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.
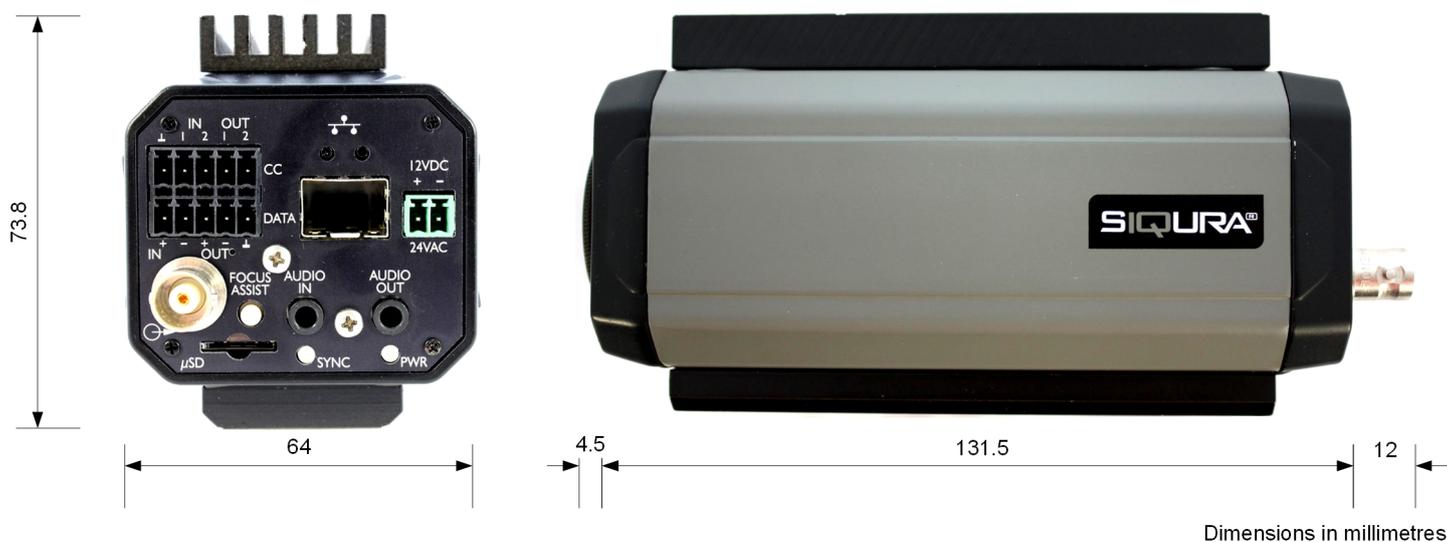
Audio, I/O contacts, and analogue output

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.

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