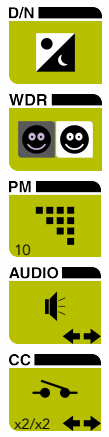# Features

- 1/3" Pixim DPS® Seawolf imager
- Day/night with IR-cut filter
- Super wide dynamic range
- Backlight compensation
- 2 alarm inputs/2 outputs
- Analog output
- Two-way audio
- 10 privacy masks
- 24 VAC; 12 VDC/24 VDC; 802.3af PoE
- Optical output option

WINNER
Security Industry Association
NEW PRODUCT SHOWCASE
Judges' Choice Award
ISC West 2012

BC620WDR
Network Super WDR Box Camera

Description

The Siqura® BC620WDR is a network box camera which provides superior low light performance and wide dynamic range. It is also a highly flexible platform which can provide both embedded analytics as well as multi-stream encoding. With a built-in SFP option, the BC620WDR is ready for the widest range of applications.

Multistream/multicodec

The versatile BC620WDR 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 BC620WDR is fitted with video analytics to check the health of the camera. This image quality monitor analyzes contrast, exposure, sharpness and noise. Camera tampering analytics detect any 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)

The BC620WDR is designed with OSA offering standardised streaming video and remote control based on international standards and tested with different vendors. A comprehensive HTTP API gives access to all controls and makes integration easy. The BC620WDR also supports the unique Siqura® MX™ protocol.

Audio, I/O contacts, and analog output

By combining streaming video with duplex audio and I/O contacts over IP, the BC620WDR provides all the interfaces necessary for any IP CCTV application. The BC620WDR is a hybrid solution and can provide local video for a public view monitor or local DVR.

Power source choices

The BC620WDR can be powered by 12 VDC/24 VDC or 24 VAC (terminal block) 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.
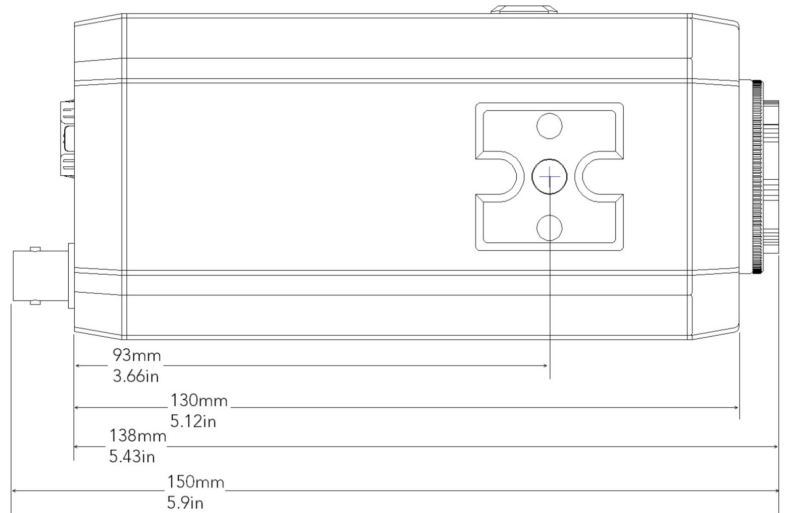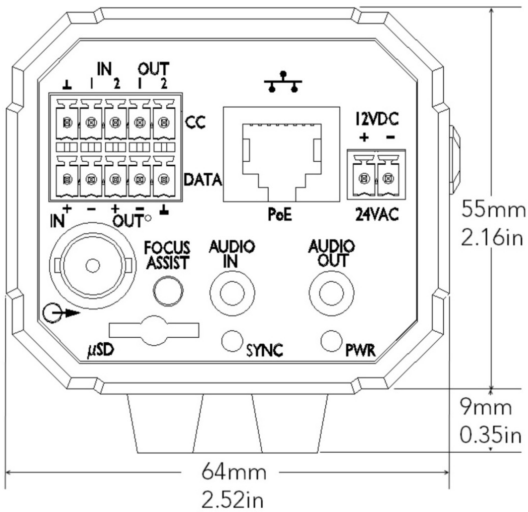
Award-winning camera

At the ISC West 2012 trade show, the BC620WDR series received the New Product Showcase Judges' Choice Award from the Security Industry Association. The Judges' Choice Award is one of two primary awards and is given for the product or service that, in the opinion of the judges, deserves recognition for its unique approach to a security solution.

Powered by
PIXIM®
SEAWOLF
TKH GROUP
SIQURA®

Fiber option

A fiber option is available for direct connection of fiber to the camera via a flexible SFP interface. The XSNet™ range of SFP modules, with options for both single mode and multi-mode are certified for use with this camera.

Technical Specifications

Image control	
Wide dynamic range	17-bits and 102dB (minimum); 20-bits and 120dB (maximum)
WDR zones	4 predefined
Backlight compensation	Yes
Auto white balance	ATW, AWB (push to set)
ATW range	Normal: 2800K – 7500K; extended: 2000K – 11000K
Metering zones	Center, left, right, top, bottom, or auto
Noise reduction	3D motion adaptive
Automatic gain control	On/off (0-50dB gain selectable)
Flicker reduction	On (Pixim EFR)/off
Day/night (IR-cut filter)	Auto/manual/GPIO
Digital slow shutter	2x - 32x
Focus assistant	On-screen meter (via push button/ webpage)

Technical Specifications
BC620WDR

Camera

Image sensor	1/3" Pixim DPS® Seawolf imager
Video standards	PAL/NTSC (selectable via menu)
Optical format	1/3" (6.3mm diagonal)
Image capture	Progressive scan
Image resolution - horizontal	690 HTVLE
Image resolution - vertical	460+VTVL
Output resolutions	
D1	720x480 (NTSC)/ 720x576 (PAL)
½D1	352x480 (NTSC)/ 352x576 (PAL)
2CIF	720x240 (NTSC)/ 720x288 (PAL)
CIF	352x240 (NTSC)/ 352x288 (PAL)
QCIF	176x120 (NTSC)/ 176x144 (PAL)
Pixel count	409,388
Shutter	1/30 (1/25) ~ 1/30, 720 auto
Shuttering	Global electronic shuttering
Output modes	Interlaced or progressive
Video output	1 Vpp, 75Ω, BNC
Lens mount	CS/C
Lens type	DC iris, manual
Signal-to-noise ratio	50dB, 53dB (maximum)
Minimum scene illumination	0.1 lux colour, 0.05lux (b/w), F1.2, 50IRE

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 motion detection	Yes (user-defined masking)
Camera health	Focus, contrast, SNR, exposure
Tamper monitoring	Image positioning (up to 16 presets)
Video settings	User profiles, contrast, brightness, colour saturation, hue, sharpness

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 MP or HP (ISO/IEC 14496-10), MPEG-4 SP Layer 5 (ISO/IEC 14496-2), MPEG-2 (ISO/IEC 13818-2), MJPEG
Types of streaming	UDP/IP (multicast and/or unicast)
Number of output streams	Up to 20
Encoding latency	<130ms typ
GOP structure	I, IP (selectable/user profiles)
Quad streaming	2x D1 at 30fps H.264 + D1 at 30fps MPEG-2, MPEG-4, or MJPEG + CIF at 5fps MPEG-2, MPEG-4, or MJPEG
Output data rate	Up to 20 Mb/s (CBR or VBR selectable/user profiles)

Technical Specifications
BC620WDR

Network	
Interface(s)	RJ-45 or SFP (modules not included)
Protocols	H.264 BP, MPEG-4 ES, MPEG-2, RTP, UDP, IP, DHCP, IGMPv2, RTSP, (S)NTP, MX/IP, HTTP, SNMP v2, DiffServ, SAP, UPnP

Audio	
Number of channels	1 full-duplex stereo (line level); mono (mic level)
Number of streams	3 (multicast and/or unicast)
Maximum bandwidth	20 Hz to 20 kHz
Sampling resolution	8-bit linear PCM or G.711
Input level	Adjustable, mic or line
Output level	Adjustable, 3V pk-pk
Input impedance	>20kΩ or 600Ω
Output impedance	<100Ω

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	300b/s to 230.4kbps
PTZ control interface(s)	Serial tunneling, webpage, HTTP (API), NTCIP (SNMP)
PTZ control protocols	Standard Pelco-D, Bosch, other remote loadable protocols

Contact closures	
Inputs	Normally open (fail-safe) (2)
Outputs	Fail-safe, potential-free (2)

Storage	
Storage options	Micro SD card, 64 GB

Powering	
Power consumption	7 W
Power	20-30 VAC, 11-30 VDC, 802.3af PoE
Power adapter (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)

Mechanical	
Dimensions (h x w x d)	63.8 x 64 x 150mm (2.51 x 2.52 x 5.90in)
Weight	146g (6.09oz)
Mounting interface	¼inch 20-thread top or bottom (removable block)
Colour	Black/Grey

Ordering information

Models	Description
BC620WDR	Network box camera, Super WDR, VCA, D1 resolution, dual H.264
BC620WDR /SFP	Network box camera, Super WDR, VCA, D1 resolution, dual H.264 with SFP interface
PSA-UN12DC with ferrules	Power adapter, 110-230 VAC, 60/50hz to 12 VDC, 1.5A, ferrules, with US/EU/UK plug adapters (included)
Siqura WM-04	Indoor wall bracket
Siqura HSG01	Housing, fixed camera
Siqura HSG02	Housing, fixed camera, heater/blower, 24 VAC
Siqura HSG03	Housing, fixed camera, IR illuminator, heater/blower, 24 VAC
Siqura HSG02LV	Housing, fixed camera, heater/blower, 90-230 VAC
Siqura HSG03LV	Housing, fixed camera, IR illuminator, heater/blower, 90-230 VAC
Siqura HSG/WALL	Bracket, wall
Siqura HSG/POLE	Bracket, pole
Siqura HSG/CORNER	Bracket, corner
Siqura HSG/CEILING	Bracket, ceiling
Siqura HSG/SUN	Housing fixed camera, sunshield
ECO-plug	Ethernet over coax, SFP Module, 100Mb with accessory cable, 40cm
XSNet SFP MM/850	2-fiber multimode SFP (100/1000Base-FX)
XSNet SFP MM/1310	2-fiber multimode SFP (100Mb only)
XSNet SFP SM/10	Single-mode SFP,dual LC connector
XSNet SFP SM/BidiA	1-fiber single-mode SFP, SC connector
XSNet SFP SM/BidiB	1-fiber single-mode SFP, SC connector
XSNet SFP SM/60	Long distance single-mode SFP, dual LC connector
XSNet SFP SM/CWDM	CWDM SFP, dual LC connector