BL5006M

6MP IP Bullet camera with 5x motor zoom, IR, 1/2.5" CMOS

DESCRIPTION

The BL5006M is a 6 megapixel IP bullet camera providing clear images in any situation. A wide angle 2.7 .. 13.5 mm (5x motor zoom) 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, Image stabilization, Defog and 3DNR; for further enhancement of the image, dedicated AI is assisting in the removal of the classical low-light artefacts such as noise and motion blur. BL5006M is capable of streaming out by HTTPS protocol.
Datasheet version v20261016

FEATURES

- 1/2.5 Progressive scan CMOS
- Max. 3296x1856 (6MP) resolution
- 2.7 .. 13.5 mm (5x motor zoom)
- 6MP 30fps, 1080p 60fps
- 120 dB WDR (Dual exposure HDR)
- Triple stream H.264, H.264+, H.265, H.265+, and MJPEG
- Day/Night with IR-cut filter / WDR / BLC
- AI-enhanced embedded video analytics
- ONVIF Profile S, T, G, M
- NDAA Compliant



Description

Multi-stream multi-codec

The camera has triple stream capability for simultaneous streaming of H.264, H.264+, H.265, H.265+, and MJPEG. Multiple combinations of resolution, frame rate, and encoding can be configured to fit all possible live viewing and recording scenarios. The highest 6 MP resolution is available at full frame rate, while double 50/60 fps is available for full HD resolution.

Dual conversion gain HDR

Dual conversion gain HDR is a high dynamic range imaging technology that uses two different conversion gains (High Conversion Gain and Low Conversion Gain) on the image sensor. This technology allows the sensor to simultaneously capture both high and low brightness details in the same scene, thereby extending the sensor’s dynamic range. The advantage of DCG HDR technology is that it can provide better signal-to-noise ratio and dynamic range while reducing motion artefacts.

Open standards

Multiple options are available to easily integrate the BL5006M to a video management system. The TKH Security signature SPI protocol is included as the easiest way to drive the camera in customized environments. In support of open standards, the camera is ONVIF conformant. Any VMS today supports this camera via its ONVIF driver.

Image enhancement

The BL5006M utilizes advanced image processing technology. Crisp and detailed 6MP images with an extremely high dynamic range in real time due to multiple exposure HDR within one frame. Back-light and High-light compensation enhances image-visibility in difficult lighting situations. In addition the camera provides for 3D motion compensated noise reduction for the best images.
Truly remarkable about the camera is its AI-enhanced low-light sensitivity. Using this next-gen technology, the disadvantageous effects of low light environments such are noise and motion blur are effectively reduced by this camera, without the help of supplemental lighting.

Power source choices

The BL5006M can be powered by 12 Vdc, or over the network with PoE.

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Camera	
Image sensor	1/2.5" CMOS
Max. Resolution	3296x1856 (6MP)
Max. Frame rate	60 fps (1080p)
Minimum scene illumination	0.008 lx (Color); 0 lx (B/W, IR lighting); F1.6
Shutter Speed	1/4 .. 1/100000 s
Lens	Motorized 2.7 .. 13.5 mm (5x zoom), F1.6, DC-iris
Field of View	108° .. 36° horizontal, 57° .. 20° vertical
Focus Control	Auto, Manual
Slow Shutter	Supported
Day/Night	Automatic IR-cut Filter
Illumination	50 m; 850 nm (IR)

Streaming	
Stream 1 resolutions	3296x1856, 3200x1800, 2688x1520, 2560x1440, 1920x1080
Stream 2 resolutions	1920x1080, 1280x720, 704x576, 640x480, 640x360, 480x240, 352x288
Stream 3 resolutions	1280x720, 704x576, 640x480, 640x360, 352x288
Stream 4 resolutions	1920x1080, 1280x720, 704x576, 640x480, 640x360, 480x240, 352x288
Video Compression	H.264, H.264+, H.265, H.265+, MJPEG
H.264 profiles	Base profile, Main profile, High profile
H.265 profiles	Main profile
Video Bitrate	64 .. 10000 kbps
Bitrate Control	CBR, VBR
Number of video output streams	Up to 10
Region of interest	Supported, 8x
Video output	Supported, 1x (CVBS, BNC)

Image	
Image control	Brightness, Contrast, Saturation, Sharpness, Whitebalance, AGC
Day/Night control	Auto, Day, Night, Timer
Wide dynamic range	120 dB (Dual Conversion Gain HDR)
SNR	50 dB
Image enhancement	BLC, HLC, Defog, 3DNR, 2DNR
Rotation	0°, 180°
Mirror	Mirror, Flip
Privacy masks	8 (Solid)
Text and picture overlay	6x Text, Date/time, Camera name, Image (jpg)
Image stabilization	Supported (EIS)
Digital Zoom	16x

Mechanical adjustment	
Pan range	0° .. 360°
Tilt range	0° .. 90°

Analytics

Specs

Analytics	
Smart analytics	Line crossing, Intrusion detection, Zone enter, Zone exit,
	Scene changed, Left luggage, Object removed, Object counting,
	Loitering, Face detection, People counting, Illegal parking,
	Simultaneous AI, Video Metadata
Event detections	Motion detection, Tampering, Network disconnected,
	IP address conflict, Storage full, Storage error, Image quality,
	Bad focus, Bad color, Audio detection
Event actions	Alarm output, Record video clip, Send message, Upload image
Analysis Type: Left Object	
Zones/Lines	1x Line
Schedule	Working days, Holidays
Triggered actions	Play sound, Take snapshot, Record video, Send mail, Push FTP,
	Set output
Analysis Type: Removed Object	
Zones/Lines	1x Line
Triggered actions	Play sound, Take snapshot, Record video, Send mail, Push FTP,
	Set output
Analysis Type: Line Crossing	
Zones/Lines	4x Lines
Classification	People, Car, Motorcycle, Bicycle
Other	Direction, Object detection and sensitivity,
	Object size set individually for People, Car, Motorcycle/Bicycle
Schedule	Working days, Holidays
Triggered actions	Play sound, Take snapshot, Record video, Send mail, Push FTP,
	Set output
Analysis Type: Zone Entry	
Zones/Lines	4x Zones
Classification	People, Car, Motorcycle, Bicycle
Other	Alarm duration, Object detection and sensitivity,
	Object size set individually for People, Car, Motorcycle/Bicycle
Schedule	Working days, Holidays
Triggered actions	Play sound, Take snapshot, Record video, Send mail, Push FTP,
	Set output
Analysis Type: Zone Exit	
Zones/Lines	4x Zones
Classification	People, Car, Motorcycle, Bicycle
Other	Alarm duration, Object detection and sensitivity,
	Object size set individually for People, Car, Motorcycle/Bicycle

Specs

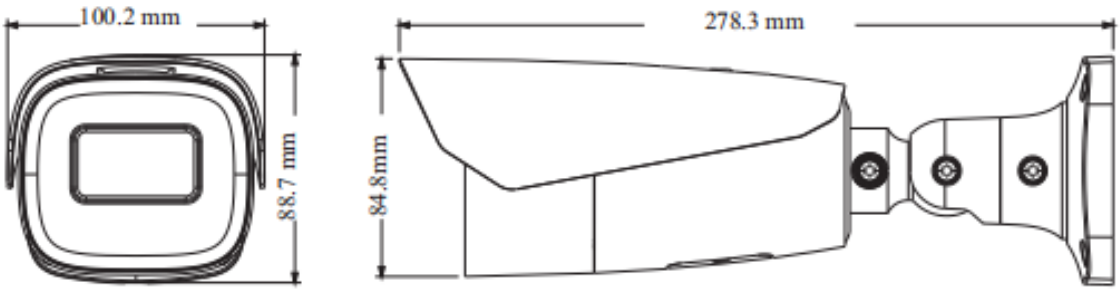
Analysis Type: Zone Exit	
Schedule	Working days, Holidays
Triggered actions	Play sound, Take snapshot, Record video, Send mail, Push FTP,
	Set output
Analysis Type: Object Counting	
Zones/Lines	1x Line
Classification	People, Car, Motorcycle, Bicycle
Other	Number of entries/exits, Current status in object, Welcome threshold,
	Occupancy threshold
Schedule	Working days, Holidays
Triggered actions	Play sound, Take snapshot, Record video, Send mail, Push FTP,
	Set output
Analysis Type: Zone Counting	
Zones/Lines	1x Zone
Classification	People, Car, Motorcycle, Bicycle
Other	Alarm duration, Time threshold, Number of entries/exits,
	Current status in object, Welcome threshold, Occupancy threshold
Schedule	Working days, Holidays
Triggered actions	Play sound, Take snapshot, Record video, Send mail, Push FTP,
	Set output
Analysis Type: Zone Intrusion	
Zones/Lines	4x Zones
Classification	People, Car, Motorcycle, Bicycle
Other	Alarm duration, Object detection and sensitivity,
	Object size set individually for People, Car, Motorcycle/Bicycle
Schedule	Working days, Holidays
Triggered actions	Play sound, Take snapshot, Record video, Send mail, Push FTP,
	Set output
Analysis Type: Heat Map	
Zones/Lines	4x Zones
Classification	People, Car, Motorcycle, Bicycle
Other	Object detection and sensitivity,
	Object size set individually for People, Car, Motorcycle/Bicycle
Schedule	Working days, Holidays
Triggered actions	Play sound, Take snapshot, Record video, Send mail, Push FTP,
	Set output
Analysis Type: Moving Object Detection	
Zones/Lines	4x Zones
Classification	Person

Specs

Analysis Type: Moving Object Detection	
Other	Alarm duration, Time threshold, Object detection and sensitivity
Schedule	Working days, Holidays
Triggered actions	Play sound, Take snapshot, Record video, Send mail, Push FTP,
	Set output
Analysis Type: Illegal Parking Detection	
Zones/Lines	4x Zones
Classification	Car, Motorcycle, Bicycle
Other	Alarm duration, Time threshold, Object detection and sensitivity,
	Object size set individually for Car, Motorcycle/Bicycle
Schedule	Working days, Holidays
Triggered actions	Play sound, Take snapshot, Record video, Send mail, Push FTP,
	Set output
Analysis Type: Crowd Detection	
Zones/Lines	4x Zones
Other	Alarm duration, Time threshold
Schedule	Working days, Holidays
Triggered actions	Play sound, Take snapshot, Record video, Send mail, Push FTP,
	Set output
Analysis Type: Attribute Detection	
Zones/Lines	4x Zones, 4x Exclusion zones
Classification	People, Car, Motorcycle, Bicycle
Person attributes	Gender, Age, Direction, Hat, Glasses, Backpack, Upper clothing type,
	Upper clothing color, Lower clothing type, Lower clothing color,
	Skirt/Dress, Mask, Shoulder bag
Vehicle attributes	Color, Type, Brand, Model
Bicycle attributes	Type
Motorcycle attributes	Type
Schedule	Working days, Holidays
Triggered actions	Push FTP, Show overlay tekst
Audio	
Audio input	1x Line IN (mono, 3.5mm connector) / Mic (built-in)
Audio output	1x Line OUT (mono, 3.5mm connector)
Compression	G.711alaw, G.711ulaw
Alarm	
Input	1x Alarm IN
Output	1x Digital OUT
Electrical	

Specs

Electrical	
Power supply	DC 12 V (max. 11.5W), PoE 802.3af (max. 11.5W)
Network	
Interface	100Base-TX (FE, IEEE 802.3u), MDI/MDI-X Auto negotiation,
	Flow control (IEEE 802.3x)
Protocols	TCP, UDP, ICMP, HTTP, FTP, RTP, DHCP, DNS, DDNS, RTSP, RTCP, PPPoE,
	NTP, UPnP, SMTP, SNMP v1/v2/v3, IGMP v1/v2/v3, 802.1x, QoS, IPv4,
	IPv6, SSL, TLS v1.0/v1.1/v1.2/v1.3, ONVIF (Profile S/G/T/M), SPI,
	TACACS+
Interoperability	ONVIF (Profile S/G/T/M), SPI
Security	Password, Complex password, HTTPS encryption,
	802.1x port authentication, EAP, Watermark, IP address filter,
	HTTP authentication (Basic, Digest), ONVIF authentication (WSSE,
	digest), Secured stream (RTP/RTSP/HTTPS, RTP/RTSPS),
	Logout after idle timeout, Security audit log, TLSv1.2 (HTTPS,
	802.1x), TLSv1.3 (HTTPS, 802.1x), Signed firmware, Secure boot
Web browser	Microsoft Edge, Google Chrome, Mozilla Firefox
Local Storage	uSD, uSDHC, uSDXC, max. 512 GB
Environmental	
Protection Level	IP66, IP67, IK10
Operating temperature	-30 .. 60 °C (-22 .. 140 °F)
Relative humidity (Operating)	Max. 95% (non-condensing)
Storage temperature	-30 .. 65 °C (-22 .. 149 °F)
Relative humidity (Storage)	Max. 95% (non-condensing)
Mechanical	
Material	Metal
Connectivity	Cable tail 35 cm (13.8 inch)
Product dimensions	278 x 100 x 89
Product weight	1 kg (2.3 lbs)
Package dimensions	322 x 127 x 123
Package weight	1.5 kg (3.2 lbs)
Color	Signal white, black
Ordering Information	
BL5006M	6MP IP Bullet camera with 5x motor zoom, IR, 1/2.5" CMOS
JBBL50	Junction box, for BL50xxM
PM50	Pole mount, for BL50xxM, FD50xxM, FE5012


100.2 mm
88.7 mm
278.3 mm
84.8mm

RELATED



TKH Security JBBL50
Junction box, for BL50xxM



TKH Security PM50
Pole mount, for BL50xxM, FD50xxM, FE5012



TKH Security WM50
Corner mount, for FD50xxM, FE5012