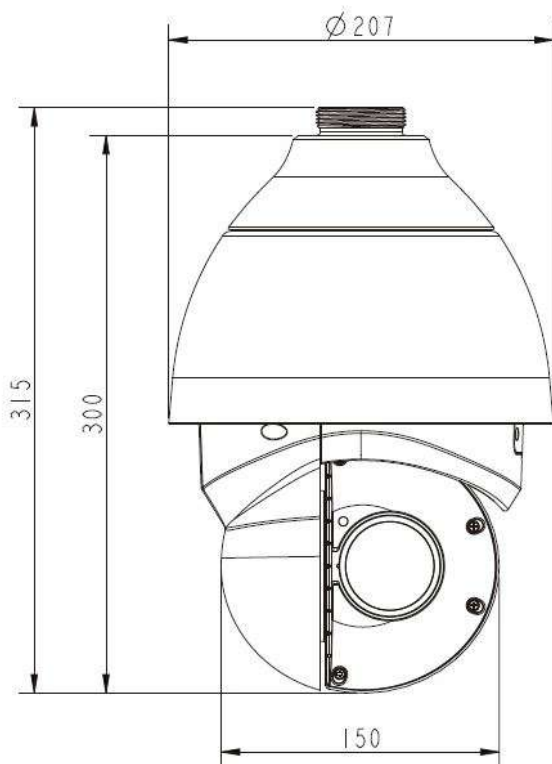
RELATED

Siqura PTZ dome accessoires
PTZ dome mounting accessories

Siqura ECO-plug
Ethernet over Coax 100Mb SFP Module

Siqura SFP Module
SFP modules for Ethernet over fiber

dP 98: :

Network PTZ dome camera, 25x zoom, 2MP, IR, IP65

DESCRIPTION

h×y dP 98: :   u w   uw dhn x   y   uv y z   x   u' y 5k   ×   : A   wu
       v w 3 wu   yu   z   TP /9E: 8 98 D 80 y   u' y z   w   y u x
zu u u 5h×y wu   y u   ×y u y   yw×   '   w× u T 5 BA3u x   y ' y
T 5 B@2 z   u y y   vy y w   y   z ×y   xy   yu G   u y vu x   x ×u x
    u' y y   y   y   5h×y dP 98: :   zzy   u   u' y y ×u wy y   yw×   y 3
   w× u NZO u x T ZO3Qyw   wU u' y g uv   u   3P yz ' u x ; P P b f 5

FEATURES

1/2.8 Progressive scan CMOS

4.8 to 120 mm zoom lens

2 MP @ 60 fps (1920 x 1080)

120 dB WDR

Triple-stream H.265, H.264 and MJPEG video

Day/Night with IR-cut filter / WDR / BLC

Electronic Image Stabilisation

ONVIF Profile S

Camera

Image sensor	1/2.8 Progressive scan CMOS
Effective pixels	1920 (H) x 1080 (V)
Zoom	25x optical zoom, 16x digital zoom
Minimum scene illumination	0.05 lux colour, 0.01 lux B/W (@ F1.6, AGC on)
Shutter speed	1 - 1/30,000 s
Lens	Auto Iris (DC)
Lens type	4.8 mm to 120 mm, F1.6
Horizontal field of view	64.5° (W) 2.9° (T)

Pan / Tilt

Pan travel	360° Continuous
Tilt travel	-5° ~ 90°
Manual speed	Pan: 0.1° ~ 300°/s, tilt: 0.1° ~ 160°/s tilt
Presets	300 Presets
Cruise	4
Sequence	8
Autopan	Yes
Speed by zoom	On/Off
Resume after power loss	Yes
Park function	Preset / Pattern Scan / Patrol Scan / Auto Scan / Tilt Scan / Random Scan / Frame Scan / Panorama Scan
PTZ by scheduled	Preset / Pattern Scan / Patrol Scan / Auto Scan / Tilt Scan / Random Scan / Frame Scan / Panorama Scan
PTZ position OSD	On / off / temporarily

Functions

Privacy masks	24
Text and picture overlay	Name, Date + time, Day of week, 4x text overlay (44 characters each)
Video motion detection	On / off / by schedule
Video motion detection alarm	Alarm output, record video clip, send alarm message, upload image
Tampering detection	On / off / by schedule
Tampering detection alarm	Alarm output, send alarm message
Exceptions	
HHD full / HHD error	On / off
HHD full / HHD error alarm	Alarm output, send alarm message
Network failure detection	On / off
Network failure detection alarm	Alarm output
IP conflict detection	On/Off
IP conflict detection alarm	Alarm output
Illegal login detection	On / off
Illegal login detection alarm	Alarm output, send alarm message

Image control

Specs

Image control

Wide dynamic range	On / off
WDR value	>120 dB (in WDR dual shutter mode)
Backlight compensation	BLC, HLC
White balance	Auto / manual / outdoor / indoor / fluorescent lamp / sodium lamp / ATW
Exposure control	Auto, Manual Iris priority, Shutter priority (includes limits for exposure level, iris and gain)
Slow shutter	On/Off
Focus	Auto /manual / semi-auto
Brightness	Manual
Contrast	Manual
Saturation	Manual
Sharpness	Manual
Day/Night function	Auto / night / day / schedule
Noise reduction	On / off / expert Defog On / off
Electronic Image Stabilisation	On / off
Image rotation	Normal/ rotate 180

Video

Compression algorithm(s)	H.265 (main profile) / H.264 (basic / main / high profile) / MJPEG
Low bit rate encoding	H.265, H.264+
Supported resolutions	
Main Stream (up to 50 / 60 fps)	19201080, 1280960, 1280720
Sub Stream (up to 25 / 30 fps)	704576, 640480, 352288 in 50Hz mode
	704480, 640480, 352240 in 60Hz mode
Third Stream (up to 25 / 30 fps)	19201080, 1280960, 1280720, 704576, 640480, 352288 (50Hz mode)
	19201080, 1280960, 1280720, 704480, 640480, 352240 (60 Hz mode)
MJPEG	Available in sub stream or third stream
Compression bit rate control	Constant bit rate (CBR), variable bit rate (VBR)
Output bit rate (per H.264 stream)	Up to 16384 kbit/s
Number of video output streams	Up to 20 (RTSP)
Total output data rate (max)	50000 kbit/s

Audio

Two-way audio	line in / line out
Compression	G.726 / G.711 (µ-law, a-law) / MP2L2/ PCM/ G.722.1
Input level	Adjustable gain
Connector type	Multifunction terminal block (IN, GND, OUT)

Alarm inputs/output

Input	2x 0 - 5 V
Output	2x
Operational modes	Normally open; normally closed
Connector type	Multifunction terminal block Input: IN1, IN2, GND Output: OUT1, COM1, OUT2, COM2

Storage

Specs

Storage

Storage options	Supports up to 128 GB capacity of micro SD/SDHC/SDXC memory

Network

Interface	10/100 Ethernet
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, DHCP, PPPoE
Password levels	User and Administrator
Connector type	RJ45

Management

Supported browsers	IE7+, Chrome18+, Firefox5.0+, Safari5.02+
Security	HTTPS, IP filter, login lock, PNAC (IEEE802.1x)
Protocols	UPnP, SNMP, Bonjour, ONVIF
Password levels	Administrator / operator / user
User accounts	32

Powering

Power consumption	18 W
Power	12 Vdc, PoE+ (IEEE 802.3at, class 4)
Connector type	DC barrel connector

Environmental

Operating temperature	-30 °C to +65 °C (-22 °F to +149 °F)
Ingress protection	IP65
IR distance	50 m

Mechanical

Dimensions	diameter169 x 161 mm (diameter6.65 x 6.34 in)
Weight	2.45 kg (5.4 lbs)
Housing	Aluminum
Colour	RAL 9003 (signal white)

Order information

PD1022	Network PTZ dome camera, 25x zoom, 2MP, IR, IP65

PD1022 Dimension

161

Φ169
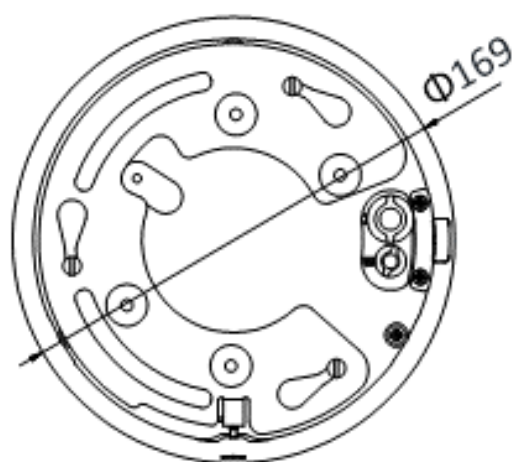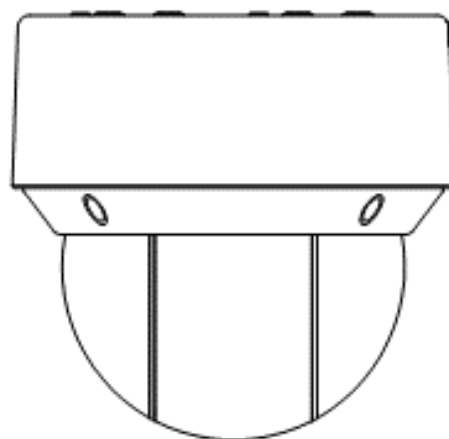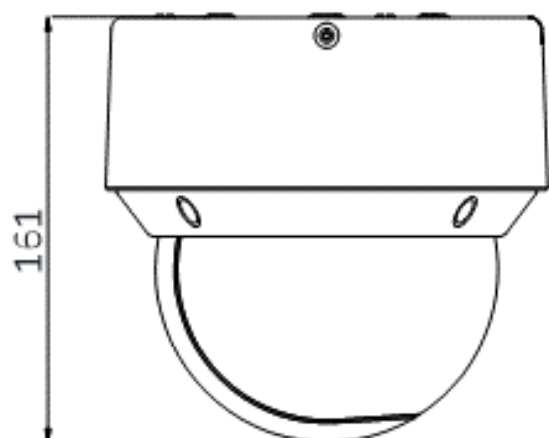
Unit: mm

dP 98: : n; 4QU

Network PTZ dome camera, 20x zoom, 2MP, IR, IP65

DESCRIPTION

h×y dP 98: : n; 4QU u w   uw dhn x   y   uv y z   x   u' y 5k   ×   : 8
   wu   v w 3 wu   yu z   T P /9E: 8 98D80 y   u' y z
w   y u x zu u u 5h×y wu y u   ×y u y   yw×   '   w× u T 5 BA3u x
   y ' y   T 5 BA z   u y y   vy y w   y   z ×y xy   yu G   u y
vu x   x ×u x   u' y y   y y   5h×y dP 98: : n; 4QU zzy   u   u' y
y ×u wy y   yw×   y 3   w× u NZO u x TZO3Qyw   wU u' y g uv   u   3
P yz ' u x ; P P b f 5

FEATURES

1/2.8 Progressive scan CMOS

7 to 94 mm zoom lens

2 MP @ 60 fps (1920 x 1080)

120 dB WDR

Triple-stream H.265, H.264 and MJPEG video

Day/Night with IR-cut filter / WDR / BLC

Electronic Image Stabilisation

ONVIF Profile S

Camera

Image sensor	1/2.8 Progressive scan CMOS
Effective pixels	1920 (H) x 1080 (V)
Zoom	20x optical zoom, 16x digital zoom
Minimum scene illumination	0.05 lux colour, 0.01 lux B/W (@ F1.6, AGC on)
Shutter speed	1 - 1/30,000 s
Lens	Auto Iris (DC)
Lens type	4.7 to 94 mm, F1.6
Horizontal field of view	61.4° (W) 2.9° (T)

Pan / Tilt

Pan travel	360° Continuous
Tilt travel	-5° ~ 90°
Manual speed	Pan: 0.1° ~ 300°/s, tilt: 0.1° ~ 160°/s tilt
Presets	300 Presets
Cruise	4
Sequence	8
Autopan	Yes
Speed by zoom	On/Off
Resume after power loss	Yes
Park function	Preset / Pattern Scan / Patrol Scan / Auto Scan / Tilt Scan / Random Scan / Frame Scan / Panorama Sca
PTZ by scheduled	Preset / Pattern Scan / Patrol Scan / Auto Scan / Tilt Scan / Random Scan / Frame Scan / Panorama Sca
PTZ position OSD	On / off / temporarily

Functions

Privacy masks	8
Text and picture overlay	Name, Date + time, Day of week, 4x text overlay (44 characters each)
Video motion detection	On / off / by schedule
Video motion detection alarm	Alarm output, record video clip, send alarm message, upload image
Tampering detection	On / off / by schedule
Tampering detection alarm	Alarm output, send alarm message
Exceptions	
HHD full / HHD error	On / off
HHD full / HHD error alarm	Alarm output, send alarm message
Network failure detection	On / off
Network failure detection alarm	Alarm output
IP conflict detection	On/Off
IP conflict detection alarm	Alarm output
Illegal login detection	On / off
Illegal login detection alarm	Alarm output, send alarm message

Specs

Functions

Image control

Wide dynamic range	On / off
WDR value	>120 dB (in WDR dual shutter mode)
Backlight compensation	BLC, HLC
White balance	Auto / manual / outdoor / indoor / fluorescent lamp / sodium lamp / ATW
Exposure control	Auto (includes limits for exposure level, iris, shutter and gain) Manual Iris priority (includes limits for exp
Slow shutter	On/Off
Focus	Auto /manual / semi-auto
Brightness	Manual
Contrast	Manual
Saturation	Manual
Sharpness	Manual
Day/Night function	Auto / night / day / schedule
Noise reduction	On / off / expert Defog On / off
Electronic Image Stabilisation	On / off
Image rotation	Normal/ rotate 180

Video

Compression algorithm(s)	H.265 (main profile) / H.264 (basic / main / high profile) / MJPEG
Low bit rate encoding	H.265i, H.264i
Supported resolutions	
Main Stream (up to 50 / 60 fps)	19201080, 1280960, 1280720
Sub Stream (up to 25 / 30 fps)	704576, 640480, 352288 in 50Hz mode
	704480, 640480, 352240 in 60Hz mode
Third Stream (up to 25 / 30 fps)	19201080, 1280960, 1280720, 704576, 640480, 352288 (50Hz mode)
	19201080, 1280960, 1280720, 704480, 640480, 352240 (60 Hz mode)
MJPEG	Available in sub stream or third stream
Compression bit rate control	Constant bit rate (CBR), variable bit rate (VBR)
Output bit rate (per H.264 stream)	Up to 16384 kbit/s
Number of video output streams	Up to 20 (RTSP)
Total output data rate (max)	50000 kbit/s

Audio

Two-way audio	line in / line out
Compression	G.726 / G.711 (µ-law, a-law) / MP2L2/ PCM/ G.722.1
Input level	Adjustable gain
Connector type	Multifunction terminal block (IN, GND, OUT)

Specs

Audio	

Alarm inputs/output	
Input	2x 0 - 5 V
Output	2x
Operational modes	Normally open; normally closed
Connector type	Multifunction terminal block Input: IN1, IN2, GND Output: OUT1, COM1, OUT2, COM2

Storage	
Storage options	Supports up to 128 GB capacity of micro SD/SDHC/SDXC memory

Network	
Interface	10/100 Ethernet
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, DHCP,
Password levels	User and Administrator
Connector type	RJ45

Management	
Supported browsers	IE7+, Chrome18+, Firefox5.0+, Safari5.02+
Security	HTTPS, IP filter, login lock, PNAC (IEEE802.1x)
Protocols	UPnP, SNMP, Bonjour, ONVIF
Password levels	Administrator / operator / user
User accounts	32

Powering	
Power consumption	18 W
Power	12 Vdc, PoE+ (IEEE 802.3at, class 4)
Connector type	DC barrel connector

Environmental	
Operating temperature	-30 °C to +65 °C (-22 °F to +149 °F)
Ingress protection	IP65 IR distance 50 m

Specs

Mechanical	
Dimensions	diameter169 x 161 mm (diameter6.65 x 6.34 in)
Weight	2.45 kg (5.4 lbs)
Housing	Aluminum
Colour	RAL 9003 (signal white)

Order information	
PD1022Z3-EI	Network PTZ dome camera, 20x zoom, 2MP, IR, IP66

S I Q U R A

dP 998@n: 4Q

4 Mp intelligent IP outdoor PTZ camera 36x zoom

DESCRIPTION

h×y dP 998@n: 4Q u @4 y' u y Ud x dhn x y wu y u × u v vv y5M y z ×' ×4' uxy ; B wu y y y ×u u x wyu u'y y u xy u ' y5 h×y ×' ×4 yyx u 3 3u x yw×u u x u 4z w ' y u u y u x uv yz w yx u'y 5h×y wu y u z yx × y u y ' y zyu y u ' xy y u wy yu 5

FEATURES

1/1.8 Progressive scan CMOS imager

4MP @ 60 fps

36x optical zoom, 16x digital zoom

400°/s preset speed

20° tilt above horizon without optical distortion

120 dB WDR (HDR)

Supports EIS, Defog, BLC, and HLC

Intelligent VCA, Auto tracking, AI

IP67 and vandal proof IK10

ONVIF Profile S and G conformant

Py w

a 4 yu ×'×xyz

h×y y' uyxwu yu×u 4 yu wu uv z u y yu ' zT5BA3 T5B@ aVdOS5g yu '@4 y'u y TP/:AB8 9@@80L B8z vy5a y w v u z y uxzu yuy wu vyw z' yx u zxzyy y y 'ux yw x ' wyu 5

c y uxux

a y uyuuvy yu y'uy ×y dP998@n:4Q u xy uu'y y y 5U z y uxux3×y dP998@n:4Q w u ×uu'y zjag.3 cbjlR/d zygux S0ux ×yg uMdU5

d y wyw× wy

h×y dP998@n:4Qwu vy yyx ×:@juw y ×y y ×T4dQ wy 5 /D8:5, v h y;F u B8k0

U u'yy ×u wy y

M xyuy zzyu ywu vy yx wyuy u'y u uxz yw w×u ×'× x u wu'y /9:8xNk Pf03xyz '3NZOu x TZO5k × y' u w '3xyu wu vy yy ×y u'yy y × vu x x×5

N 4 uu w

h×ywu yuzyu yu y y yy z y 'y uu w3 w×u i u yxyx Nu''u'y Py yw 3cv ywfy u Py yw 3Ruwy Py yw 3M x Q wy Py yw 3u uw '3 ×w×u ×y yu xy yw 'u u uyuxuw×' y uzy 5Q vyxxyx xyy 4yu ' vu yx vyw wu zwu yx wyzu yuu wu yxv yuy3×ux 3'u3yw5

Camera

Image sensor	1/1.8" Progressive scan CMOS
Effective pixels	2560 1440 (16:9)
Min. illumination	0.002 lux Color, 0.0002 lux B/W (F/1.5, AGC on)
Shutter speed	1 to 1/30,000 sec
Day/Night	IR-cut filter
Lens	36x zoom
Focal length	5.7 (F/1.5) to 205.2 mm (F/4.5)
Horizontal field of view	59.8° (W) to 2.0° (T)
Minimum focus distance	10 mm (W) to 1500 mm (T)
Lens material	High-grade optical glass

PTZ

Pan range	360° Continuous rotation
Tilt range	-20° to +90°
Number of presets	300
Preset speed	400°/s
Manual speed	0.1°/s to 350°/s Pan; 0.1°/s to 240°/s Tilt
Preset accuracy	0.225°
Features	Preset/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan
Pattern Scan	4 pattern scans, record time over 10 minutes for each scan
Patrol Scan	8 patrols, up to 32 presets for each patrol
Body material	Aluminum alloy and ABS
Internal demister/heater	Standard

Image control

Dynamic range (WDR)	120 dB, HDR
White balance	Auto/Manual/ATW (Auto-tracking White Balance) /Indoor/Outdoor/
	Fluorescent Lamp/Sodium Lamp
Image settings	Sharpness, Brightness, Contrast, Color, EV
SNR	Better than 50dB
Noise reduction	3DNR
Electronic Image Stabilization (EIS)	Yes
Image enhancement	HLC/BLC/Defog/Regional Exposure/Regional Focus
Digital zoom	16x
Picture overlay	Picture can be overlaid on video with 512x512 24-bit bmp format
	Text, date & time, compass
Privacy masks	24 programmable polygon privacy masks

Video

Video compression	H.265 (MP/+), H.264 (BP/MP/HP/+), MJPEG
Video bit rate	32 kbps to 16 Mbps
Max resolution	2560x1440
Max frame rate	50/60 fps (120dB WDR= off)

Specs

Video

Main Stream	
H.265/H.264/MJPEG @ 50/60 fps	2560x1440, 2048x1536, 1920x1080, 1280x960, 1280x720
Sub Stream	
H.265/H.264/MJPEG @ 25/30 fps	704x576, 640x480, 352x288
Third stream	
H.265/H.264/MJPEG @ 25/30 fps	1920x1080, 1280x960, 1280x720, 704x576, 640x480, 352x288
Analog video output	PAL/NTSC (BNC on breakout cable)

Audio

Audio compression	G.711/G.722.1/G.726/MP2L2/PCM
Audio bit rate	64 kbps (G.711) / 16 kbps (G.722.1) / 16 kbps (G.726) / 32-160 kbps (MP2L2)
Environment noise filtering	Support
Audio Input	1x Mic in/Line in interface, 2-2.4Vpp 1k, 10%
Audio Output	1x Audio output interface Line level, impedance: 600
Audio sampling rate	16 kHz / 32 kHz / 44.1 kHz / 48 kHz

Video Analytics

Line crossing detection	Cross a user-defined virtual line, unidirectional or bidirectional
Intrusion detection	Enter and loiter in a user-defined region
Region entrance	Enter a user-defined region
Region exiting	Exit from a user-defined region
Event detections	Unattended Baggage Detection, Object Removal Detection, Face Detection,
	Audio Exception Detection
Recognition	Face detection
Auto tracking	Manual Tracking, Auto Tracking, Event Tracking
	(support tracking specified target types such as human and vehicle)

Network

Network storage	Micro SD/SDHC/SDXC up to 256 GB; NAS (Support NFS, SMBv1/CIFS)
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP,
	RTSP, RTCP, RTP, TCP/IP, DHCP, PPPoE, Bonjour, Diamond, NTCIP.
Security	3-level user authentication (ID and PW), Host authentication (MAC address);
	HTTPS encryption; IEEE 802.1x port-based network access control; IP address filtering
Standard	ONVIF (Profile S, Profile G), PSIA, CGI, ISAPI, Siqura API
Web browser	IE 9, 10 and 11; limited support for Edge, Chrome, Firefox

Environmental

Ingress protection level	IP67
Impact protection	IK10
Overvoltage protection	6000V Lightning Protection, Surge Protection and Voltage Transient Protection
Ambient operating temperature	-40 °C to +65 °C (-40 °F to +149 °F),
Relative humidity	5 to 100%

Specs

Environmental

Power supply	24 Vac 10%, 802.3bt Type 3 (Hi-PoE, 50 W)
Power consumption	Max. 50 W

Mechanical

Interfaces	Break-out cable
Dimensions	diameter 231.1 x 335.6 mm
Weight	6 kg
Color	RAL 9003 (signal white)

Ordering information

PD1104Z2-E	4 Mp intelligent IP outdoor PTZ camera 36x zoom

DIMENSIONS IN MM.

ACCESSORIES

PD1104Z2-E(I)	Accessories
	CM11 Ceiling mount for PD1100 series
	CM12 Ceiling mount for PD1100-series, 50 cm
	CM15 Ceiling mount for PD1100-series, 25 cm
	PM07 Pole and wall mount for PD1100 series
	PM07B Pole, wall and box mount for PD1100 series
	PM08 Pole parapet mount for PD1100 series
	WM12 Wall mount for PD1100 series
	WM12B Wall and box mount for PD1100 series
	WM16 Gooseneck mount for PD1100 series
	WM17 Corner and wall mount for PD1100 series
	WM17B Corner, wall and box mount for PD1100 series

RELATED

Siqura PTZ dome accessoires
PTZ dome mounting accessories

S I Q U R A

dP 998@n: 4QU

4 Mp intelligent IP outdoor PTZ camera 36x zoom wit IR

D E S C R I P T I O N

h×y dP 998@n: 4QU u @4 y' u   y Ud   x   dhn x   y wu   y u   ×   u v   vv y 5M
   y z   ×' ×4' uxy ; B   wu   y   y   y   ×u   u x wyu   u' y   y u
  xy u ' y 5 h×y   y' u yx Uf   u   y   y w   u' y   y : 88
 ' × w   x   5 h×y ×' ×4   yyx   u 3   3u x   yw×u   u x u   4z w ' y
   u   u y   u x   uv y z w   yx   u' y 5 h×y wu   y u   z   yx   × y y u
  y   ' y   zyu   y   u   '   xy   y   u wy yu 5

F E A T U R E S

1/1.8 Progressive scan CMOS imager

4MP @ 60 fps

36x optical zoom, 16x digital zoom

400°/s preset speed

Integrated IR illumination up to 200 m

120 dB WDR (HDR)

Supports EIS, Defog, BLC, and HLC

Intelligent VCA, Auto tracking, AI

IP67 and vandal proof IK10

ONVIF Profile S and G conformant

P y w

a 4 yu ×'×xyz

h×y y' u yx wu y u×u 4 yu wu uv z u y yu ' zT 5 BA3
T 5 B@ a VdOS 5g yu ' @4 y'u y TP /: AB8 9@@80L B8 z v y5a y
w v u z y u x zu y u y wu vy w z' yx u z x zzy y y
y ' u x yw x ' wy u 5

c y u xu x

a y u y u u uv y yu y' u y ×y dP 998@ n: 4Q u xy u u'y y
y 5U z y u xu x 3 ×y dP 998@ n: 4Q w u ×u u ' y zj a g. 3
c b j UR /d z y gu x S 0u x ×y g u Mdl5

d y wy w× wy

h×y dP 998@ n: 4Q wu vy y yx ×: @j uw y ×y y ×T 4d Q wy 5
/D8: 5 v h y; F u B8 k 0

U u'y y ×u wy y

M xy u y zzyu y wu vy yx wyu y u'y u u x z y w w×u ×'×
x u w u ' y /9: 8 xN k P f 0 3 xyz ' 3NZO u x TZO 5k × y' u w ' 3xy u wu vy
yy ×y u'y y y × vu x x ×5

N 4 u u w

h×y wu y u zyu y u y y y y z y 'y u u w 3 w×u i u y xyx Nu''u'y
Py yw 3 c v yw f y u Py yw 3 Ru wy Py yw 3 M x Q wy Py yw 3u
uw ' 3 ×w×u ×y y u xy yw ' u u u y u x u w× ' y
uzy 5Q vy xx yx xyy 4yu ' vu yx v yw wu z wu yx wy zu y u u
wu yx v yu y 3 ×ux 3' u 3y w5

Camera

Image sensor	1/1.8" Progressive scan CMOS
Effective pixels	2560 1440 (16:9)
Min. illumination	0.002 lux Color, 0.0002 lux B/W (F/1.5, AGC on)
Shutter speed	1 to 1/30,000 sec
Day/Night	IR-cut filter
Lens	36x zoom
Focal length	5.7 (F/1.5) to 205.2 mm (F/4.5)
Horizontal field of view	59.8° (W) to 2.0° (T)
Minimum focus distance	10 mm (W) to 1500 mm (T)
Lens material	High-grade optical glass
IR ilumination	850 nm
IR range	200 m

PTZ

Pan range	360° Continuous rotation
Tilt range	-20° to +90°
Number of presets	300
Preset speed	400°/s
Manual speed	0.1°/s to 350°/s Pan; 0.1°/s to 240°/s Tilt
Preset accuracy	0.225°
Features	Preset/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan
Pattern Scan	4 pattern scans, record time over 10 minutes for each scan
Patrol Scan	8 patrols, up to 32 presets for each patrol
Body material	Aluminum alloy and ABS
Internal demister/heater	Standard

Image control

Dynamic range (WDR)	120 dB, HDR
White balance	Auto/Manual/ATW (Auto-tracking White Balance) /Indoor/Outdoor/
	Fluorescent Lamp/Sodium Lamp
Image settings	Sharpness, Brightness, Contrast, Color, EV
SNR	Better than 50dB
Noise reduction	3DNR
Electronic Image Stabilization (EIS)	Yes
Image enhancement	HLC/BLC/Defog/Regional Exposure/Regional Focus
Digital zoom	16x
Picture overlay	Picture can be overlaid on video with 512x512 24-bit bmp format
	Text, date & time, compass
Privacy masks	24 programmable polygon privacy masks

Video

Video compression	H.265 (MP/+), H.264 (BP/MP/HP/+), MJPEG
Video bit rate	32 kbps to 16 Mbps

Specs

Video

Max resolution	2560x1440
Max frame rate	50/60 fps (120dB WDR= off)
Main Stream	
H.265/H.264/MJPEG @ 50/60 fps	2560x1440, 2048x1536, 1920x1080, 1280x960, 1280x720
Sub Stream	
H.265/H.264/MJPEG @ 25/30 fps	704x576, 640x480, 352x288
Third stream	
H.265/H.264/MJPEG @ 25/30 fps	1920x1080, 1280x960, 1280x720, 704x576, 640x480, 352x288
Analog video output	PAL/NTSC (BNC on breakout cable)

Audio

Audio compression	G.711/G.722.1/G.726/MP2L2/PCM
Audio bit rate	64 kbps (G.711) / 16 kbps (G.722.1) / 16 kbps (G.726) / 32-160 kbps (MP2L2)
Environment noise filtering	Support
Audio Input	1x Mic in/Line in interface, 2-2.4Vpp 1k, 10%
Audio Output	1x Audio output interface Line level, impedance: 600
Audio sampling rate	16 kHz / 32 kHz / 44.1 kHz / 48 kHz

Video Analytics

Line crossing detection	Cross a user-defined virtual line, unidirectional or bidirectional
Intrusion detection	Enter and loiter in a user-defined region
Region entrance	Enter a user-defined region
Region exiting	Exit from a user-defined region
Event detections	Unattended Baggage Detection, Object Removal Detection, Face Detection,
	Audio Exception Detection
Recognition	Face detection
Auto tracking	Manual Tracking, Auto Tracking, Event Tracking
	(support tracking specified target types such as human and vehicle)

Network

Network storage	Micro SD/SDHC/SDXC up to 256 GB; NAS (Support NFS, SMBv1/CIFS)
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP,
	RTSP, RTCP, RTP, TCP/IP, DHCP, PPPoE, Bonjour, Diamond, NTCIP.
Security	3-level user authentication (ID and PW), Host authentication (MAC address);
	HTTPS encryption; IEEE 802.1x port-based network access control; IP address filtering
Standard	ONVIF (Profile S, Profile G), PSIA, CGI, ISAPI, Siqura API
Web browser	IE 9, 10 and 11; limited support for Edge, Chrome, Firefox

Environmental

|	
Ingress protection level	IP67
Impact protection	IK10
Overvoltage protection	6000V Lightning Protection, Surge Protection and Voltage Transient Protection
Ambient operating temperature	-40 °C to +65 °C (-40 °F to +149 °F),

Specs

Environmental

Relative humidity	5 to 100%
Power supply	24 Vac 10%, 802.3bt Type 3 (Hi-PoE, 50 W)
Power consumption	Max. 60 W

Mechanical

Interfaces	Break-out cable
Dimensions	diameter 266.6 x 410 mm
Weight	8 kg
Color	RAL 9003 (signal white)

Ordering information

PD1104Z2-EI	4 Mp intelligent IP outdoor PTZ camera 36x zoom with IR

ACCESSORIES

PD1104Z2-E(I)	Accessories
	CM11 Ceiling mount for PD1100 series
	CM12 Ceiling mount for PD1100-series, 50 cm
	CM15 Ceiling mount for PD1100-series, 25 cm
	PM07 Pole and wall mount for PD1100 series
	PM07B Pole, wall and box mount for PD1100 series
	PM08 Pole parapet mount for PD1100 series
	WM12 Wall mount for PD1100 series
	WM12B Wall and box mount for PD1100 series
	WM16 Gooseneck mount for PD1100 series
	WM17 Corner and wall mount for PD1100 series
	WM17B Corner, wall and box mount for PD1100 series

DIMENSIONS IN MM:

408

Φ266.6
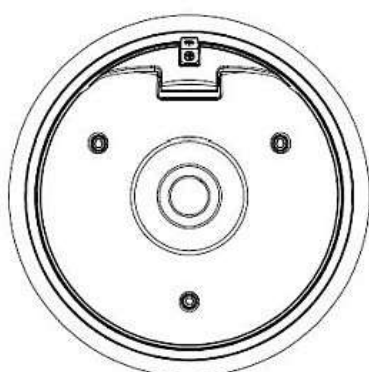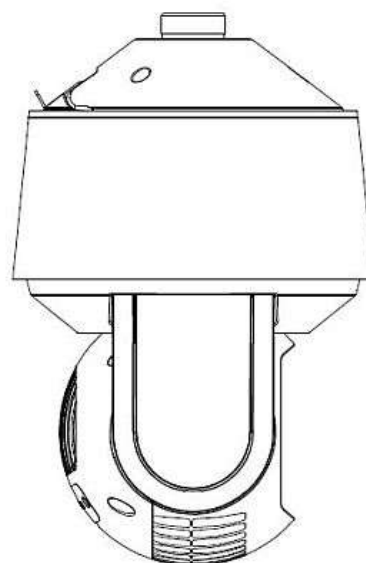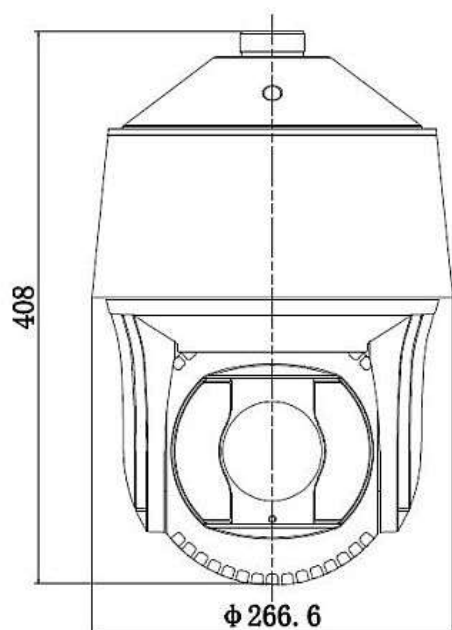
Unit:mm

RELATED

Siqura PTZ dome accessoires
PTZ dome mounting accessories

Cámaras de Tránsito

TrafficPTZ Ultimo

Full HD PTZ IP camera system

- ✓ 1/2'' Sony CMOS sensor
- ✓ Full HD (2.42 MP) resolution
- ✓ H.264, MJPEG, optional MPEG-4, MPEG-2 compression
- ✓ 30x Optical zoom
- ✓ Temperature-hardened and IP66
- ✓ Day/Night with IR-cut filter
- ✓ Variable speeds 0.02-100°/s pan, 0.02-40°/s tilt
- ✓ Horizontal continuous rotation, vertical -90° / +40°
- ✓ Wind load ≤160 km/h operational, ≤200 km/h stationary
- ✓ Compliant to ONVIF Profile S, NTCIP 1205, NEMA TS2
- ✓ Wiper standard, washer options

Description
The TrafficPTZ Ultimo is a high-precision, full-featured network PTZ camera providing high-quality, high-definition images. The tightly integrated 30x optical zoom, autofocus lens makes for the easiest installation and remote adjustment.

Construction
The accurate top-mount construction ensures vision beyond the horizon and continuous rotation on the horizontal axis, combining high speed and absolute tracking accuracy, both in manual and in patrol mode. The TrafficPTZ Ultimo is temperature-hardened for demanding applications in cold or hot environments.

Multistream high definition
The TrafficPTZ Ultimo cameras have multiple stream capability for simultaneous streaming of one or more H.264 streams, combined with MJPEG. Two independent H.264/MJPEG encoders can generate full-HD 1080p video streams at full frame rate. Optionally, a third encoder can be configured for MPEG-4 or MPEG-2, to guarantee backwards compatibility with many legacy control systems. Multiple combinations of resolution and frame rate can be configured to satisfy different live viewing and recording scenarios.

Open standards
Its careful assembly and compliance to open standards ensure that the TrafficPTZ Ultimo integrates with the most common VMSes 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 customisation. Moreover, being ONVIF Profile S compliant, the camera is supported even if your software does not have a dedicated driver.

Day/Night, backlight compensation, and wide dynamic range
The TrafficPTZ Ultimo provides automatic day/night functionality, for use in low light situations. Backlight compensation enhances image visibility in difficult lighting situations. This ensures quality pictures at all times. Wide dynamic range solves the problem of overlit images by taking the better of two pictures with different light references.

TrafficPTZ Ultimo

Full HD PTZ IP camera system

Camera

Image sensor	1/2" Sony CMOS
Video standards	PAL 25 fps, NTSC 30 fps
Output resolutions	1080p (1920x1080); 720p (1280x720); XVGA (1024x768); SVGA (800x600); D1 (720x480); VGA (640x480); CIF (352x240)
Effective pixels	1920 (H) x 1080 (V)
Shutter speed	1/30 ~ 1/30000s, digital slow shutter 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 Color DSS (1/7.5s) 0.0375lux, BW DSS (1/7.5s) 0.002lux
Horizontal field of view	W: 61.2° / T: 2.32°
Focal length	6mm (F1.5) ~ 180mm (F4.3)
Digital Image Stabilization	Off / On

Image control

WDR/BLC	Off / WDR / BLC
WDR value	>130 dB
High Light Compensation	Off / On / Night Only
White balance	Auto / One Push / Manual / Indoor / Outdoor
Gain Control (AGC)	Off / On
Iris	0 ~ 20 steps
Exposure	Auto / Iris.P / Shut.P / 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	Max. 24 Areas
Optical zoom	30x
Digital zoom	32x

Video

Compression	H.264, MJPEG, optional MPEG-4 and MPEG-2
Aspect ratio	Selectable 16:9 or 4:3, without scaling, no transcoding, no black bars
Video encoder 1	H.264 or MJPEG
Video encoder 2	H.264 or MJPEG
Number of video streams	Max. 20 streams per encoder
Total number of streams	Max. 80 Mbps total bitrate
Snapshot	JPEG pull, FTP push

TrafficPTZ Ultimo
Full HD PTZ IP camera system

Network

Interface(s)	100 Mbps FE Ethernet (RJ-45)
Protocols	IPv4, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMPv1/2/3, SNMPv1/2/3, QoS, ONVIF-S, 802.1X, NTCIP-1205

Storage

Storage options	Micro SD card, 64 GB, NAS
Local recording	Continuous, scheduled, alarm

Powering

Power consumption	110 W incl. heater, 60W without heater
Power	230 Vac; 120 Vac; 24 Vac (separate models)

Environmental

Operating temperature	Recommended continuous operating temperature: -35 ˚C / -31 ˚F (with heater) to +65 ˚C / 149 ˚F Temperature Certificate according to NEMA TS2 test C-G: -35 °C / -31 °F to +75 °C / +167 °F
Relative humidity	0% to 100%
MTBF (Mean Time Between Failures)	>100,000 hours at 50 ˚C

Test specification

Category	Tests passed
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	UL, file E249792
Environmental – Temperature	NEMA TS2 section 2.2.7.3 t/m 2.2.7.6. And 65°C continuous
Environmental – Vibration	NEMA TS2 section 2.2.8 TR2130C section 5
Environmental – Shock	NEMA TS2 section 2.2.9

TrafficPTZ Ultimo

Full HD PTZ IP camera system

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	3x 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 40°/s
Speed-by-Zoom (proportional)	Yes, for Optical zoom as well as Digital zoom
Preset accuracy	0.02°
Dimensions (h x w x d)	See drawings for dimensions
Weight	17 kg

Ordering information

Models	Description
TPU24	TrafficPTZ Ultimo Full HD PTZ IP camera system, 24 Vac
TPU120	TrafficPTZ Ultimo Full HD PTZ IP camera system, 120 Vac
TPU230	TrafficPTZ Ultimo Full HD PTZ IP camera system, 230 Vac

| Mounting accessories	Description
TPTM01	Top Mount (Parapet) bracket for TrafficPTZ camera
TPWM01	Wall Mount bracket for TrafficPTZ camera
TPPM01	Pole Mount bracket for TrafficPTZ camera
TPCM01	Corner Mount bracket for TrafficPTZ camera

Washer accessories	Description
TPWP01	Washer pump 23L 11 m for TrafficPTZ camera, 230/120/24 Vac
TPWP02/230	Washer pump 23L 30 m for TrafficPTZ camera, 230 Vac
TPWP02/120	Washer pump 23L 30 m for TrafficPTZ camera, 120 Vac
TPWP03	Washer pump 5L 5 m for TrafficPTZ camera, 230/120/24 Vac
SA-WP10-10m-VSF 24 v2	10 liters washer tank, pump 10 m delivery head, 316L frame, 24 Vac

Spares	Description
BC840v2-TP	TrafficPTZ Ultimo Camera Module
TPSS01	Sunshield for TrafficPTZ and TFHx01
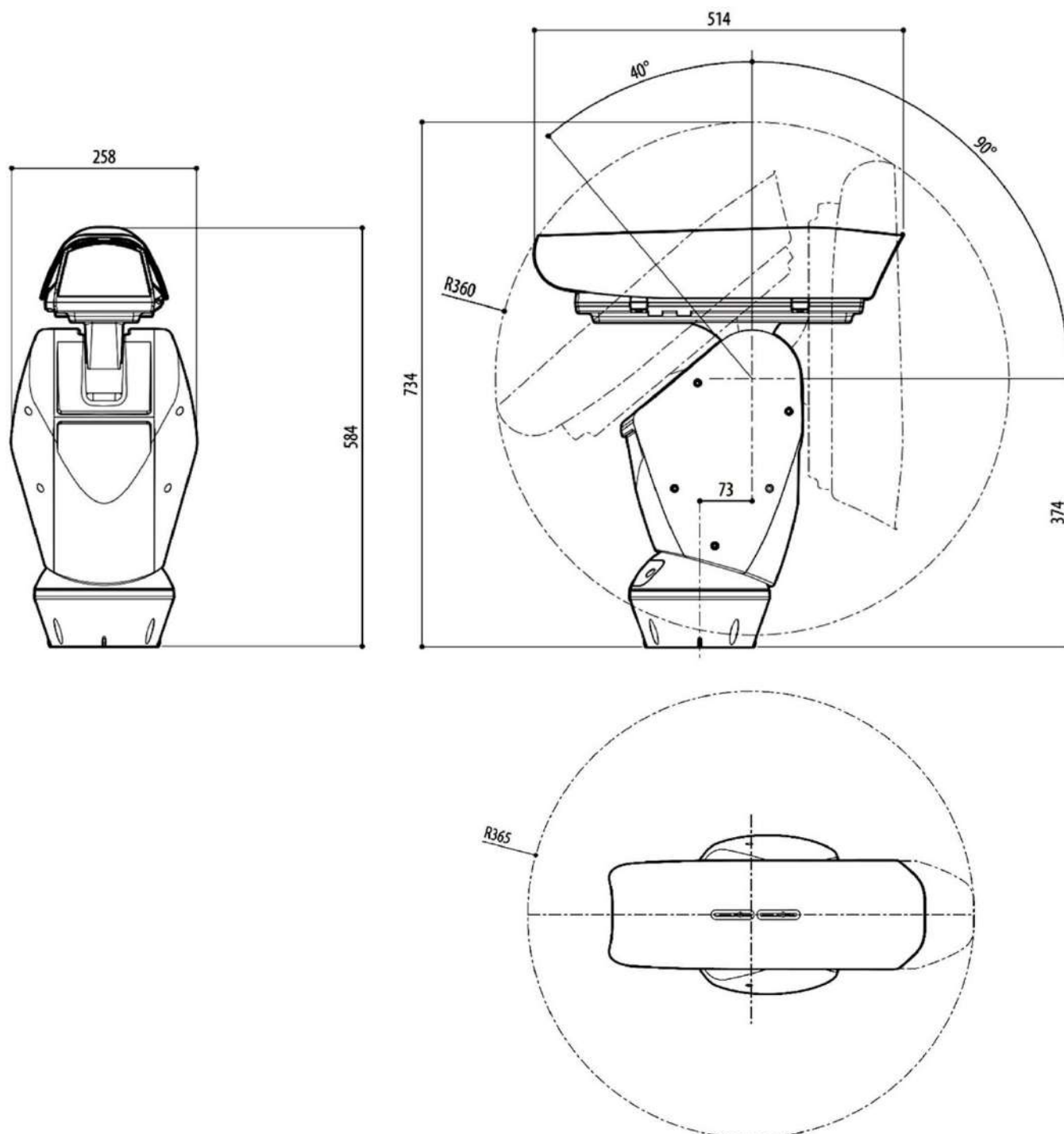
Dimensions

Cámaras ANPR

(Cámaras para lectura de placas)

SIQURA

TATTILE

uwp V

3MP Dual-Sensor ANPR Camera

DESCRIPTION

FEATURES

>95% Accuracy of onboard ANPR
Recognition up to 200km/hr
One-lane Coverage
Speed estimation
Webpage Remote Control
Video streaming 24/7
ONVIF Compliance
Local storage up to 128GB
Waterproof IP67
Built-in IR illuminator
Support GPS/LTE(Optional)

Features and Performance

Lane Detected	1
Max Vehicle Speed [km/h]	200
Working Distance [m]	Up to 25
Detection	99%
Reading	>95%
OCR ANPR engine	on board
2nd Lever OCR	optional
Grabbing	Up to 60 fps
Classification	optional
Vehicle Color	optional
Vehicle Brand	optional
Vehicle Model	optional
AES256	Yes
SHA2	Yes
Compression	JPG
Streaming	Color video streaming via standard RTSP protocol

Configuration

Web Server	Installation and configuration with on board Web Server
TCP/IP Server	Configuration and monitoring through TCP/IP protocol. (SDK provided)
Date and Hour	Synchronization via NTP protocol, IEEE1588, GPS
Software Update	Upgrading via Web Interface and SDK

Data Transmission

FTP	FTP Client to FTP Server mode for remote data transmission; Multiple IP servers addressable
TCP/IP	Tattile TCP/IP open protocol; (SDK provided)
Standard protocols	XML; SNMP; NTCIP; DATEX2; UTMC; ONVIF; MODBUS
Serial Port	Insulated RS485

Operation Mode

|	
Free Run	Continuous processing with automatic plate detection
Triggered	Image capture and processing triggered by Ethernet command or digital signal

System

ANPR camera	Up to 3 Megapixel grayscale sensor
Context camera	Up to 3 Megapixel color sensor
Illuminator	10 high power LEDs, InfraRed @ 850 nm
Lenses	C-Mount. Many focal lengths available.
Operating System	Linux Operating System
Digital I/O	2 Inputs - 2 Outputs 1 Strobe output
Connectors	Waterproof circular connector
IP Protection	Waterproof IP67
Ethernet	GigaBit Ethernet 10/100/1000

Specs

System	
Storage	uSD up to 128 GB
GPS	Optional
LTE	Optional

Technical Data	
Operating & Storage Temperature	From -40° to +60° C
Operating & Storage Humidity	From 10% to 90% non condensing
Power supply voltage	24 Vdc
Power consumption	15 W (max)

Ordering Information	
F01870	VEGA1 Long Range
F01872	VEGA1 Short Range
F01836	Power Supply for Vega and Vega1 series
T19362	GPS module for Vega1
T19841	Pole Collar for Vega and Vega1 series
T19943	Horizontal Pole Collar for Vega and Vega1 series
T19958	MicroSD 64GB for Vega and Vega1 series instead of 8GB
LIC_00019	Brand Color and Classification Software for Vega1

VEGA 1 DIMENSION IN MM
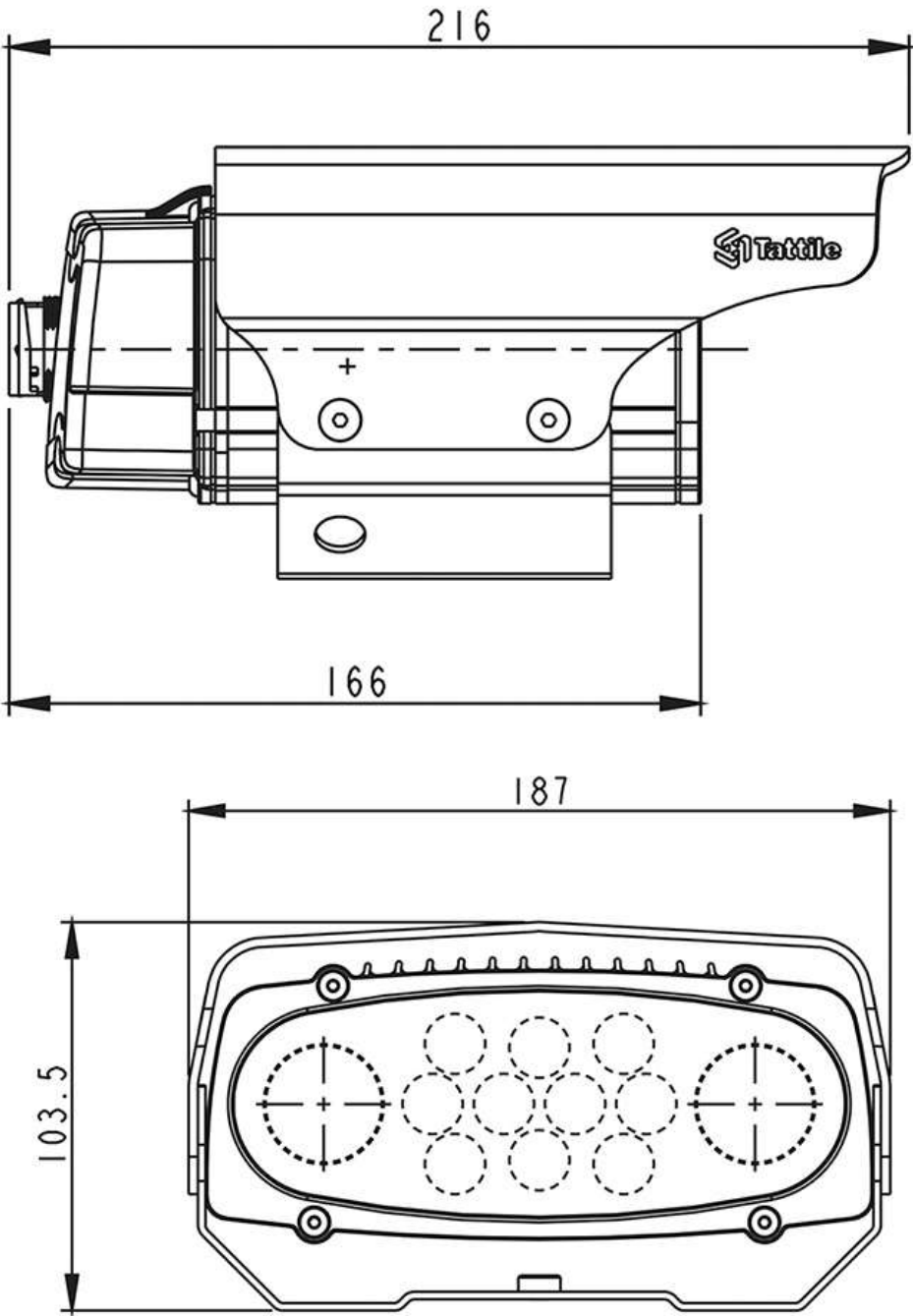
TATTILE

uwp r p zs

2MP ANPR Camera

DESCRIPTION

r   ut
.   G   G   L
G   l   lu   B   uC
L   G
r   l   L

FEATURES

>95% Accuracy of onboard ANPR

Recognition up to 150km/h

One-lane Coverage

Webpage Remote Control

Local storage up to 128GB

Waterproof IP67

Built-in IR illuminator

Features and Performance

	BASIC SHORT RANGE	BASIC LONG RANGE
Lane Detected	1	
Max Vehicle Speed [km/h]	70	150
Working Distance [m]	up to 8	up to 25
Detection	99%	
Reading	>95%	
OCR ANPR engine	on board	
2nd Lever OCR	not available	
Grabbing	Up to 60 fps	
AES256	Yes	
SHA2	Yes	
Compression	JPG	

Configuration

Web Server	Installation and configuration by Web Server on board
TCP/IP Server	Configuration and monitoring through TCP/IP protocol. (SDK provided)
Date and Hour	Synchronization via NTP protocol, IEEE1588
Software Update	Upgrading via Web Interface and SDK

Data Transmission

FTP	FTP Client to FTP Server mode for remote data transmission; Multiple IP servers addressable
TCP/IP	Tattile TCP/IP open protocol; (SDK provided)
Wiegand	Yes
Standard protocols	XML; SNMP; NTCIP; DATEX2; UTMC; MODBUS
Serial Port	Insulated RS485

Op. Mode

Free Run	Continuous processing with automatic plate detection
Triggered	Image capture and processing triggered by Ethernet command or digital signal

System

ANPR camera	2 MPX BW
	2 MPx Color (Color Version)
Illuminator	8 high power LEDs, InfraRed @ 850 nm
Lenses	C-Mount. Many focal lengths available
Operating System	Linux Operating System
Digital I/O	2 Optoisolated input - 2 Relay Output 1 Strobe output
Connectors	Safe Connector
IP Protection	Waterproof IP67
Ethernet	GigaBit Ethernet 10/100/1000
Storage	uSD up to 128 GB
WiFi (Easinstall)	Yes
Vandal proof Connector	Yes

Specs

System

Technical Datas

Operating & Storage Temperature	From -40° to +60° C
Operating & Storage Humidity	From 10% to 90% non condensing
Dimensions	178 x 90 x 133 mm (WxHxL)
Weight [kg]	1.5
Power supply voltage	24 Vdc, PoE
Power consumption	13 W (max)

Ordering Information

F01751	VEGA Basic Short Range L 16mm BF 5MT D4.0 Color
F01753	VEGA Basic Long Range L 25mm BF 14MT D4.0 Color
F01754	VEGA Basic Short Range L 16mm BF 5MT D4.0
F01755	VEGA Basic Long Range L 25mm BF 14MT D4.0
F01756	VEGA Basic Long Range L 35mm BF 18MT D4.1
F01836	Power Supply for Vega and Vega1 series
T19841	Pole Collar for Vega and Vega1 series
T19943	Horizontal Pole Collar for Vega and Vega1 series
T19958	MicroSD 64GB for Vega and Vega1 series instead of 8GB

VEGA BASIC DIMENSION IN MM