



# Technical Specifications

## **MOBOTIX MOVE 2MP Vandal Dome Camera**

A performant 2MP, Full HD/1080p resolution camera for the daily security and surveillance needs. The camera easily adapts to different indoor and outdoor scenes.

- 2.8 to 12 mm Manual Vari-Focal Lens
- Wide Dynamic Range (WDR) max. 130 dB
- Light Sensitivity: Color 0.08 lux, B/W 0.008 lux
- PoE power support (IEEE802.3af)
- Integrated IR LEDs up to 50 m/164 ft distance
- Outdoor suitable (IP66) and vandal proof design (IK10)
- ONVIF Profile S/G/T/M support
- Temperature Range -55 to 60 °C/-67 to 140 °F



BeyondHumanVision

**MOBOTIX**

Document ID: Mx\_TS\_Mx-VD2A-2-IR\_V1.23\_EN

V1.23\_7/1/2026, Order Code: Mx-VD2A-2-IR

## Technical Specifications

### MOBOTIX MOVE 2MP Vandal Dome Camera

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## Product Information

Product Name	2MP Vandal Dome Camera
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Order Code	Mx-VD2A-2-IR
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## Hardware Design

Processor	Ambarella S6L22m (Quad-core ARM® Cortex®-A53, 600 MHz)
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Memory	RAM: 512 MB FLASH: 256 MB
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Image Sensor	5MP, 1/2.7" Progressive CMOS OS05A20 (OmniVision)
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Effective (Used) Pixels	1920x1080 (2MP)
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## Lens

Minimum Illumination	Color: 0.08 lux B/W: 0.008 lux
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Lens Characteristics	Manual Vari-Focal Lens Focal Length: 2.8 to 12 mm Aperture: F1.4 to F2.8 Horizontal Field of View: 96.76° (Wide), 34.13° (Tele) Vertical Field of View: 52.21° (Wide), 19.24° (Tele)
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Lens Mechanics	3-Axis adjustment
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## Camera

Day/Night	Automatic mechanically switchable IR-cut filter
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Shutter Speed	<b>Manual mode:</b> WDR: 1/17550 s Linear: 30 fps, 1/37440 s <b>Automatic Mode:</b> 1 to 1/10000 s
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Frame Rate (maximum)	<b>WDR on:</b> H.265/H.264: 1920x1080@30fps + 720x480@30fps MJPEG: 1080p@30fps <b>WDR off:</b> H.265/H.264: 1920x1080@30fps + 720x480@30fps MJPEG: 1080p@30fps
Auto Gain	Min. gain: 3 dB, max. gain: 48 dB, step size: 3
WDR	Up to 130 dB Multi Exposure WDR & HDR Engine support
Zoom	Optical: 4.29x, 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

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## 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.

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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)

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Direct to Cloud support	Yes (uses TLS 1.2 by default, MOBOTIX CLOUD account and newest firmware required)
User and Group Management	Yes (for fine-grained access control)
VPN	Yes (to establish secure network connections)
Digitally signed firmware	Yes (to prevent firmware file tampering)
RSA encryption	Yes (to support stronger ciphers; supported: RSA (2048 bits), AES-128, AES-256, SHA-256, SHA-384)

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## Network

Interface	10/100/1000 Mbps Ethernet
Supported Protocols	ARP, 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/M
Supported Browsers	All current browsers are supported.

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## System Integration

Base Video Analytics	<ul style="list-style-type: none"><li>■ Motion Detection</li><li>■ Tampering</li></ul>
Event Triggers	<ul style="list-style-type: none"><li>■ Analytics</li><li>■ Network failure detection</li><li>■ Periodical event</li><li>■ Manual trigger</li></ul>
Event Actions	<ul style="list-style-type: none"><li>■ Video recording to edge storage</li><li>■ File upload: FTP, network share and email</li><li>■ Notification: HTTP, FTP, email</li></ul>

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## General

Housing Material	Metal
Housing Color	RAL 9003
Power Requirements	PoE IEEE802.3af, class 0, max. 7.5 W

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PoE Modes Supported	Mode A or Mode B
Connectors	RJ45
IR Illumination	850 nm; up to 50 m/164 ft distance depending on reflection of scenery
Video Storage	microSD/SDHC/SDXC card support up to 1 TB, Support for recording to NAS, MOBOTIX HUB, MOBOTIX MOVE NVR
Environmental Protection Class	IP66/IK10
Operating Temperature	-55 to 60 °C/-67 to 140 °F
Cold Start Temperature	-20 °C/-4 °F
Relative Humidity	90 % non-condensing
Storage Conditions	-20 to 70 °C/-4 to 158 °F
Approvals	EMC: CE/FCC, Safety: LVD, Environmental: IP66, IK10
MTBF	95,000 hours
Warranty	5 years
Dimensions	ø 133.8 x 117.4 mm
Weight	760 g

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#### **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 was originally based on IEC EN62676-4: 2015. The current DORI standard IEC EN62676-4: 2024 defines the levels listed below.

## DORI Levels According to IEC EN62676-4: 2024

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

1. **Overview:** To display moving objects at far distances, a minimum of 20 pixels per meter (PPM) is required. This allows for basic perimeter detection and border control applications.
2. **Outline:** For outlining moving objects and their direction, at least 40 PPM is necessary. This is useful for tracking object movements.
3. **Discern:** To discern targets or crowds at a distance, more than 80 PPM is required. This level of detail helps in identifying movements of people, vehicles, or animals.
4. **Perceive:** To perceive targets or crowds, a minimum of 125 PPM is required. Although people cannot be differentiated by gender, their movements can be tracked.
5. **Characterize:** Characterizing people and vehicles requires more than 250 PPM. This level allows for identifying person type, gait, behavior, and vehicle category.
6. **Validate:** For validating known persons or reading vehicle license plates, over 500 PPM is necessary. This is also sufficient for most automatic face recognition software.

- 7. **Scrutinize:** To scrutinize people, capturing at least 1500 PPM is essential. This ensures high certainty in identifying individuals and recognizing vehicle details like model and year of manufacture. The value for Scrutinize is equivalent to the passport photo size of a person.

## DORI Distances

DORI Level Order Code	Overview		Outline		Discern		Perceive		Characterize		Validate		Scrutinize	
	Wide-Angle ↔/⚡	Tele ↔/⚡	Wide-Angle ↔/⚡	Tele ↔/⚡	Wide-Angle ↔/⚡	Tele ↔/⚡	Wide-Angle ↔/⚡	Tele ↔/⚡	Wide-Angle ↔/⚡	Tele ↔/⚡	Wide-Angle ↔/⚡	Tele ↔/⚡	Wide-Angle ↔/⚡	Tele ↔/⚡
Mx-VD2A-2-IR	44 m/40 m 144.36 ft/131.23 ft	157 m/124 m 515.09 ft/406.82 ft	22 m/20 m 72.18 ft/65.62 ft	79 m/62 m 259.19 ft/203.41 ft	11 m/10 m 36.09 ft/32.81 ft	39 m/31 m 127.95 ft/101.71 ft	7 m/6 m 22.97 ft/19.69 ft	25 m/20 m 82.02 ft/65.62 ft	4 m/3 m 13.12 ft/9.84 ft	13 m/10 m 42.65 ft/32.81 ft	2 m/2 m 6.56 ft/6.56 ft	6 m/5 m 19.69 ft/16.40 ft	1 m/1 m 3.28 ft/3.28 ft	2 m/2 m 6.56 ft/6.56 ft

# Dimensions

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

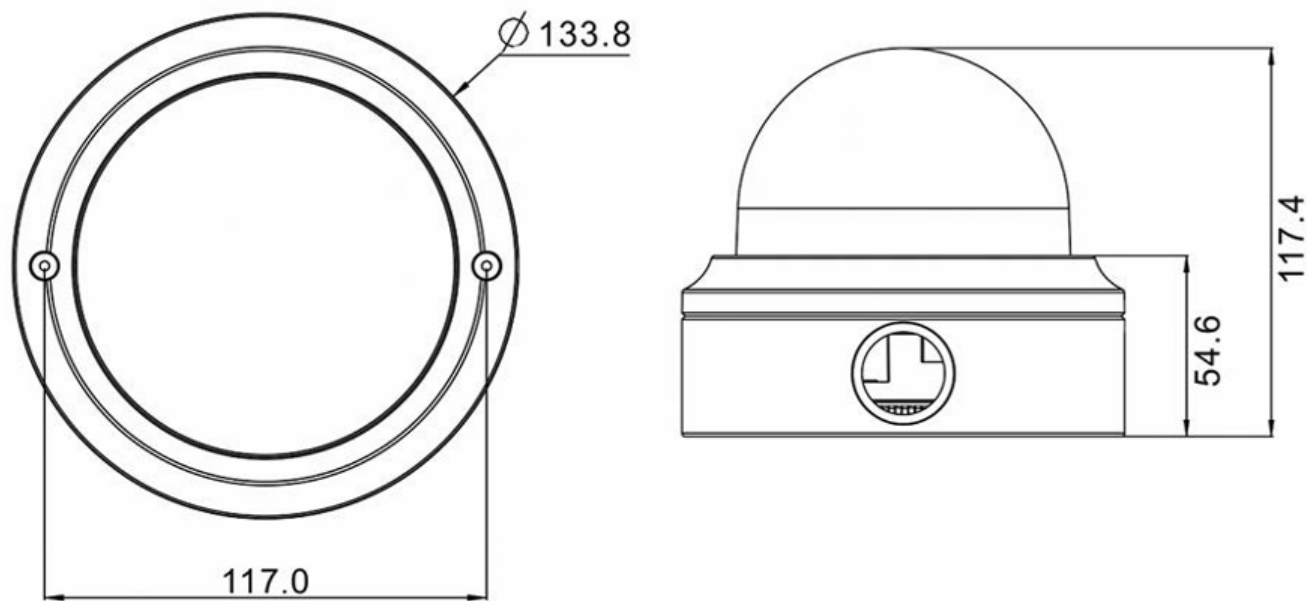







Fig. 1: Mx-VD2A-2-IR: All measurements in mm

## Accessories for Vandal Dome Cameras

Picture/ Order Code	Description	Compatible Products	Material/ Color	Weight
 <p data-bbox="312 1115 448 1144">Mx-M-VD-C</p>	<p data-bbox="608 533 906 651">Weatherproof corner mount for MOVE Vandal Dome cameras.</p>	<p data-bbox="963 533 1166 741">All MOVE Vandal Dome (VD) cameras. Requires use of Mx-M-VD-W.</p>	<p data-bbox="1187 533 1310 696">SPCC steel, hammer-blow painted RAL9003</p>	<p data-bbox="1410 533 1485 562">2.0 kg</p>
 <p data-bbox="312 1765 448 1794">Mx-M-VD-P</p>	<p data-bbox="608 1182 938 1301">Weatherproof pole mount for MOVE Vandal Dome cameras.</p>	<p data-bbox="963 1182 1166 1391">All MOVE Vandal Dome (VD) cameras. Requires use of Mx-M-VD-W.</p>	<p data-bbox="1187 1182 1382 1346">Zinc-galvanized SECC steel, powder-coated RAL9003</p>	<p data-bbox="1410 1182 1485 1211">0.7 kg</p>

## Technical Specifications

### MOBOTIX MOVE 2MP Vandal Dome Camera

Picture/ Order Code	Description	Compatible Products	Material/ Color	Weight
 Mx-M-VD-W	Weatherproof wall mount for MOVE Vandal Dome cameras (2-piece set of wall mount and pendant cap).	All MOVE Vandal Dome (VD) cameras. Can be combined with Mx-M-VD-C or Mx-M-VD-P.	Wall Mount: Die-cast ADC12 aluminium alloy, hammer blow-painted RAL9003 Pendant cap: polycarbonate RAL9003	1.4 kg
 Mx-M-VD-IC	Indoor in-ceiling mount for MOVE Vandal Dome cameras.	All MOVE Vandal Dome (VD) cameras.	Zinc-galvanized SECC steel, powder-coated RAL9003	0.8 kg
 Mx-A-VD-DCS	Tinted replacement dome for MOVE Vandal Dome cameras.	All MOVE Vandal Dome (VD) cameras.	Ring: Die-cast ADC12 aluminium alloy, powder-coated RAL9003 Dome: Polycarbonate, tinted	0.25 kg

MOBOTIX MOVE 2MP Vandal Dome Camera

Picture/  
Order Code



Mx-A-VD-DCT

Description

Clear replacement dome for MOVE Vandal Dome cameras.

Compatible Products

All MOVE Vandal Dome (VD) cameras.

Material/  
Color

Ring: Die-cast ADC12 aluminium alloy, powder-coated RAL9003  
Dome: Polycarbonate, clear

Weight

0.21 kg



Mx-A-VD-DBC-EC

Clear **EverClear-coated** replacement dome for MOVE Vandal Dome cameras.

All MOVE Vandal Dome (VD) cameras.

Ring: Die-cast ADC12 aluminium alloy, powder-coated RAL9003  
Dome: Polycarbonate, clear

0.21 kg



Mx-A-VD-DBT-EC

Tinted **EverClear-coated** replacement dome for MOVE Vandal Dome cameras.

All MOVE Vandal Dome (VD) cameras.

Ring: Die-cast ADC12 aluminium alloy, powder-coated RAL9003  
Dome: Polycarbonate, tinted

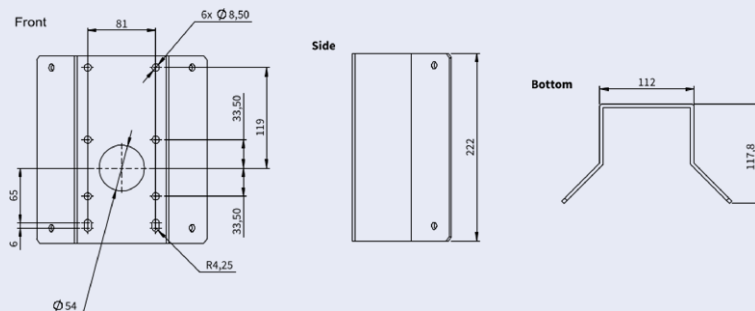
0.25 kg

# Dimensions

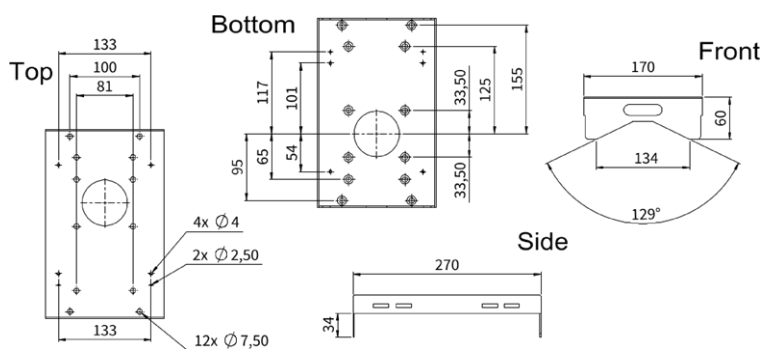
## Order Code

## Dimensions

Mx-M-VD-C



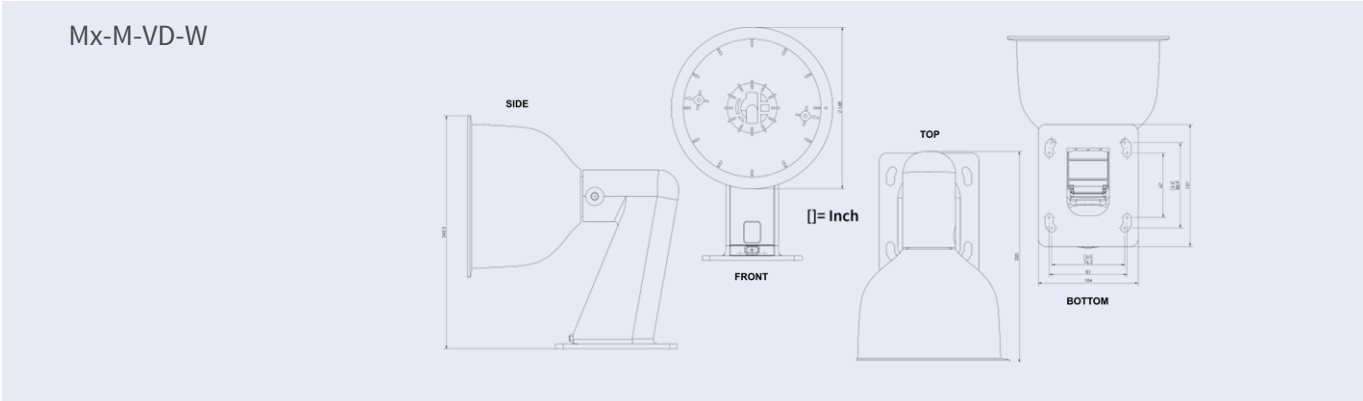
Mx-M-VD-P



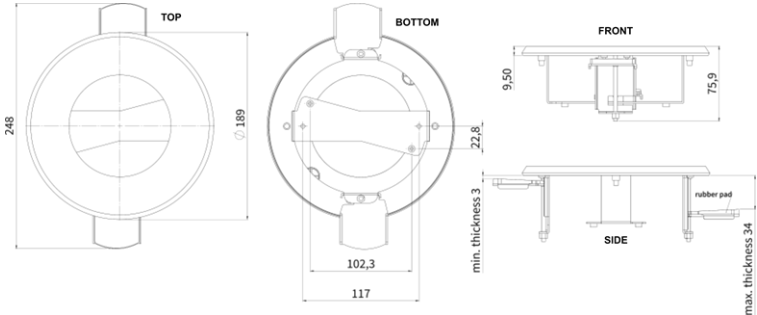
**Order Code**

Mx-M-VD-W

**Dimensions**



Mx-M-VD-IC



All measurements in mm.

# Accessories for All Cameras

Picture/ Order Code	Description	Compatible Products	Material/ Color	Weight
 <p data-bbox="245 927 517 958">MX-NPA-UPOE1A-60W</p>	<p data-bbox="608 376 935 409">UPoE Power Injector 60W.</p> <p data-bbox="608 427 986 1144">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 data-bbox="1003 376 1158 409">All cameras.</p>	<p data-bbox="1230 376 1358 454">Plastic housing, black</p>	<p data-bbox="1410 376 1506 409">0.45 kg</p>

## Technical Specifications

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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

**Technical Specifications**  
**MOBOTIX MOVE 2MP Vandal Dome Camera**

Picture/ Order Code	Description	Compatible Products	Material/ Color	Weight
 <p data-bbox="236 1160 523 1189">Mx-A-ETP1A-2601-POW</p>	<p data-bbox="608 371 978 678">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 data-bbox="608 707 978 972">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 data-bbox="1003 707 1158 779">Mx-A-ETP1A-2601-SET</p>	<p data-bbox="1230 707 1353 779">Plastic housing, black</p>	<p data-bbox="1410 707 1505 736">0.49 kg</p>
 <p data-bbox="300 1637 462 1666">MX-SWITCH1</p>	<p data-bbox="608 1223 978 1809">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 data-bbox="1003 1223 1158 1252">All cameras.</p>	<p data-bbox="1230 1223 1353 1294">Plastic housing, gray</p>	<p data-bbox="1410 1223 1505 1252">0.31 kg</p>

## Further Reading

[Manuals and Quick Installation documents](#)



[Technical Specifications](#)



[MOBOTIX MOVE Installation Hints](#)



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# MOBOTIX

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