# Network bullet camera, 9-22 mm motorized, 3MP, H.264/MJPEG, IR, WDR, IP66

- √ 1/2.8" CMOS
- ✓ 3MP @ 30 fps
- ✓ Motorised, 9 ~ 22 mm varifocal lens
- ✓ 120 dB WDR
- ✓ 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 BL860M2IR is a 3MP HD bullet camera with builtin 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. 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 HD 720 stream at 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 BL860M2IR to a video management system. In support of open standards, the camera is compliant with the ONVIF Profile S specification.

### Image optimalisation

The BL860M2IR 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 BL860M2IR 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 BL860M2IR 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	4/0.011.014.00		
Image sensor	1/2.8" CMOS, 3 Megapixel		
Effective pixels	2048 (H) x 1536 (V)		
Minimum scene illumination	0.08 lux F1.6 color, 0.004 lux F1.6, (b/w), 0 lux with IR		
Shutter speed	1 ~ 1/10.000 sec		
Lens	9 ~ 22 mm, F1.6		
Lens type	DC auto iris, motorised zoom		
Horizontal field of view	33° (Wide) ~ 14° (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		
Audo detection	On, Off, By schedule		
Audio detection alarm	Alarm output, record video clip, send alarm message, upload		
Addie detection diam.	image		
	90		
Image control			
Wide dynamic range	On/Off		
- WDR value	120 dB		
Exposure	Auto, Manual		
White balance	Auto, Manual, One push		
Contrast	Manual		
Brightness	Manual		
Saturation	Manual		
Hue	Manual		
Sharpness	Manual		
Day/Night function	Auto, Night, Day, Light sensor, 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	10x		
Image rotation	Normal, Flip, Mirror, 90° clockwise, 90° counterclockwise, 180° Rotate		

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## Technical specifications

Video					
Compression algorithm(s)		ne / main / high			
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, 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 ab	ove resolution for	ormats in each i	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) on breakout cable				
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Audio					
Two-way audio	Line in, Line out				
Compression	•	a-law) / G.726			
Bit rate	G.711: 64 Kb				
שונומוט	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		e jacks, ø 3.5 mi	m on breakout o	cable	
Commence type	r omale phon	o jacko, z olo ili	The or broaked t	JGD10	
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	5 pin terminal block on breakout cable				
Confidence type	o pin termina	DIOUR OII DIGAR	Jul Gabie		
Storage					
Storage options	Supporte un t	o 128 GP conce	ity of SD/SDHC	C/SDYC momory	
Storage options	Supports up to 128 GB capacity of SD/SDHC/SDXC memory (fat32)				
Notwork storage	,				
Network storage	NAS				

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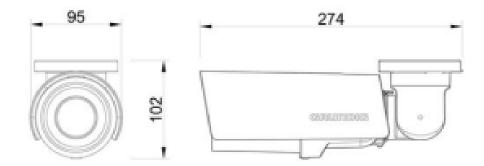
## Technical specifications

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		
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. 13.4 W		
Power		24 Vac / 24 Vdc / 12 Vdc / 802.3at PoE+		
Connector type		2 pin terminal block on breakout cable		
Environmental				
Start-up temperature		-55 °C (-67°F)		
Operating temperature		-55 °C to +55 °C (-67°F to 131°F)		
Relative humidity		10% to 90%, non-condensing		
Mechanical				
Dimension		95 x 274 mm (3.74 x 10.79 ln)		
Weight		940 g (2.1 lbs)		
Colour		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				
BL860M2IR		Network bullet camera, 9-22 mm motorized, 3MP, H.264/MJPEG, IR, WDR, IP66		
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Accessories		lunction hav for DL Ovy		
JB07/BL	(1)	Junction box for BL8xx		
PM09B/BL		Pole mount junction box for BL8xx		

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## Technical specifications

### Dimensions





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