# Network bullet camera, 3.5-8 mm motorised, 8MP, H.264/MJPEG, P-Iris, IR, IP66

- √ 1/1.7" CMOS
- √ 8 MP @ 30 fps
- ✓ 4K resolution
- ✓ 3.5-8 mm motorised varifocal lens
- ✓ Quad-stream H.264 and MJPEG video
- ✓ Built-in IR illuminator
- ✓ IP66 ingress protection
- ✓ IK10 impact rating
- ✓ 24 Vac, 24 Vdc, 12 Vdc, 802.3at PoE
- ✓ ONVIF Profile S conformant



#### **Description**

The BL880M1IR is an 8MP HD bullet 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 motorised 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. 8 Mpixel resolution is available at 25/30 fps, a full-HD 1080p stream at 50/60 fps can be combined with a 720p stream at 50/60 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 BL880M1IR to a video management system. In support of open standards, the camera is compliant with the ONVIF Profile S specification.

#### Image optimalisation

The BL880M1IR 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 BL880M1IR provides wide dynamic range by using different gain ratios for different illumined areas to bring details in the darker areas of an image without saturation in the brighter parts.

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

#### Power source choices

The BL880M1IR can be powered by 12 Vdc, 24 Vdc, 24 Vac, or over the network with 802.3at-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.



# Technical specifications

Camera	
Image sensor	1/1.7" CMOS
Effective pixels	3840(H) x 2160(V)
Minimum scene illumination	0.04 Lux@F1.45 color, 0.002 Lux @ F1.45 (b/w), 0 lux with IR
Shutter speed	1 ~ 1/10.000 sec
Lens	3.5 ~ 8 mm, F1.45
Lens type	Motorized Zoom & Focus, P-Iris
Horizontal field of view	116° (Wide) ~ 52° (Tele)
Functions	
Privacy masks	5
Text and picture overlay	Date, time, date & time, 5x 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, 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
- WDR value	85 dB
Exposure	Auto iris, Auto shutter, Shutter priority, Manual
White balance	Auto, ATW, One push, Manual
Brightness	Manual
Sharpness	Manual
Contrast	Manual
Saturation	Manual
Hue	Manual
IR function	Auto, Night, Day, Light sensor, Light On, Light Off, Smart Configurable day/ night threshold levels
Noise reduction	IR light compensation, Trigger AF by switching 3DNR (Off, Low, Mid, High), 2DNR (On/Off), ColorNR (Off, Low Mid, High)
Backlight compensation	On/Off
Digital zoom	10x
Image rotation	Normal, Flip, Mirror, 90° clockwise, 90° counterclockwise, 180° Rotate

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# 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	3840x2160, 3200x1800, 1920x1080, 1280x1024, 1280x720, 1024x768, 800x600, 720x480, 640x480, 352x240, 320x240	
Compression capabilities	(indication, other combinations possible)	
Resolution format	format 1 format 2 format 3 format 4	
H.264 instances in 50/60fps	1920x1080	
(or higher resolution at lower frame rate)	1920x1080 1280x1024	
(1 9 1 11 11 11 11 11 11 11 11 11 11 11 1	1920x1080 1280x1024 640x480 -	
	1280x1024 1280x720 1024x768 720x480	
H.264 instances in 25/30fps	3840x2160	
(or higher resolution at lower frame rate)	3200x1800 1280x720	
H.264 instances in 15fps	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	
Analogue video output	PAL/NTSC	
Connector type	BNC (1.0 Vpp in 75 Ω) on breakout cable	
Connector type	BIVE (1.0 Vpp III 73 12) OII BIEGROUL CABIE	
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 jacks, ø 3.5 mm on breakout cable	
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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	4 Pin terminal block on breakout cable	
Storage		
Storage options	Supports up to 128 GB capacity of SD/SDHC/SDXC memory (fat32)	
Network storage	NAS	
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 on breakout cable	
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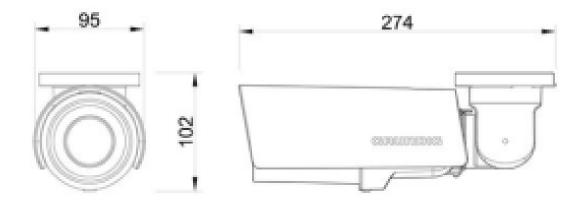
# Technical specifications

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. 15.6 W
Power		24 Vac / 24 Vdc / 12 Vdc / 802.3at PoE+
Connector type		3 Pin terminal block on breakout cable
Environmental		
Operating temperature		-40°C to 50°C (-40° to 122° F)
Relative humidity		10% to 90%, no condensation
Mechanical		
Dimensions		95 x 274 mm (3.74 x 10.79 ln)
Weight		0.94 kg (2.1 lbs)
Color		RAL 9003 (Signal white)
Built-in IR illuminator		
- Working distance		Up to 50 m
- Wavelength		850 nm
- Number of LEDs		6
Ingress protection		IP66
Impact rating		IK10
Ordering information		
BL880M1IR		Network bullet camera, 3.5-8 mm motorized, 8MP, H.264/MJPEG, P-Iris, IR, IP67
Accessories		
JB07/BL	• -	Junction box for BL8xx
PM09B/BL		Pole mount junction box for BL8xx

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## Technical specifications

## Dimensions







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