

VandalBullet

MOBOTIX MOVE VB-4-IR

Technical Specifications

- ➔ Motorized Vari-Focal Lens with One-Push Auto Focus
- ➔ 2.7 to 12 mm Lens
- ➔ Wide Dynamic Range (WDR) 120db
- ➔ Auto-Iris
- ➔ Remote Zoom & Focus
- ➔ Triple Power Support (PoE/DC12 V/AC24 V)
- ➔ Integrated IR LEDs
- ➔ IP66 and Full IK10
- ➔ Extended Temperature Range up to 60 °C

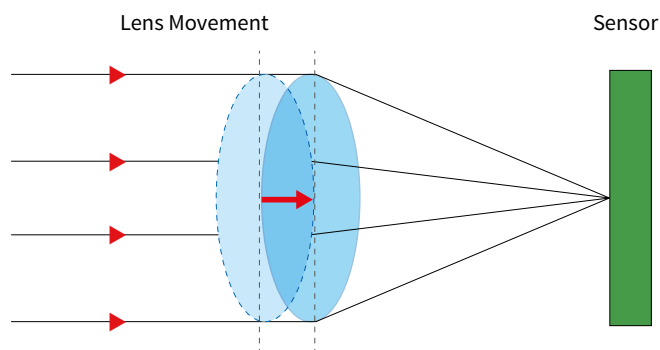


Product Features:

- Progressive Scan CMOS Sensor Support with 4MP Resolution
- Multi Exposure WDR
- Multi Codec Support (H.264/H.265/MJPEG)
- Low Latency Streaming
- Triple Stream Support
- True Day/Night Function (ICR)
- IR LED (Working Distance up to 30 m)
- 3D Motion Compensated Noise Reduction (MCTF)
- Smart Event Function: External Output/Motion Detection/Network Failure Detection/Tampering Alarm/Periodical Event/Manual Trigger/Audio Detection
- Text Overlay and Privacy Masks
- microSD (SDHC/SDXC) Card Support
- ONVIF Profile S/G/T Support
- Smart Low Bitrate Control
- Weatherproof (IP66)
- Vandal Proof (Full IK10 Rating)

Auto Focus

The MOBOTIX MOVE VandalBullet VB-4-IR can perform fast, reliable auto focus and can adapt to different indoor and outdoor scenes through its unique algorithm. As auto focus can be done by camera itself, no on-site focus adjustment is required.



IK 10

The MOBOTIX MOVE VandalBullet VB-4-IR is fully protected against punishing weather, vandals, vibration and shock. Its durability translates into better reliability and usability by reducing maintenance time.

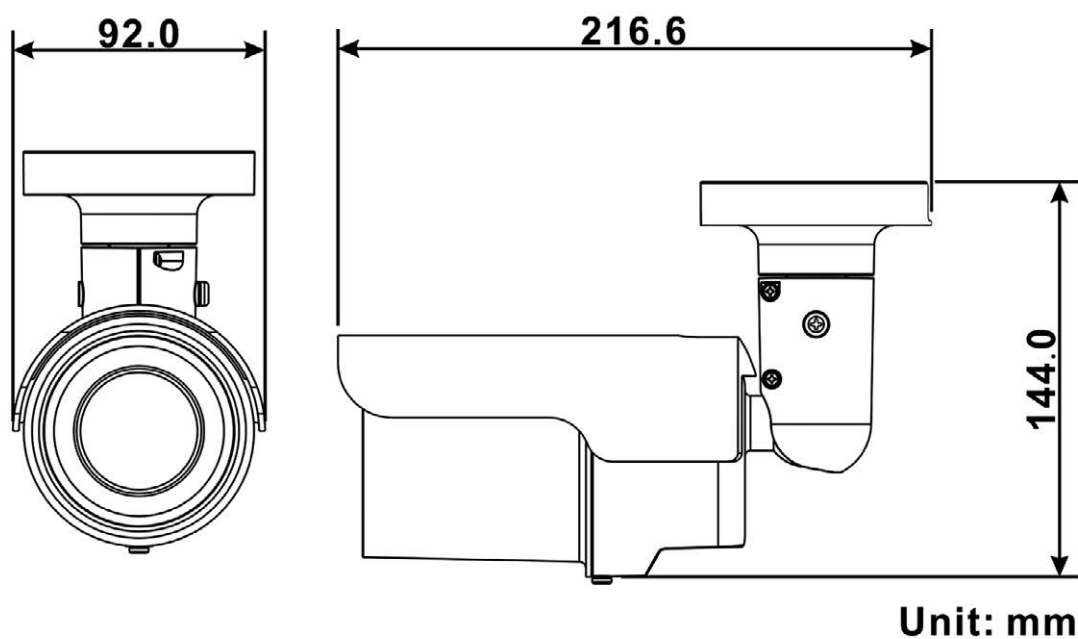
Technical Specifications

MOBOTIX MOVE VandalBullet VB-4-IR		
MOBOTIX Order Number	Mx-VB1A-4-IR	
Image Sensor	4MP 1/3“ Progressive CMOS	
Effective Pixels	HxV = 2720x1536(4M)	
Pixel Size	2.0 μm	
Frame Rate (Maximum)	H.264/H.265: 4M @30 fps + d1 @30 fps MJPEG: 1080p @ 30 fps	
Lens		
Minimum Illumination	Color B/W	0.1 lux 0.01 lux
Lens	Motorized Vari-Focal Lens Focal Length Horizontal (Field of View) Vertical (Field of View)	Focus, Zoom, P-Iris, F1.7, 2.7 to 12 mm 103 ° (Wide), 35 ° (Tele) 53 ° (Wide), 23 ° (Tele)

Camera	
Day and Night	Automatically removable IR-cut Filter
Shutter Time	1 to 1/10K sec.
HDR	Yes
EIS	No
Zoom	Optical 4.4x, 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	H.264/H.265/MJPEG
Streaming	Up to 3 individually configurable streams in H.264/H.265/MJPEG Configurable resolution/frame rate/bandwidth LBR/VBR/CBR in H.264/H.265
Audio Codec	
Compression	G.711/G.726/AAC/LPCM
Streaming	2-Way
Audio Input	Line in
Audio Output	Line out
Network	
Interface	10/100 Mbps Ethernet
Security	User Authentication/HTTPS/IP Filter/IEEE 802.1x
Supported Protocols	ARP, PPPoE, IPv4/v6, ICMP, IGMP, QoS, TCP, UDP, DHCP, UPnP, SNMP, SMTP, RTP, RTSP, HTTP, HTTPS, FTP, NTP, DDNS , SMBv2
ONVIF	Profile S/G/T conformant
System Integration	
Analytics	Motion Detection/Tampering/Audio Detection
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
Power	PoE IEEE802.3af, class 0 DC12 V, 1.14 A, max 13.68 W AC24 V, max 13.68 W

Technical Specifications: MOBOTIX MOVE VandalBullet VB-4-IR

Connectors	RJ45	
	Alarm in x2, Alarm out x1, Terminal Block	
	DC12 V Terminal Block	
	AC24 V Terminal Block	
	Audio in 3.5 mm Jack	
	Audio out 3.5 mm Jack	
	CVBS Connector (available with max. 2 activated streams)	
IR Illumination	Illumination Distance: up to 30 m	
Storage	Support for microSD/microSDHC/microSDXC card Support for recording to NAS	
Protection Class	IP66/Full IK10	
Operating Conditions	-30 °C to 60 °C (-22 °F to 140 °F) 10 % to 90 %, no Condensation	
Storage Conditions	-20 °C to 70 °C (-4 °F to 158 °F)	
Approvals	EMC Safety Environment	CE/FCC LVD IP66, IK10
Dimensions	ø 105x233.8 mm	
Weight	1210 g	



VandalBullet

MOBOTIX MOVE VB-4-IR-D

Technical Specifications

- ➔ Motorized Zoom Lens with Auto Focus Function
- ➔ 9 to 22 mm Lens especially for greater Distances
- ➔ Wide Dynamic Range (WDR) 120db
- ➔ Auto-Iris
- ➔ Remote Zoom & Focus
- ➔ Triple Power Support (PoE/DC12 V/AC24 V)
- ➔ Integrated IR LEDs
- ➔ IP66 and Full IK10
- ➔ Extended Temperature Range up to 60 °C

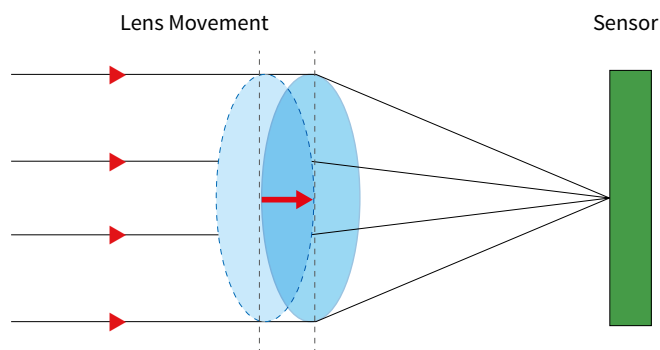


Product Features:

- Progressive Scan CMOS Sensor Support with 4MP Resolution
- Multi Exposure WDR
- Multi Codec Support (H.264/H.265/MJPEG)
- Low Latency Streaming
- Triple Stream Support
- True Day/Night Function (ICR)
- IR LED (Working Distance up to 40 m)
- 3D Motion Compensated Noise Reduction (MCTF)
- Smart Event Function: External Output/Motion Detection/Network Failure Detection/Tampering Alarm/Periodical Event/Manual Trigger/Audio Detection
- Text Overlay and Privacy Masks
- microSD (SDHC/SDXC) Card Support
- ONVIF Profile S/G/T Support
- Smart Low Bitrate Control
- Weatherproof (IP66)
- Vandal Proof (Full IK10 Rating)

Auto Focus

The MOBOTIX MOVE VandalBullet VB-4-IR-D can perform fast, reliable auto focus and can adapt to different indoor and outdoor scenes through its unique algorithm. As auto focus can be done by camera itself, no on-site focus adjustment is required.



IK 10

The MOBOTIX MOVE VandalBullet VB-4-IR-D is fully protected against punishing weather, vandals, vibration and shock. Its durability translates into better reliability and usability by reducing maintenance time.

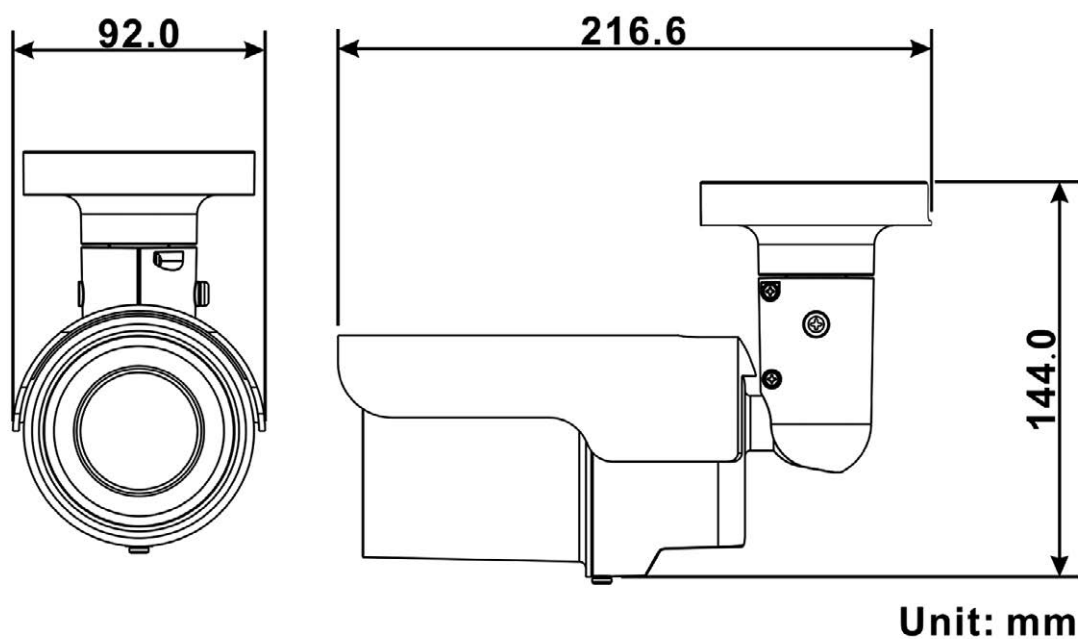
Technical Specifications

MOBOTIX MOVE VandalBullet VB-4-IR-D		
MOBOTIX Order Number	Mx-VB1A-4-IR-D	
Image Sensor	4MP 1/3“ Progressive CMOS	
Effective Pixels	HxV = 2720x1536(4M)	
Pixel Size	2.0 μm	
Frame Rate (Maximum)	H.264/H.265: 4M @30 fps + d1 @30 fps MJPEG: 1080p @ 30 fps	
Lens		
Minimum Illumination	Color B/W	0.1 lux 0.01 lux
Lens	Motorized Zoom Lens Focal Length Horizontal (Field of View) Vertical (Field of View)	Focus, Zoom, DC Iris, F1.6, 9 to 22 mm 35 ° (Wide), 15 ° (Tele) 20 ° (Wide), 9 ° (Tele)

Camera	
Day and Night	Automatically removable IR-cut Filter
Shutter Time	1 to 1/10K sec.
HDR	Yes
EIS	No
Zoom	Optical 2.4x, 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	H.264/H.265/MJPEG
Streaming	Up to 3 individually configurable streams in H.264/H.265/MJPEG Configurable resolution/frame rate/bandwidth LBR/VBR/CBR in H.264/H.265
Audio Codec	
Compression	G.711/G.726/AAC/LPCM
Streaming	2-Way
Audio Input	Line in
Audio Output	Line out
Network	
Interface	10/100 Mbps Ethernet
Security	User Authentication/HTTPS/IP Filter/IEEE 802.1x
Supported Protocols	ARP, PPPoE, IPv4/v6, ICMP, IGMP, QoS, TCP, UDP, DHCP, UPnP, SNMP, SMTP, RTP, RTSP, HTTP, HTTPS, FTP, NTP, DDNS , SMBv2
ONVIF	Profile S/G/T conformant
System Integration	
Analytics	Motion Detection/Tampering/Audio Detection
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
Power	PoE IEEE802.3af, class 0 DC12 V, 1.14 A, max 13.68 W AC24 V, max 13.68 W

Technical Specifications: MOBOTIX MOVE VandalBullet VB-4-IR-D

Connectors	RJ45	
	Alarm in x2, Alarm out x1, Terminal Block	
	DC12 V Terminal Block	
	AC24 V Terminal Block	
	Audio in 3.5 mm Jack	
	Audio out 3.5 mm Jack	
	CVBS Connector (available with max. 2 activated streams)	
IR Illumination	Illumination Distance: up to 40 m	
Storage	Support for microSD/microSDHC/microSDXC card Support for recording to NAS	
Protection Class	IP66/Full IK10	
Operating Conditions	-30 °C to 60 °C (-22 °F to 140 °F) 10 % to 90 %, no Condensation	
Storage Conditions	-20 °C to 70 °C (-4 °F to 158 °F)	
Approvals	EMC Safety Environment	CE/FCC LVD IP66, IK10
Dimensions	ø 105x233.8 mm	
Weight	1210 g	





Technical Specifications

MOBOTIX 2MP Vandal Bullet Analytics Camera

A performant 2 MP, full HD 1080p resolution camera that includes Video Analytic features that suit the daily security and surveillance needs. The camera performs fast and reliable auto focus and adopts to different indoor and outdoor scenes.

- Motorized Lens 2.7 to 12 mm with One-Push Auto Focus
- Remote Zoom & Focus
- Wide Dynamic Range (WDR) max. 130dB
- Integrated Video Analytics
- Triple Power Support (PoE / 12 Vdc / 24 Vac)
- Integrated IR LEDs up to 40 m Distance
- IP66 and IK10
- Extended Temperature Range up to -55°C to +60 °C incl. heater

BeyondHumanVision

 HEVC Advance™
MOBOTIX

Technical Specifications MOBOTIX 2MP Vandal Bullet Analytics Camera

Product Information

Product Name	2MP Vandal Bullet Analytics Camera
Order Code	Mx-VB2A-2-IR-VA

Image Quality

Image Sensor	2 MP, 1 / 2.7" Progressive CMOS
Effective Pixels	H x V = 1920 x 1080 (2MP)
Pixel Size	2.0 um
Frame Rate (maximum)	WDR on: H.265 / H.264: 2 MP @ 30 fps / 720p @ 30 fps MJPEG: 1080p @ 30 fps WDR off: H.265 / H.264: 2 MP @ 60 fps / 720p @ 60 fps MJPEG: 1080p @ 60 fps

Lens

Minimum Illumination	Color: 0.08 lux B/W: 0.008 lux
Lens Characteristics	Motorized Lens: Zoom, Focus, P-IRIS Focal length: F1.6, 2.7 to 12 mm Horizontal (Field of View): 102.1° (Wide), 31.5° (Tele) Vertical (Field of View): 70.3° (Wide), 22.7° (Tele)

Camera

Day / Night	Automatic mechanical switchable IR-Cut Filter
Shutter Time	Manual mode: WDR: 30 fps, 1/17550 s Linear: 60 fps, 1/37440 s Automatic Mode: 1 to 1/10000 s
WDR	Up to 130 dB Multi Exposure WDR & HDR Engine support
Zoom	Optical: 4.4x, 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: 33K Ω
Audio Output	Line Out: 1Vrms 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	Conforms to profiles S, G, T, Q

Technical Specifications **MOBOTIX 2MP Vandal Bullet Analytics Camera**

System Integration

Base Video Analytics	Motion Detection / Tampering / Audio noise Detection
Enhanced Video Analytics	Embedded enhanced Video Analytic package (abandoned object, intrusion, sabotage, wrong direction, loitering, object count, object removal). 2 analytic functions can be activated simultaneously.
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: Printing color RAL9003
Power	PoE IEEE802.3af, class 0, max. 13 W 12 V DC, max. 13 W 24 V AC, max. 14 W (25 VA) Zero-Down-Time Power Source Switching
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

Technical Specifications MOBOTIX 2MP Vandal Bullet Analytics Camera

Environmental Protection Class	IP66 / IK10
Operating Conditions	Temperature range: -55 to 60 °C/-41 to 140 °F with Heater ON Cold start: max. -30 °C/-22 °F Relative humidity: 10 to 90 % non-condensing
StorageConditions	-20 to 70 °C/-4 to 158 °F
Approvals	EMC: CE / FCC, Safety: LVD, Environmental: IP66, IK10
Dimensions	ø 105x233.8 mm
Weight	1210 g

Dimensions

NOTE! You can download the drilling template from the section [Drilling Template](#) 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!

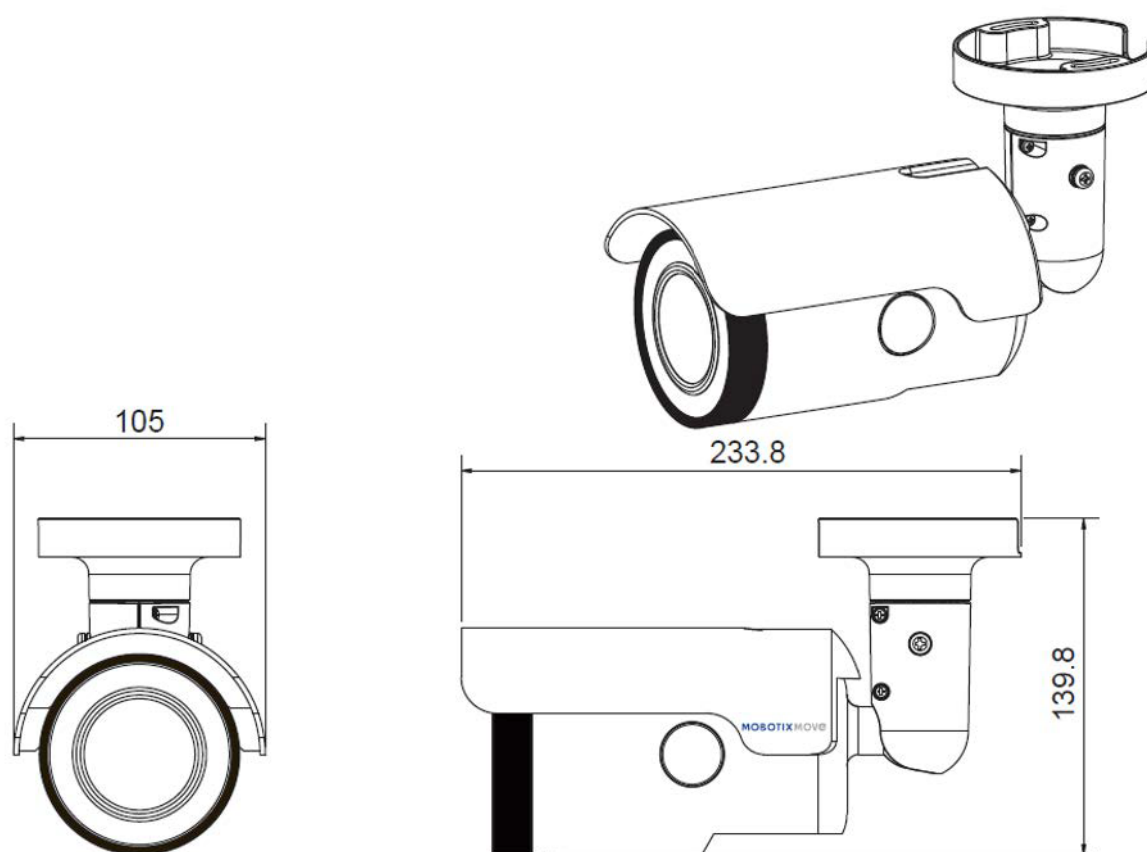


Fig. 1: 2MP Vandal Bullet Analytics Camera: All measurements in mm



Technical Specifications

MOBOTIX 5MP Vandal Bullet Analytics Camera

A performant 5 MP resolution camera that includes Video Analytic features that suit the daily security and surveillance needs. The camera performs fast and reliable auto focus. The new “crystal picture engine” provides low noise high quality images even under low-light conditions without compromises.

- Motorized Lens 2.7 to 12 mm with One-Push Auto Focus
- Remote Zoom & Focus
- Wide Dynamic Range (WDR) max. 130dB
- Integrated Video Analytics
- Triple Power Support (PoE / 12 Vdc / 24 Vac)
- Integrated IR LEDs up to 40 m Distance
- IP66 and IK10
- Extended Temperature Range up to -55°C to +60 °C incl. heater

BeyondHumanVision

 HEVC Advance™
MOBOTIX

Technical Specifications MOBOTIX 5MP Vandal Bullet Analytics Camera

Product Information

Product Name	5MP Vandal Bullet Analytics Camera
Order Code	Mx-VB1A-5-IR-VA

Image Quality

Image Sensor	5 MP, 1 / 2.7" Progressive CMOS
Effective Pixels	H x V = 2720 x 1976 (5MP)
Pixel Size	2.0 um
Frame Rate (maximum)	WDR on: H.265 / H.264: 5 MP @ 30 fps / 720p @ 30 fps MJPEG: 1080p @ 30 fps WDR off: H.265 / H.264: 5 MP @ 60 fps / 720p @ 60 fps MJPEG: 1080p @ 60 fps

Lens

Minimum Illumination	Color: 0.08 lux B/W: 0.008 lux
Lens Characteristics	Motorized Lens: Zoom, Focus, P-IRIS Focal length: F1.6, 2.7 to 12 mm Horizontal (Field of View): 102.1° (Wide), 31.5° (Tele) Vertical (Field of View): 70.3° (Wide), 22.7° (Tele)

Camera

Day / Night	Automatic mechanical switchable IR-Cut Filter
Shutter Time	Manual mode: WDR: 30 fps, 1/17550 s Linear: 60 fps, 1/37440 s Automatic Mode: 1 to 1/10000 s
WDR	Up to 130 dB Multi Exposure WDR & HDR Engine support
Zoom	Optical: 4.4x, 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: 33K Ω
Audio Output	Line Out: 1Vrms 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	Conforms to profiles S, G, T, Q

System Integration

Base Video Analytics	Motion Detection / Tampering / Audio noise Detection
Enhanced Video Analytics	Embedded enhanced Video Analytic package (abandoned object, intrusion, sabotage, wrong direction, loitering, object count, object removal). 2 analytic functions can be activated simultaneously.
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: Printing color RAL9003
Power	PoE IEEE802.3af, class 0, max. 13 W 12 V DC, max. 13 W 24 V AC, max. 14 W (25 VA) Zero-Down-Time Power Source Switching
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

Technical Specifications MOBOTIX 5MP Vandal Bullet Analytics Camera

Environmental Protection Class	IP66 / IK10
Operating Conditions	Temperature range: -55 to 60 °C/-41 to 140 °F with Heater ON Cold start: max. -30 °C/-22 °F Relative humidity: 10 to 90 % non-condensing
StorageConditions	-20 to 70 °C/-4 to 158 °F
Approvals	EMC: CE / FCC, Safety: LVD, Environmental: IP66, IK10
Dimensions	ø 105x233.8 mm
Weight	1210 g

Dimensions

NOTE! You can download the drilling template from the section [Drilling Template](#) 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!

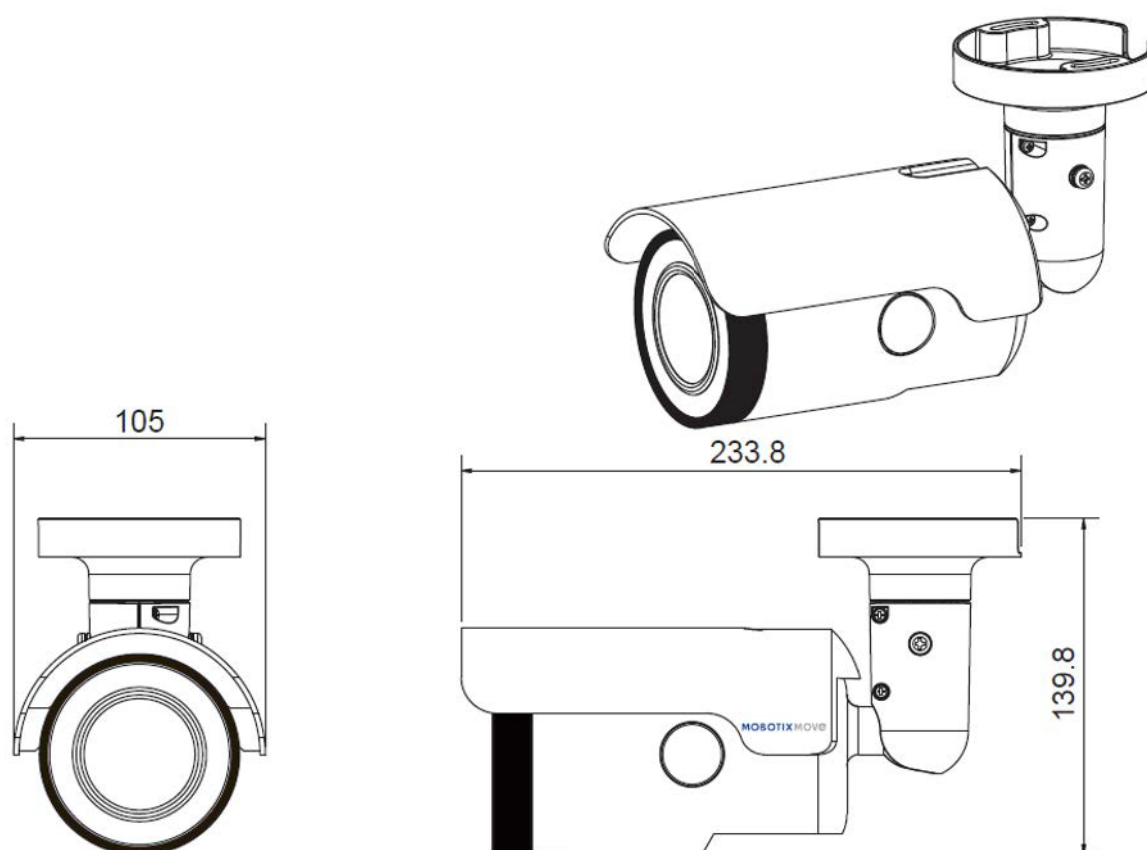


Fig. 1: 5MP Vandal Bullet Analytics Camera: All measurements in mm