

BL2024M

4MP IP Bullet camera with 5x motor zoom, IR, 1/2.8" CMOS

DESCRIPTION

The BL2024M is a 4 megapixel IP bullet camera providing clear images in any situation. A wide angle 2.7 to 13.5 mm motorized autofocus lens allows for easy setup and ensures sharp and clear images. The camera has a wide range of intelligent video analytics features to detect numerous events. Intelligent video encoding ensures good image quality and low storage costs. It offers many image enhancement techniques, such as BLC and HLC, Electronic Image Stabilization, Defog and 3D DNR.

FEATURES

1/2.8 Progressive scan CMOS

2.7 .. 13.5 mm (5x motor zoom)

2688x1520 (4MP)

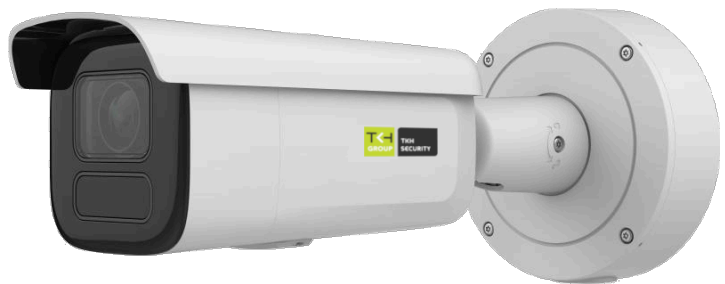
120 dB WDR

Quad stream H.265, H.264 and MJPEG video

Day/Night with IR-cut filter / WDR / BLC

Electronic Image Stabilisation

ONVIF Profile S, T, G



Description

Multi-encoder & multi-streaming

High-Efficiency Video Coding (HEVC)

H.265 or HEVC is a video compression standard, the successor of H.264. In comparison, H.265 offers about double the compression ratio at the same level of video quality or substantially improved video quality at the same bit rate. Thus saving bandwidth and recording space.

ONVIF

Multiple options are available to easily integrate the BL2024M into a video management system. In support of open standards, the BL2024M is compliant with ONVIF (Profile S, Profile G, Profile T).

Image enhancement

The BL2024M features a set of tools to enhance the image quality, such as smart IR, Defog, BLC, and 3D noise reduction.

Ease of installation

The BL2024M comes with mounting options (separately sold) for pendant wall mounting and pole mounting.

(c) 20250219

Camera

Image sensor	1/2.8" CMOS
Max. Resolution	2688x1520 (4MP)
Max. Frame rate	30
Minimum scene illumination	0.002 lx (Color); 0 lx (B/W, IR lighting)); F1.4
Shutter Speed	1/3 .. 1/100000 s
Lens	Motorized 2.7 .. 13.5 mm (5x zoom), F1.4, Auto-iris
Field of View	113 .. 34 deg horizontal, 58 .. 19 deg vertical
Focus Control	Auto, Manual
Slow Shutter	Supported
Day/Night	Automatic IR-cut Filter
IR illumination	60 m; 850 nm

Video

Stream 1 resolutions	2688x1520, 1920x1080, 1280x720
Stream 2 resolutions	1280x720, 640x480, 640x360
Stream 3 resolutions	1920x1080, 1280x720, 640x480, 640x360
Stream 4 resolutions	1280x720, 640x480, 640x360
Video Compression	H.265, H.264, MJPEG
H.264 profiles	Baseline profile, Main profile, High profile
H.265 profiles	Main profile
Video Bitrate	32 .. 8000 Kbps
Bitrate Control	CBR, VBR
Number of video output streams	Up to 6
Region of interest	Supported, 5x

Image

Image control	Brightness, Contrast, Saturation, Sharpness, Whitebalance, AGC
Day/Night control	Day, Night, Auto
Wide dynamic range	120 dB
SNR	52 dB
Image enhancement	BLC, HLC, Defog, 3DNR, 2DNR
Rotation	Supported
Mirror	Off, Left/Right, Up/Down, Center
Privacy masks	Video.1.Image.PrivacyMask.Line
Text and picture overlay	8x Text, Date/time, Camera name, Picture

Mechanical adjustment

Pan range	0 .. 355°
Tilt range	0 .. 90°

Analytics

Specs



Analytics	
Smart analytics	Line crossing, Intrusion detection, Zone enter, Zone exit, Audio exception, Scene changed, Left luggage, Object removed, Loitering
Event detections	Motion detection, Tampering, Network disconnected, IP address conflict, Invalid login, Storage full, Storage error, Image quality, Bad focus, Bad lighting, Bad contrast, Bad SNR
Event actions	Alarm output, Record video clip, Send message, Upload image

Audio	
Audio input	1x Line IN (mono, 3.5mm connector)
Audio output	1x Line OUT (mono, 3.5mm connector)
Compression	G.711ulaw, G.711alaw, G.722.1, G.726, MP2L2, MP3, AAC

Alarm	
Input	1x Alarm IN
Output	1x Digital OUT (max. 12 VDC, 30 mA)

Network	
Interface	RJ45 10 M/100 M self-adaptive Ethernet port
Protocols	TCP, UDP, ICMP, HTTP, FTP, SFTP, RTP, DHCP, DNS, DDNS, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP v1/v2/v3, IGMP v1/v2, 802.1x, QoS, IPv4, IPv6, Bonjour, SSL, TLS, ONVIF Profile S/G/T, SPI, ISAPI, SMB, NFS, CIFS
Interoperability	ONVIF Profile S/G/T, SPI, ISAPI
Security	Password, Complex password, HTTPS encryption, 802.1x port authentication, EAP, Watermark, IP address filter, Basic authentication, Digest authentication, HTTP authentication, ONVIF WSSE authentication, ONVIF digest authentication, TRTP over HTTPS, RTSP over HTTPS, Logout after idle timeout, Security audit log, TLSv1.2, TLSv1.3, Signed firmware, Secure boot
Web browser	Internet Explorer 11, Microsoft Edge, Google Chrome, Mozilla Firefox
Local Storage	uSD, uSDHC, uSDXC, max. 256 GB

Environmental	
Protection Level	IP66, IK10
Operating temperature	-30 .. 60 °C (-22 .. 140 °F)
Relative humidity (Operating)	Max. 95% (non-condensing)
Storage temperature	-30 .. 60 °C (-22 .. 140 °F)
Relative humidity (Storage)	Max. 95% (non-condensing)
Power supply	12VDC (max. 13W) PoE 802.3at class 4 (max. 15W)

Specs



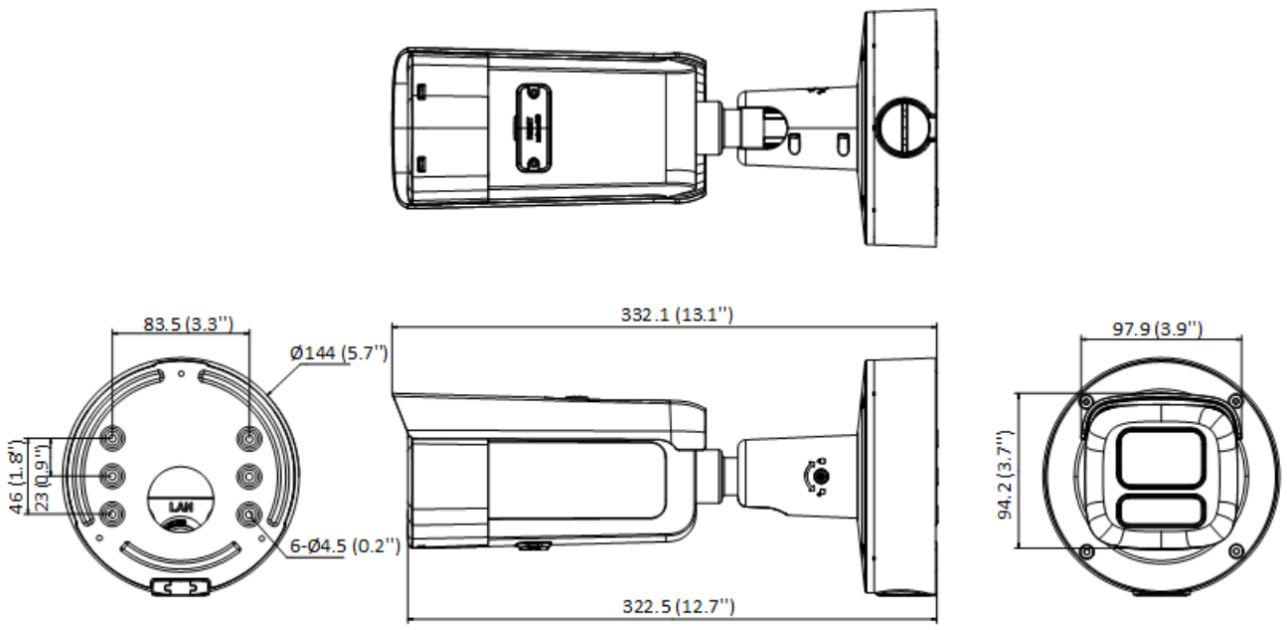
Environmental

Mechanical

Material	Metal
Product dimensions	144 x 144 x 333
Product weight	1.5 kg (3.3 lbs)
Package dimensions	385 x 190 x 180
Package weight	2.5 kg (5.5 lbs)

Ordering Information

BL2024M	4MP IP Bullet camera with 5x motor zoom, IR, 1/2.8" CMOS
PM10	Pole mount, for BL/FD200xM1-EI, FD200xv2M
PM10A	Pole mount, for BL200xv2M
WM20	Corner mount, for 200xM/200xv2M series cameras



RELATED

**TKH Security PM10**

Pole mount, for BL/FD200xM1-EI, FD202xv2M, BL/FD200xM

**TKH Security PM10A**

Pole mount, for BL200xv2M, BL2002PID, BL202xM

**TKH Security WM20**

Corner mount, for 200xM, 200xv2M, 202xM