

## Features

- 30x Optical zoom
- 1/2.8" Progressive scan CMOS imager
- 3 Megapixel, real time
- H.264 and MJPEG compression
- 120 dB WDR
- Two-way audio
- Day/Night with IR-cut filter
- 24 Vac / 24 Vdc / 12 Vdc / 802.3af PoE
- Micro SD support
- ONVIF Profile S compliant



## BC820v2H3

### 3MP IP Box camera with integrated 30x zoom lens

#### Description

The Siqura® BC820v2H3 is a full-featured network box camera providing high-quality, high-definition images. The integrated 30x optical zoom, autofocus lens makes for the easiest installation and remote adjustment.

#### Multistream high definition

BC820v2H3 cameras have quad stream capability (triple-stream in WDR 2 shutter mode) for simultaneous streaming of combinations of H.264 streams with one MJPEG stream. The MJPEG stream can be allocated to any configured resolution format (limited to 1080p). Multiple combinations of resolution and frame rate can be configured to satisfy different live viewing and recording scenarios. Full frame rate, 3 Mpixel streaming with a lower resolution second stream is possible.

#### Open standards

Multiple options are available to easily integrate the BC820v2H3 to a video management system. In support of open standards, the camera is compliant with the ONVIF Profile S specification. The BC820v2H3 seamlessly integrates with any Pan/Tilt station by offering free configurable commands issued to the PT station through the serial data interface.

#### Image optimisation

The BC820v2H3 provides automatic day/night functionality with configurable thresholds, for use in low-light situations. Backlight compensation enhances image visibility in difficult lighting situations. The BC820v2H3 provides two modes for wide dynamic range. The first mode uses different gain ratios for different illuminated 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.

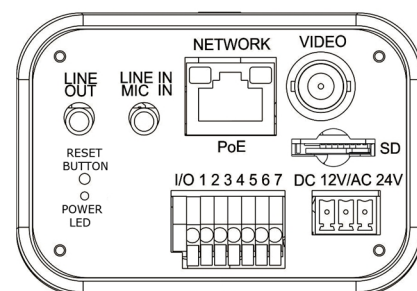
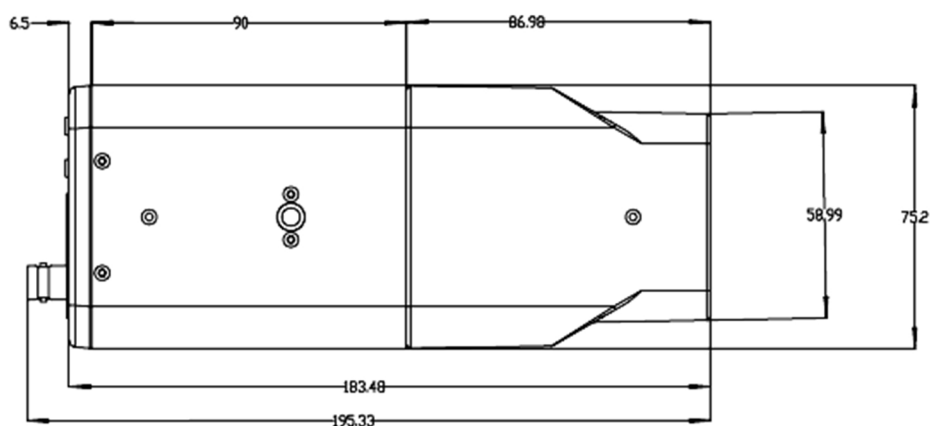
The available image optimisation methods ensure quality pictures at all times.

#### Power source choices

The BC820v2H3 can be powered by 12 Vdc, 24 Vdc, 24 Vac, or over the network with 802.3af-compliant PoE sources.

# Technical Specifications

## BC820v2H3



### Camera

Image sensor	1/2.8" Progressive scan CMOS
Effective pixels	2048 (H) x 1536 (V)
Shutter speed	1~1/10000 s
Minimum scene illumination	0.04 lux (colour), 0.002 lux (b/w), F1.6
Lens	30x Optical zoom, F1.6 (wide), F5 (tele)
Lens focal length	4.3~129 mm
Horizontal field of view	67.4° (W) - 2.6° (T)

### Functions

Privacy masks	5
Video regions of interest	4x for H.264, 1x for MJPEG
Video motion detection	On, off, by schedule
Video motion detection alarm	Alarm output, record video clip, send alarm message, upload image
Tamper monitoring	On, off, by schedule
Tamper monitoring 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 message
Image rotation	Normal / Flip / Mirror / 90° (clockwise, counterclockwise) and 180° Rotate
On-screen display	Image corners can hold one of the following OSD items: - Time / date / time & date - Text: one row of 15 characters - Subtitle: five rows of 16 characters

# Technical Specifications

## BC820v2H3

Image control	
Backlight compensation	On/Off
Wide dynamic range	On/Off
WDR value	120 dB (in WDR dual shutter mode)
Contrast	Manual
Brightness	Manual
Saturation	Manual
Hue	Manual
Sharpness	Manual
White balance	Auto, ATW, One push, Manual
Noise reduction	Off, 3D (low, medium, high), 2D (On/Off), ColorNR (low, medium, high)
Iris control	DC iris
Exposure	Auto (iris or shutter priority) / Manual
Day/Night (IR-cut filter)	Auto/night/day/smart (with adjustable threshold levels)
IR Light compensation	On/Off
Digital zoom	10x
Automatic gain control	Max. level configurable

# Technical Specifications

## BC820v2H3

### Video

Compression algorithm(s)	H.264 (baseline / main / high profile); MJPEG			
Number of compression instances	Quad stream (triple stream in WDR 2 shutter mode). Any combination of H.264 streams with possibly one MJPEG stream. Streams can be freely configured to resolution/frame rate formats.			
Supported resolutions	2048x1536; 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 instances in 50/60fps (one can be MJPEG) (best resolution setting at 50/60fps; higher resolution at lower frame rate possible)	1920x1080 1920x1080 1920x1080	- 720x576 640x480 (25/30fps)	- - 342x288 (25/30fps)	- - -
H.264 instances in 25/30fps (one can be MJPEG) (best resolution setting at 25/30fps; higher resolution at lower frame rate possible)	2048x1536 1920x1080 2048x1536 2048x1536 2048x1536 1920x1080	- - 1280x1024 1280x1024 1280x720 1280x1024	- - - 352x288 720x576 1280x720	- - - - 352x288 352x288
H.264 instances in 25/30fps in WDR 2 shutter mode (one can be MJPEG) (best resolution setting at 25/30fps; higher resolution at lower frame rate possible)	1920x1080 2048x1536 1920x1080	- 352x240 1280x720	- - 720x480	n.a. n.a. n.a.
MJPEG	One of the above resolution formats in each instances can be MJPEG in stead 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			
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 / AAC
Input level, Output level	Adjustable gain
Connector type	Female stereo phone jack, ø 3.5 mm (2x)

### Data

Serial port	RS-485, 2-wire
Protocols	DSCP, Pelco D, Pelco P, Universal
Connector type	2-Pin terminal block

# Technical Specifications

## BC820v2H3

### Contact closures

Input	5 V, 10 k $\Omega$ pull-up
Output	Photo relay output 300 Vdc/ac
Operational modes	Normally open, normally closed
Connector type	4-Pin terminal block

### Storage

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

### 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, PoE
Connector type	RJ-45

### Management

Supported browsers	Internet Explorer, 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	8 W
Power	12 Vdc / 24 Vdc / 24 Vac / Power over Ethernet (PoE) IEEE 802.3af
Connector type	3-Pin terminal

### Environmental

Operating temperature	-10 °C to +50 °C (+14 °F to +122 °F)
Relative humidity	10% to 90%, no condensation
MTBF (Mean Time Between Failures)	>280.000 hours at 30 °C

### Mechanical (camera)

Dimensions (h x w x d)	183 x 80 x 52 mm (7.2 x 3.1 x 2.0 in)
Weight	470 g (1.0 lbs)
Housing	Aluminium
Colour	Black/Grey

# Technical Specifications

## BC820v2H3

### Ordering information

Models	Description
BC820v2H3	Network box camera, 3 MP CMOS, 30x zoom AF, Day/night; H.264/MJPEG
PSA-UN12DC with ferrules	Power adapter, 110-230 Vac, 60/50 Hz to 12 Vdc, 1.5 A, ferrules, US/EU/UK plug adapters (included)
GBR-WA03	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	Sunshield for fixed camera housing



The quality management system used in the development, production, sales, and support of this product is ISO 9001:2008 certified by LRQA.

© Siquira B.V. 2016 - Version 1.1 - Subject to modification.

