



# Technical Specifications

## MOBOTIX MOVE 2MP IR Vandal Turret

The MOBOTIX MOVE2MP IR Vandal Turret is designed to bring clarity and vigilance to your surveillance needs. This state-of-the-art turret camera with DNN-based video analytics combines advanced features with a compact and sleek design, making it an ideal choice for various indoor and outdoor applications. The camera's weather-resistant design IP67 and IK10 ensures reliable operation even in challenging environmental conditions. Its compact turret form factor, combined with easy installation options, makes it a hassle-free choice.

- High Low-Light sensitivity
- 1/2.8" Progressive CMOS
- Fixed Lens 2.8mm
- WDR up to 120 dB
- Integrated IR Illumination, working distance up to 30 m/98 ft
- Triple Streaming H.264/H.265/MJPEG
- 2D & 3D Motion Compensated Noise Reduction (MCTF)
- ONVIF Profile S/G/T/M support
- microSD Card supports up to 512 GB.
- Integrated Microphone
- NDAA compliant
- DNN-based object detection with filtering (people/vehicles, etc.)
- Dual power Supply IEEE802.3af Class 3 / DC 12 V
- Temp. Range -30°C to 60°C/-22°F to 140 °F with integrated heater ON
- Protection Rate IP67 / IK10
- Intelligent Encoding, Smart Low Bitrate Control is same as Smart compression offering optimally useable bandwidth and storage.



BeyondHumanVision

**MOBOTIX**

Document ID: Mx\_TS\_Mx-VT1A-2-IR\_V1.22\_EN

V1.22\_7/1/2026, Order Code: Mx-VT1A-2-IR

## Technical Specifications

### MOBOTIX MOVE 2MP IR Vandal Turret

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## Product Information

Product Name	2MP IR Vandal Turret
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Order Code	Mx-VT1A-2-IR
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## Hardware Design

Processor	Novatec NT98560 (Single-core ARM® Cortex®-A9, 960 MHz)
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Memory	RAM: 512 MB FLASH: 256 MB
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Image Sensor	2MP, 1/2.8" Progressive CMOS
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Effective (Used) Pixels	1920x1080 (2MP)
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## Lens

Minimum Illumination	Color: 0.03 lux B/W: 0.01 lux, (0 lux, IR on) F1.6, AGC=on, 30 IRE, 1/1 s
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Lens Characteristics	Fixed Lens Focal Length: 2.8mm Aperture: F1.6 H x V FOV: 105°x 56°
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## Camera

Day/Night	Automatically switchable IR-cut filter
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Shutter Speed	Auto / Manual / WDR: 1 to 1/10000 s
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Shutter Priority Mode	Up to 1/7.5 s
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Frame Rate (maximum)	<b>WDR on/off:</b> H.265/H.264: 2MP@30 fps MJPEG: 2MP@30 fps
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Auto Gain	Min. gain: 0 dB, max. gain: 36 dB, step size: 3
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WDR	Up to 120 dB
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Zoom	Fixed
Image Settings	Color, Brightness, Sharpness, Contrast, White Balance, Gain Control, 2DNR, 3DNR, BLC, EV, Gamma corection, Saturation, Hue
Image Rotation	90°, 180°, 270°
Camera Body Adjust	Pan/Tilt/Rotation

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## Video Codec

Compression/Encoding	H.265/H.264/MJPEG
Streaming	Up to 3 individually configurable streams in H.264/H.265/MJPEG. Configurable resolution, frame rate, bandwidth CVBR/CBR/istream in H.265/H.264

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## Audio Codec

Compression/Encoding	G.711a/u
Streaming	One-way
Audio Input	Integrated Microphone

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## Cyber Security Features

Password Protection	Yes (including “forced” password change during initial setup)
IP address filtering	Yes (to restrict unauthorized access based on IP addresses)
IEEE 802.1X network access control	Yes (for advanced network security and authentication)
Digest authentication	Yes (for secure user authentication)
Secure Boot	Yes (support of fixed IP setting and automatic DHCP IP configuration according to individual MAC address)
AES encryption for password protection	Yes (to ensure strong encryption for password storage)
HTTPS/SSL (using TLS)	Yes (TLS 1.2 default, TLS 1.0/1.1 optional selectable)
User and Group Management	Yes (for fine-grained access control)

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## Technical Specifications

### MOBOTIX MOVE 2MP IR Vandal Turret

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Advanced Security	Yes (Active/Passive: <b>Active</b> protection controls the enabling and disabling of various network communications. <b>Passive</b> protection limits the number of operations and the duration of the ban. If the limit is reached, the user will be banned)
RTSP Authentication	Yes (for restricting unauthorized access to RTSP streams)
SFTP	Yes (network protocol that securely transfers files between a client and a server using SSH)

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## Network

Interface	10/100/1000 Mbps Ethernet
Supported Protocols	ARP, DHCP, DNS, FTP, HTTP, HTTPS, ICMP, IGMP, IPv4/6, NTP, RTSP/RTCP/RTP, RTMP, QoS, SMTP, SNMP v1/2c/3, TCP, TLS/TLS, UDP, UPnP, 802.1X, Bonjour, DDNS, PPPoE
ONVIF conformance	Supports profiles S/G/T/M
Supported Browsers	Microsoft Edge, Firefox, Google Chrome

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## System Integration

Event Actions	<ul style="list-style-type: none"><li>■ Schedule Recording (JPG/MP4)</li><li>■ DNN-based video analytics (line counting, border line, object classification/filtering for people, vehicles, etc.)</li><li>■ Video and audio recording to edge storage</li><li>■ File upload: FTP and email</li><li>■ Notification: Email (JPG)</li><li>■ OSD indication</li><li>■ SD Card recording (*JPG/MP4)</li></ul>
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## General

Housing Material	Metal
Housing Color	RAL 9003
IR Illumination	850 nm; up to 30 m/98 ft distance depending on reflection of scenery

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Video Storage                      microSD card support up to 512 GB.  
Support for recording to MOVE NVR, MOBOTIX Cloud (via MOBOTIX Bridge),  
MOBOTIX HUB, MxMC (via MOBOTIX NAS)

Remotely Upgradable            Yes

Power Requirements              IEEE802.3af, class 3, max 10 watt  
DC12V, max 10 watt

- Connectors
- RJ45
  - 1 x DC 12V Jack Socket
  - 1 x Reset / Default Button

Environmental Protection Class    IP67/IK10

Operating Temperature            -30°C to 60°C/-22°F to 140 °F with integrated heater ON

Relative Humidity                 95 % non-condensing

Storage Conditions                -40 to 60 °C/-4 to 158 °F

Approvals                          EMC: CE, FCC, BIS  
Safety: LVD

Warranty                             5 years; mechanically wearable parts (motor, gears, belts, etc.) excluded

Dimensions                         ø 120 x 95 mm

Weight                                680 g

**NOTE!**

Observe the [MOBOTIX MOVE Installation Hints](#) document to ensure optimum performance of the camera features.

# DORI Specifications

In the video surveillance context, “DORI” stands for Detection, Observation, Recognition and Identification and is based on IEC EN62676-4: 2015. These levels define the minimum pixels that a face of a person must have to provide proper identification, for example.

## DORI Levels According to IEC EN62676-4: 2015

These levels define the minimum pixels that a face of a person must have to provide proper identification, for example.

- **Detection:** Up to this distance, you can reliably determine if a person or vehicle is present.
- **Observation:** Up to this distance, you can see characteristic details of an individual, such as distinctive clothing.
- **Recognition:** Up to this distance, you can determine with a high degree of certainty whether an individual is the same as someone that has been seen before.
- **Identification:** Up to this distance, you can determine the identity of an individual beyond reasonable doubt.

## DORI Distances

DORI Level	Detection	Observation	Recognition	Identification
Order Code				
Mx-VT1A-2-IR	18.5 m/ 60.86 ft	12 m/ 39.47 ft	8.13 m/ 26.74 ft	3.89 m/ 12.8 ft

# Dimensions

**NOTE!** Drilling template: [www.mobotix.com](http://www.mobotix.com) > [Services](#) > [Download Center](#) > [Marketing & Documentation](#) > [Drilling Templates](#).

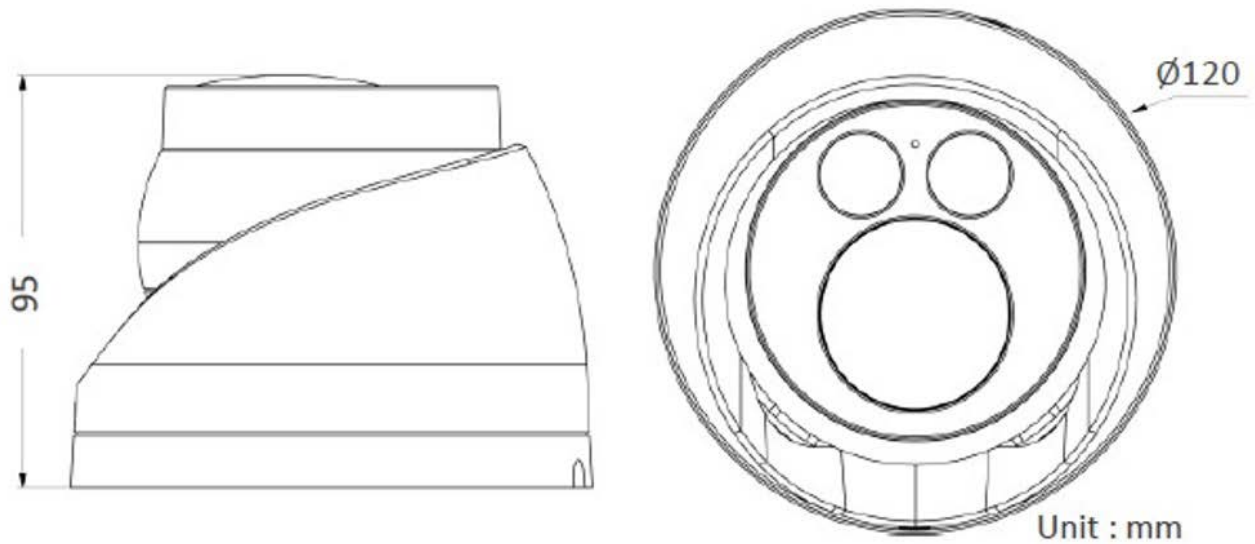




Fig. 1: Mx-VT1A-2-IR: All measurements in mm



# Accessories for Vandal Turret Cameras

Picture/ Order Code	Description	Compatible Products	Material/ Color	Weight
 <p data-bbox="245 972 381 999">Mx-M-SD-C</p>	Weatherproof corner mount.	Mx-M-SD-W or Mx-M-SD-WL.	SPCC steel, hammer-blow painted RAL9003	2.17 kg
 <p data-bbox="245 1621 381 1648">Mx-M-SD-P</p>	Weatherproof pole mount.	Mx-M-SD-W or Mx-M-SD-WL.	Zinc-galvanized SECC steel, powder-coated RAL9003	1.58 kg

**CAUTION!**  
Cannot be used with MX-M-SD-WM or Mx-M-SD-WMJB!

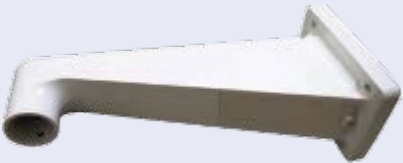

**CAUTION!**  
Cannot be used with MX-M-SD-WM or Mx-M-SD-WMJB!

**Technical Specifications**  
**MOBOTIX MOVE 2MP IR Vandal Turret**

Picture/ Order Code	Description	Compatible Products	Material/ Color	Weight
 <p data-bbox="236 958 547 992">MX-MH-SecureFlex-ESWS</p>	<p>Weatherproof pole mount <b>for extreme conditions.</b></p>	<p>Mx-M-SD-W or Mx-M-SD-WL.</p> <div style="border: 1px solid black; background-color: #e0f0e0; padding: 5px; margin-top: 10px;"> <p><b>CAUTION!</b> Cannot be used with MX-M-SD-WM or Mx-M-SD-WMJB!</p> </div>	<p>Stainless steel 3 mm, white</p>	<p>1.23 kg</p>
 <p data-bbox="320 1368 459 1402">Mx-M-SD-W</p>	<p>Weatherproof wall mount for MOVE Speed Dome/Vandal Multi-sensor/Vandal Turret cameras.</p>	<p>All MOVE Speed Dome/Vandal Multi-sensor/Vandal Turret cameras.</p> <p>Can be combined with Mx-M-SD-C or Mx-M-SD-P and camera adaptor plates (MX-M-VT-AP, MX-M-VM-AP, Mx-M-VMSD-AP).</p>	<p>Die-cast ADC12 aluminium alloy, hammer-blow painted RAL9003</p>	<p>0.84 kg</p>

## Technical Specifications



### MOBOTIX MOVE 2MP IR Vandal Turret

Picture/ Order Code	Description	Compatible Products	Material/ Color	Weight
 <p data-bbox="237 577 389 604">Mx-M-SD-WL</p>	<p data-bbox="552 371 847 577">Extended weatherproof wall mount for MOVE Speed Dome/Vandal Multisensor/Vandal Turret cameras.</p>	<p data-bbox="874 371 1134 533">All MOVE Speed Dome/Vandal Multi-sensor/Vandal Turret cameras.</p> <p data-bbox="874 555 1134 860">Can be combined with Mx-M-SD-C or Mx-M-SD-P and camera adaptor plates (MX-M-VT-AP, MX-M-VM-AP, Mx-M-VMSD-AP).</p>	<p data-bbox="1145 371 1318 622">Die-cast ADC12 aluminium alloy, hammer-blow painted RAL9003</p>	<p data-bbox="1334 371 1414 398">1.5 kg</p>
 <p data-bbox="237 1415 389 1442">MX-M-SD-WM</p>	<p data-bbox="552 900 847 1240">Weatherproof wall mount for MOVE Speed Dome/Vandal Multi-sensor/Vandal Turret cameras. Can also be mounted on top of wall mount junction box MX-M-SD-WMJB.</p>	<p data-bbox="874 900 1134 1061">All MOVE Speed Dome/Vandal Multi-sensor/Vandal Turret cameras.</p> <p data-bbox="874 1084 1134 1294">Can be combined with camera adaptor plates (MX-M-VT-AP, MX-M-VM-AP, Mx-M-VMSD-AP).</p>	<p data-bbox="1145 900 1318 1061">Die-cast ADC12 aluminium alloy, RAL9003</p>	<p data-bbox="1334 900 1414 927">1.3 kg</p>
		<p data-bbox="887 1339 967 1366"><b>NOTE!</b></p> <p data-bbox="887 1384 1118 1639">Can be combined with MX-M-SD-WMJB (wall mount is mounted on top of junction box).</p>		

Picture/ Order Code	Description	Compatible Products	Material/ Color	Weight
 <p data-bbox="293 645 491 674">MX-M-SD-WMJB</p>	<p data-bbox="630 376 938 501">Weatherproof wall mount junction box (IP67) for Mx-M-SD-WM.</p> <p data-bbox="630 521 938 786">Allows for comfortable cabling and installation of additional HW equipment such as PoE Injectors, lightning protection, etc.</p>	<p data-bbox="951 376 1206 501">All MOVE Speed Dome/Vandal Turret cameras.</p> <div data-bbox="951 521 1206 808" style="background-color: #e0f0e0; padding: 5px;"> <p data-bbox="962 539 1094 568"><b>CAUTION!</b></p> <p data-bbox="962 584 1197 797">Only to be used as base for Mx-M-SD-WM (wall mount is mounted on top of junction box).</p> </div>	<p data-bbox="1222 376 1398 595">Bracket: Steel, powder-coated RAL9003</p> <p data-bbox="1222 616 1398 824">Junction box: Die-cast ADC12 aluminium alloy, RAL9003</p>	4.8 kg
 <p data-bbox="312 1749 472 1778">MX-M-SD-PM</p>	<p data-bbox="630 857 938 1122">Pendant mount kit incl. base mount, 25 cm/10 in pendant pipe, installation materials and safety wires 50 cm/20 in &amp; 1 m/39 in.</p>	<p data-bbox="951 857 1206 1032">All MOVE Speed Dome/Vandal Multi-sensor/Vandal Turret cameras.</p> <p data-bbox="951 1048 1206 1267">Can be combined with camera adaptor plates (MX-M-VT-AP, MX-M-VM-AP, Mx-M-VMSD-AP).</p>	<p data-bbox="1222 857 1398 1122">Die-cast ADC10 aluminium alloy, powder-coated RAL9003</p>	1.58 kg


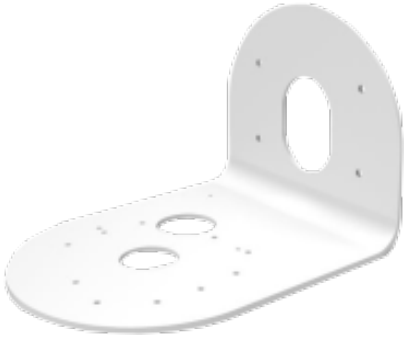

## Technical Specifications

### MOBOTIX MOVE 2MP IR Vandal Turret

Picture/ Order Code	Description	Compatible Products	Material/ Color	Weight
 MX-M-SD-PMEXT	Extension pipe 25 cm/10 in for MX-M-SD-PM.	Extends MX-M-SD-PM; max. extended total length is 1 m/39 in (3 extensions).	Die-cast ADC10 aluminium alloy, powder-coated RAL9003	0.8 kg
 MX-M-SD-GN	Weatherproof parapet mount (goose neck; IP67) with integrated junction box.  Integrated junction box allows for comfortable cabling and installation of additional hardware equipment such as PoE Injectors, lightning protection, etc.	All MOVE Speed Dome/Vandal Multi-sensor/Vandal Turret cameras.  Can be combined with camera adaptor plates (MX-M-VT-AP, MX-M-VM-AP, Mx-M-VMSD-AP).	Bracket and goose neck: Steel, powder-coated RAL9003  Junction box: Die-cast ADC12 aluminium alloy, RAL9003	14.8 kg

## Technical Specifications

### MOBOTIX MOVE 2MP IR Vandal Turret

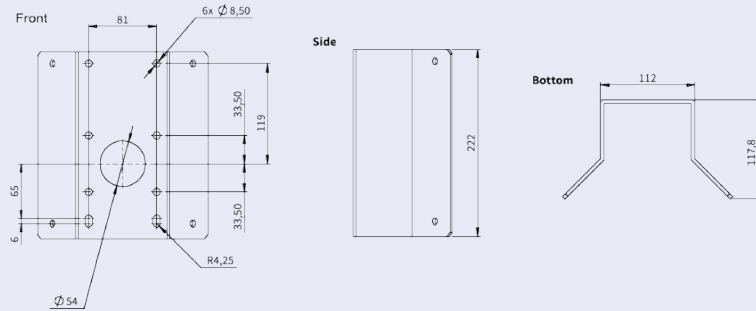
Picture/ Order Code	Description	Compatible Products	Material/ Color	Weight
 <p data-bbox="316 685 467 712">Mx-M-VT-AP</p>	<p data-bbox="630 378 927 499">Adapter mounting plate for MOVE Vandal Turret cameras.</p>	<p data-bbox="951 378 1209 454">All MOVE Vandal Turret (VT) cameras.</p> <p data-bbox="951 477 1209 734">Can be combined with MX-M-SD-GN, MX-M-SD-PM, MX-M-SD-PMEXT, Mx-M-SD-W, Mx-M-SD-WL, Mx-M-SD-WM.</p>	<p data-bbox="1222 378 1394 636">Bracket: Die-cast ADC12 aluminium alloy, stove-enamel finish RAL9003</p> <p data-bbox="1222 658 1394 913">Mounting plate: A1050P aluminium alloy, stove-enamel finish RAL9003</p>	<p data-bbox="1410 378 1485 405">0.3 kg</p>
 <p data-bbox="316 1335 467 1361">Mx-M-VT-WM</p>	<p data-bbox="630 954 927 1025">Wall mount for MOVE Vandal Turret cameras.</p>	<p data-bbox="951 954 1209 1025">All MOVE Vandal Turret (VT) cameras.</p> <p data-bbox="951 1048 1209 1122">Can be combined with Mx-M-VT-JB.</p>	<p data-bbox="1222 954 1394 1160">A1050P aluminium alloy, stove-enamel finish RAL9003</p>	<p data-bbox="1410 954 1485 981">0.3 kg</p>
 <p data-bbox="316 1720 467 1747">Mx-M-VT-JB</p>	<p data-bbox="630 1402 927 1473">Junction box for MOVE Vandal Turret cameras.</p>	<p data-bbox="951 1402 1209 1473">All MOVE Vandal Turret (VT) cameras.</p> <p data-bbox="951 1496 1209 1570">Can be combined with Mx-M-VT-WM.</p>	<p data-bbox="1222 1402 1394 1697">Top/bottom covers: Die-cast ADC12 aluminium alloy, stove-enamel finish RAL9003</p>	<p data-bbox="1410 1402 1485 1429">0.85 kg</p>

# Dimensions

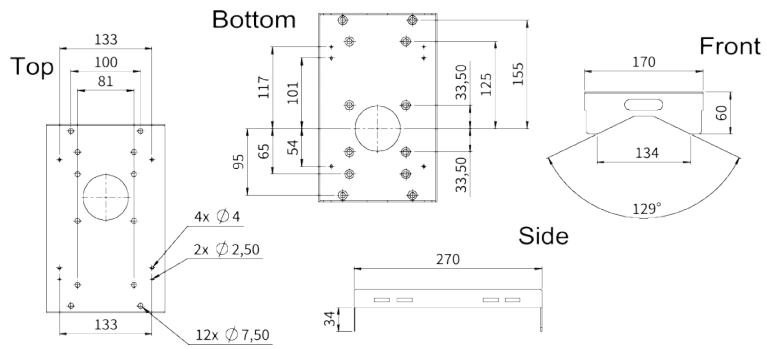
## Order Code

## Dimensions

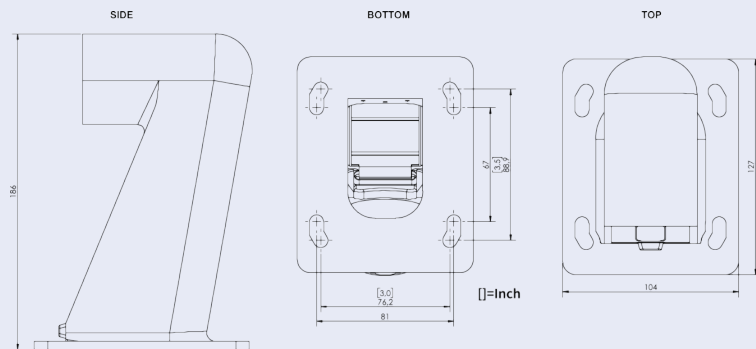
Mx-M-SD-C



Mx-M-SD-P



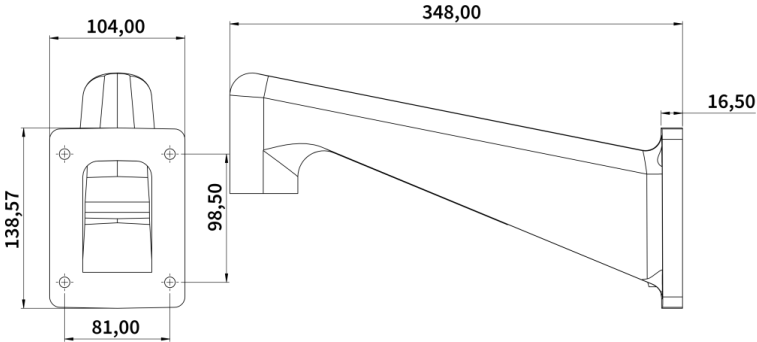
Mx-M-SD-W



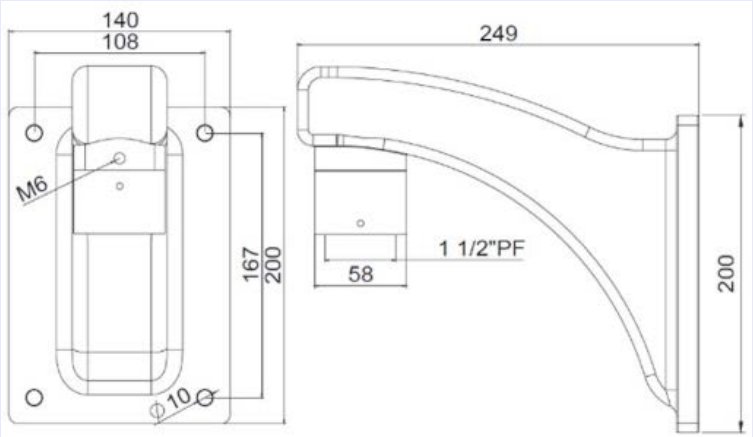
**Order Code**

MX-M-SD-WL

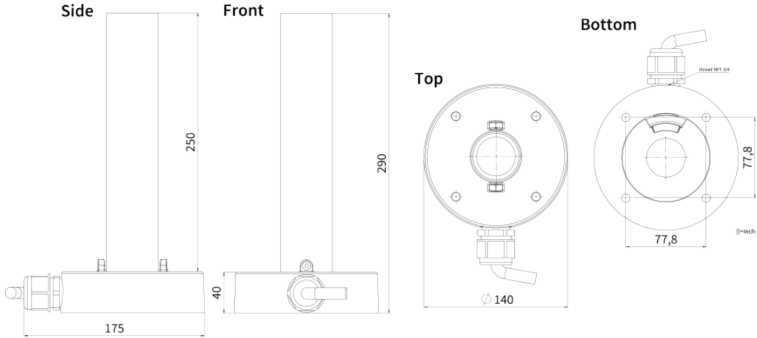
**Dimensions**



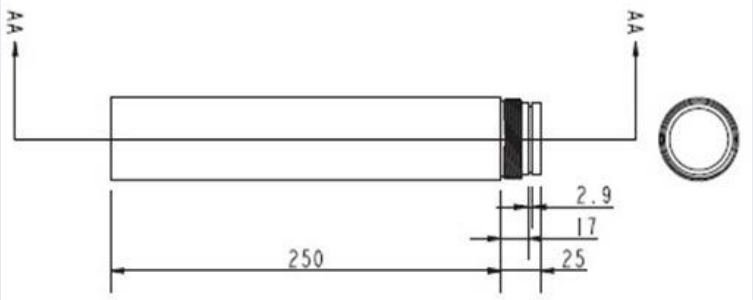
MX-M-SD-WM



MX-M-SD-PM



MX-M-SD-PMEXT



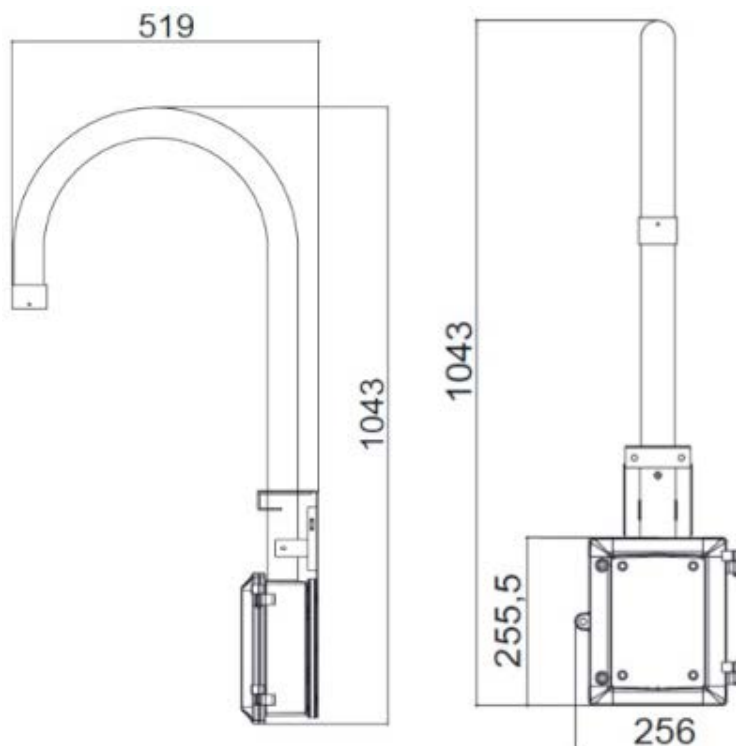
# Technical Specifications

## MOBOTIX MOVE 2MP IR Vandal Turret

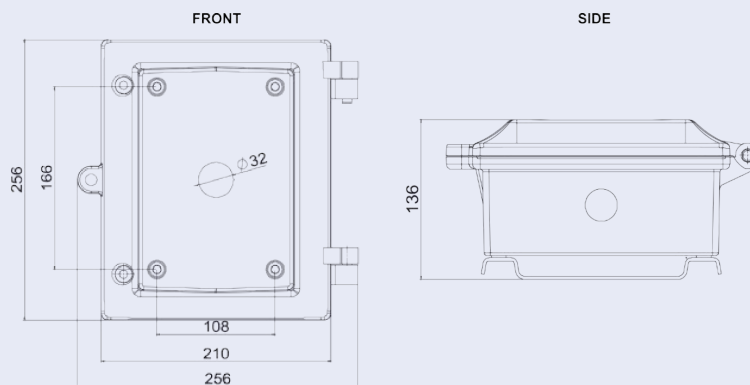
### Order Code

MX-M-SD-GN

### Dimensions



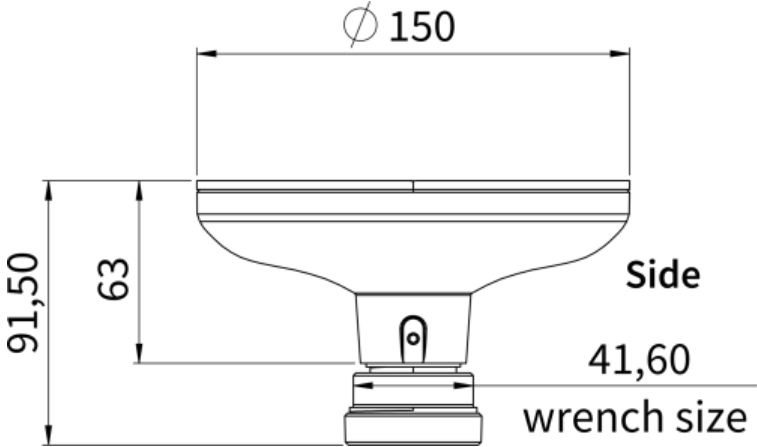
MX-M-SD-WMJB



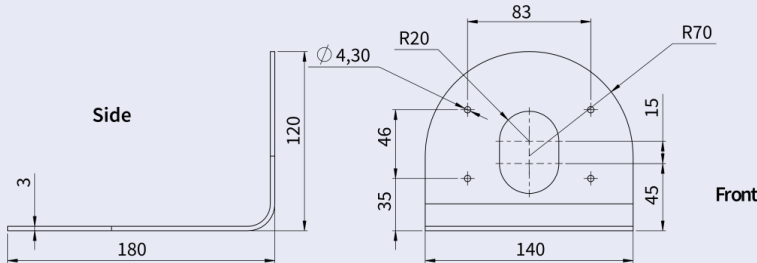
**Order Code**

Mx-M-VT-AP

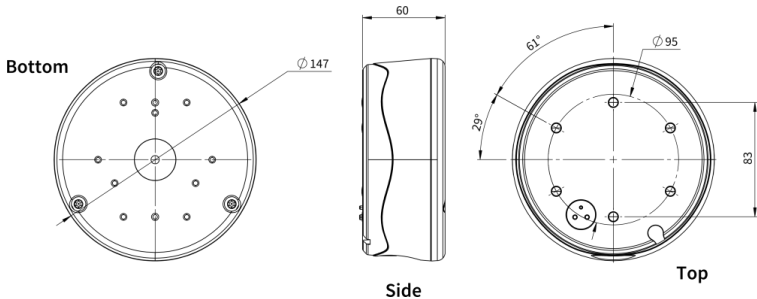
**Dimensions**



Mx-M-VT-WM



Mx-M-VT-JB



All measurements in mm.

# Accessories for All Cameras

Picture/ Order Code	Description	Compatible Products	Material/ Color	Weight
	<p>UPoE Power Injector 60W. PoE++ 60W Network Power injector • AC Input Voltage: 100 to 240 VAC (50 to 60Hz) • AC Input Current: 1.5A @100-240 VAC • Operating Ambient Temperature: • -10° to 40°C @60W • -10° to 50°C, humidity 10 to 90% @30W • IEEE 802.3bt compliant • Output power of 60W over 4-pairs • Supports 10/100/1000Base-T applications • Plug-and-play installation • Full Protection OVP, OCP• Supports 10/100/1000Base-T applications.</p>	<p>All cameras.</p>	<p>Plastic housing, black</p>	<p>0.45 kg</p>
<p>MX-NPA-UPOE1A-60W</p>				

## Technical Specifications

### MOBOTIX MOVE 2MP IR Vandal Turret

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**Picture/  
Order Code**



Mx-A-ETP1A-2601-SET

**Description**

Media converter set Ethernet (PoE+) – Twisted-Pair. Complete set consisting of two two-wire transmit/receive units for establishing an Ethernet transmission path via twisted-pair cables. • Transmission of Ethernet and PoE+ power supply via two-wire line according to IEEE1901. • Simple connection of 10/100 Mbps Ethernet end devices • Max. 95 Mbps transmission bandwidth, range up to 600 m/656 yd for data only, 300 m/328 yd for PoE depending on the quality of the twisted-pair link • 128 bit AES network data encryption • Power supply 2-wire transmitter (Tx) and receiver (Rx) as well as end device via PoE+ network switch or external power supply 56VDC / 1.2A (not included!) • Connected end devices are supplied via PoE switch IEEE802.3af(PoE), IEEE802.3at (PoE+), UPoE up to 60W (requires ext. power supply unit). • Status LEDs (data, power supply, data link, PoE) • Integrated Over-voltage protection (IEC 61000-4-5 4kV(1.2 / 50us), 2kA(8 / 20us)) • Power Supply: TX: T-

**Compatible  
Products**



All cameras. Requires Mx-A-ETP1A-2601-POW.

**Material/  
Color**

Plastic housing, black

**Weight**

0.368 kg

Picture/ Order Code	Description	Compatible Products	Material/ Color	Weight
	<p>Linx or DC12V~57V, RX: PoE Switch or DC48V~57V • Operational temperature: -20 to 60°C • Dimensions: 80.4(L) x 61.6(W) x 24(H)mm • Weight: RX/TX: 102g • Warranty: 2 years</p>	<p>Mx-A-ETP1A-2601-SET</p>	<p>Plastic housing, black</p>	<p>0.49 kg</p>
<p>Mx-A-ETP1A-2601-POW</p>	<p>Plug-type power supply for Mx-A-ETP1A-2601-SET. Output: 57V DC +/-3% / 1.2 A • Input: 90-260V AC (47-63Hz) • 68.4 Watt • Operating Temperature: 0-40°C/32-122°F</p>			
	<p>MOBOTIX network switch for DIN (top-hat) rail mounting. 5x RJ45 port with 100 MBit/s (1x uplink, 4x PoE+ with max. 75 W). Supply: 48 V DC, max. 75 W. Simplified cabling for door stations due to available connectivity for anti-theft protection, door opener and MxBus. MxBus, anti-theft protection, door and lock contact can be connected via separate wires of Ethernet cable.</p>	<p>All cameras.</p>	<p>Plastic housing, gray</p>	<p>0.31 kg</p>
<p>MX-SWITCH1</p>				

## Further Reading

[Manuals and Quick Installation documents](#)



[Technical Specifications](#)



[MOBOTIX MOVE Installation Hints](#)



[MOBOTIX Community](#)



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