Technical Specifications

MOBOTIX MOVE 4K (8MP) Vandal Bullet Analytics Camera

The MOBOTIX MOVE 4K (8MP) Vandal Bullet Analytics Camera extends the existing range of MOVE IP Camera series with a performant 4K (8MP) resolution camera with DNN (Deep Neural Network) video analytics features, perfect for the daily security and surveillance needs. The camera performs fast and reliable auto focus and adapts to different indoor and outdoor scenes. The integrated MOBOTIX MxMessageSystem allows direct communication and interaction with MOBOTIX IoT cameras via the IP network. The front glass is protected by MOBOTIXEverClear superhydrophilic nano coating for best image quality even in the rain; its self-cleaning capabilities reduce cleaning efforts and operational costs.

- EverClear coating of front glass
- Motorized Remote Zoom & Focus
- Motorized Vari-Focal Lens 3.6 to 11 mm, F1.5 to F2.0 with One-Push Auto Focus
- Wide Dynamic Range (WDR) max. 130 dB
- MOBOTIX MxMessageSystem communication system
- Integrated Video Analytics (DNN ready)

- Integrated IR LEDs up to 40 m Distance
- ONVIF Profile S/G/T support
- Triple Power Support (PoE/12 VDC/24 VAC)
- Extended Temperature Range: –55 to 60 °C/–41 to 140 °F with Heater ON
- IP66 and IK10

Product Information

Product Name	4K (8MP) Vandal Bullet Analytics Camera
Order Code	Mx-VB1A-8-IR-VA

Image Quality

Image Sensor	SONY 4K (8MP), 1/1.8" Progressive CMOS
Effective (Used) Pixels	H x V = 3864x2180 (4K/8MP)
Pixel Size	2.0 µm
Frame Rate (maximum)	H.265/H.264: 3864x2180 @30 fps + 1920x1080 @30fps MJPEG: 1080p @30fps
Front Glass Coating	Superhydrophilic and self-cleaning EverClear nano coating reduces image reflections and camera cleaning efforts (coating endurance up to 3 years depending on environmental conditions and cleaning treatment)

Lens

Minimum Illumination	Color: 0.04 lux B/W: 0.002 lux
Lens Characteristics	Motorized Lens: Zoom, Focus, P-IRIS Focal Length: 3.6 to 11 mm Aperture: F1.5 to F2.0 Horizontal Field of View: 115.0° (Wide), 47.5° (Tele) Vertical Field of View: 61.2° (Wide), 27.0° (Tele)

Camera

Day/Night	Automatic mechanically switchable IR-cut filter
Shutter Time	**Manual mode:** WDR: up to 1/67500 s Linear: up to 1/67500 s **Automatic Mode:** Up to 1/10000 s

WDR	Up to 130 dB Multi Exposure WDR & HDR Engine support
EIS (Electronic Image Stabilizer)	No
Zoom	Optical: 3.1x, Digital 10x
Image settings	Color, Brightness, Sharpness, Contrast White Balance, Exposure Control 2DNR, 3DNR, NR by Motion Masking, Text Overlay
Corridor Mode	90°, 180°, 270° Rotation

Video Codec

Compression/Encoding	H.265/H.264/MJPEG
Streaming	Up to 4 individually configurable streams in H.264/H.265/MJPEG
	Configurable resolution/frame rate/bandwidth LBR/VBR/CBR in H.265/H.264

Audio Codec

Compression/Encoding	G.711/G.726/AAC/LPCM
Streaming	2-Way, bidirectional
Audio Input	Line In: Max 6.2 Vpp Signal In, Input Impedance: 33 kΩ
Audio Output	Line Out: 1 Vrms Signal Out, Output Resistance: 200 Ω

Network

Interface	10/100 Mbps Ethernet
Security	User Authentication/HTTPS/IP Filter/IEEE 802.1x
Supported Protocols	iARP, PPPoE, IPv4/v6, ICMP, IGMP, QoS, TCP, UDP, DHCP, UPnP, SNMP, SMTP, RTP, RTSP, HTTP, HTTPS, FTP, NTP, DDNS, SMBv2
ONVIF conformance	Supports profiles S/G/T
Supported Browsers	Microsoft Internet Explorer 10 or higher, Google Chrome, Mozilla Firefox, Apple Safari;
	Microsoft Internet Explorer with ActiveX is recommended for best performance and H.265 support

System Integration

Base Video Analytics	■ Motion Detection ■ Tampering ■ Audio noise Detection (ext. microphone required)
Enhanced Video Analytics (embedded)	■ Abandoned objects ■ Intrusion (object classification) ■ Sabotage ■ Wrong direction ■ Loitering (object classification) ■ Object count (object classification) ■ Object removal ■ Stopped vehicle (object classification) 2 analytics functions can be activated simultaneously
DNN (Deep Neural Network) based video analytics	■ Face Recognition (incl. gender & age estimation) ■ Number Plate Recognition; supported countries: Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Ireland, Israel, Italy, Japan, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Moldova, Monaco, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Taiwan, Turkey, Ukraine, United Kingdom, Uzbekistan, Vietnam
Event Triggers	■ External input ■ Analytics ■ Network failure detection ■ Periodical event ■ Manual trigger
Event Actions	■ External output activation ■ Video and audio recording to edge storage ■ File upload: FTP, network share and email ■ Notification: HTTP, FTP, email

General

Casing	Metal Back Housing, PC Front
Device Color	PC front cover: RAL9003 Sunshield: - Logo color: Pantone 286C and Pantone Gray 6 Cu - Body color: RAL9003 Back metal body: RAL9003
Power	PoE IEEE802.3af, class 0, max. 13 W PoE IEEE802.3af, max 12.95 W 12 V DC max. 15.59 W 24 V AC max. 13.31 W max. 25.08 VA
Connectors	RJ45, Alarm in x2, Alarm out x1, 12 VDC Terminal Block, 24 VAC Terminal Block, Audio in 3.5 mm Jack, Audio out 3.5 mm Jack, CVBS Connector COAX (75 Ohm) (CVBS output available with max. 2 activated streams)
IR Illumination	Up to 40 m distance depending on scenery reflection
Video Storage	Support for microSD/microSDHC/microSDXC card, Support for recording to NAS, MOBOTIX MOVE NVR
Environmental Protection Class	IP66/IK10
Operating Conditions	Temperature range: −55 to 60 °C/−41 to 140 °F with Heater ON Cold start min. temp.: −30 °C/−22 °F 10 to 90 % rel. humidity (non-condensing)
Storage Conditions	−20 to 70 °C/−4 to 158 °F

Approvals	EMC: CE/FCC
	Safety: LVD
	Environmental: IP66, IK10
Dimensions	ø 105x233.8 mm
Weight	1280 g

Accessories

Picture	Order Code	Description
	Mx-M-BC-P	Pole Mount (junction mount) for MOBOTIX MOVE Bullet Cameras
	Mx-M-BC-W	Wall Mount (junction mount) for MOBOTIX MOVE Bullet Cameras
	Mx-NPA-UPOE1A-60W	UPoE Network Power Injector 60 W

Dimensions

NOTE! Download the drilling template from the section or on the MOBOTIX website: **www.mobotix.com > Support > Download Center > Marketing & Documentation > Drilling Templates**.

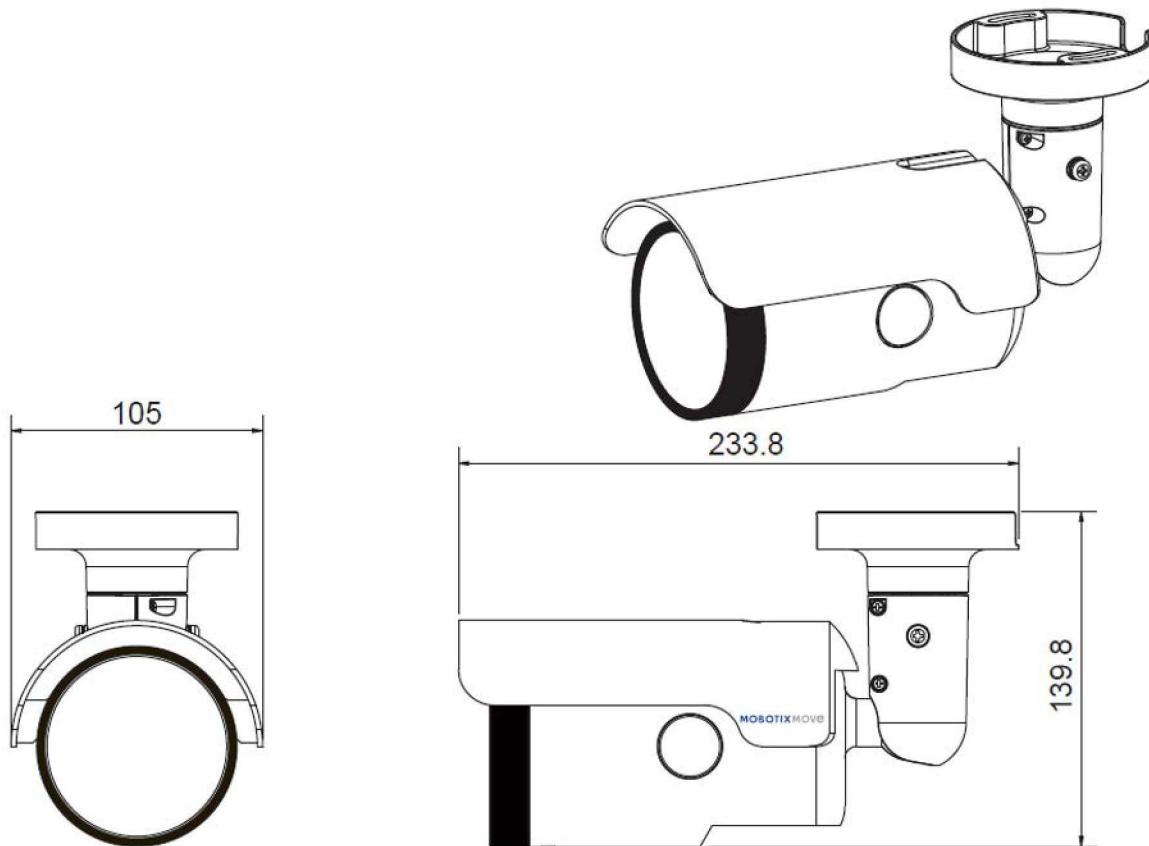**CAUTION!** Always print or copy at 100% of the original size!

Fig. 1: 4K (8MP) Vandal Bullet Analytics Camera: All measurements in mm

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Beyond**Human**Vision