



# Technical Specifications

## MOBOTIX MOVE 2MP Speed Dome Low Light Camera

The MOBOTIX MOVE 2MP Speed Dome Low Light Camera is equipped with the SONY Ultra Low-Light Sensor chipset supporting light sensitivities of down to 0.02 lux in color mode. The camera features Servo Feedback Technology. When encountering external force, such as vandalism or vibration, the PTZ can return immediately to its original position. The dome is protected by MOBOTIX EverClear superhydrophilic nano coating for best image quality even in the rain; its self-cleaning capabilities reduce cleaning efforts and operational costs.

- EverClear coating of dome
- Servo Feedback – No Drifting
- WDR up to 130 dB
- Electronic Image Stabilizer (EIS)
- H.264/H.265/MJPEG Simultaneous Streaming
- High Low-Light performance, Color-Mode: 0.02 lux
- Dual power (PoE+/AC24 V)
- IP66 and Full IK10
- ONVIF Profile S/G/T Support
- Temp. Range -40 to 55 °C/-40 to 131 °F with heater
- 3D Motion Compensated Noise Reduction (MCTF)
- Smart Event Functions
- Text Overlay and Privacy Masks
- Smart Low Bitrate Control
- Triple Stream Support
- RS485 Support
- Up to 30x Optical Zoom
- Auto-tracking

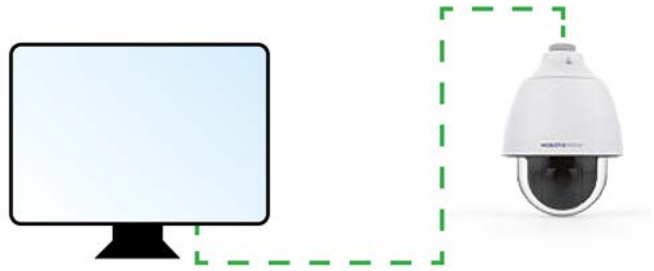


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#### Remotely Upgradable Firmware

The firmware of the MOBOTIX MOVE 2MP Speed Dome Low Light Camera can be upgraded remotely. This applies to the IP system and the pan/tilt/zoom block. This feature instantly adds new features and greatly reduces maintenance costs.



#### Servo Feedback

The MOBOTIX MOVE 2MP Speed Dome Low Light Camera features **Servo Feedback** technology. When encountering external force, such as vandalism or vibration, the PTZ immediately returns to its original position.



## Product Information

Product Name	2MP Speed Dome Low Light Camera
Order Code	Mx-SD1A-230-LL

## Image Quality

Image Sensor	2MP 1/2.8" Progressive CMOS
Effective (Used) Pixels	H x V = 1920x1080 (2MP)
Pixel Size	2.9 $\mu\text{m}$
Frame Rate (maximum)	<b>WDR on/off:</b> H.265/H.264: 2MP@30 fps MJPEG: 1080p@30fps
Dome Coating	Superhydrophilic MOBOTIX EverClear nano coating transforms water droplets into an ultra-thin water film upon impact. The coating ensures best image quality in rain and difficult external conditions and it reduces reflections and noise in low-light scenarios. EverClear is dirt-repellent and increases the stability as well as the scratch-resistance of the , further reducing maintenance efforts. Coating endurance up to 3 years depending on environmental conditions and cleaning treatment.

## Lens

Minimum Illumination	Color: 0.02 lux B/W: 0.001 lux
Lens Characteristics	Motorized Lens: Zoom, Focus, P-IRIS, Auto-IRIS Focal Length: 4.3 to 129 mm Aperture: F1.6 – F4.7 Horizontal Field of View: 59° (Wide), 2.4° (Tele) Vertical Field of View: 35.2° (Wide), 1.4° (Tele)

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## Camera

Shutter Time	1 to 1/10000 s
Shutter Priority Mode	Up to 1/45 s
WDR	Up to 130 dB
EIS	Yes
Auto tracking	On/off
Zoom	Optical: 30x, Digital 10x
Image Settings	Color, Brightness, Sharpness, Contrast, White Balance, Exposure Control, 2DNR, 3DNR, NR by Motion, Masking, Text Overlay
Image Rotation	90°, 180°, 270°
Servo Feedback	Yes (see <a href="#">Servo Feedback, p. 2</a> )

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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 LBR/VBR/CBR in H.265/H.264.

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#### 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 conformance	Supports profiles S/G/T
Supported Browsers	All current browsers are supported.

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#### System Integration

Base Video Analytics	Motion detection
Event Triggers	<ul style="list-style-type: none"><li>External Input</li><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>External output activation</li><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 and plastic
Power	PoE+ IEEE802.3at, Class 4, max 23.11 W AC 24 V, max 24.20 W, max 39.60 VA
Connectors	<ul style="list-style-type: none"><li>RJ45</li><li>4 x Alarm in, 2x Alarm out terminal block</li><li>AC 24 V terminal block</li><li>RS485 terminal block</li></ul>
Video Storage	Support for microSD/microSDHC/microSDXC card up to 1 TB, recording to NAS, MOBOTIX MOVE NVR

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Remotely Upgradable	Yes (see <a href="#">Remotely Upgradable Firmware, p. 2</a> )
Environmental Protection Class	IP66/IK10
Operating Temperature	-40 to 55 °C/-40 to 131 °F with heater
Relative Humidity	10 to 90 % non-condensing
Storage Conditions	-20 to 70 °C/-4 to 158 °F
Approvals	EMC: CE/FCC, Safety: LVD, Environmental: IP66, IK10
Dimensions	ø 210 x 279 mm with sun shield
Weight	3100 g

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### PTZ Features

Preset positions	Up to 256 positions, 1 Home position
Sequences	Up to 8 sequences with 64 preset positions each
Cruise Path	up to 8
Auto pan paths	Up to 4
Display Position	Pan/Tilt degrees can be displayed in live image
Tilt Angle	Between -20° and +100°
Pan Angle	360° endless
Tilt Speed	Manual Tilt Speed: 0.1°-60°/s; Preset Tilt Speed: 7°-300°/s
Pan Speed	Preset up to 400°/s
Joystick/Keypoint Control	RS485 protocols DSCP, Pelco-D and Pelco-P

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


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# Accessories




Picture	Order Code	Description
	Mx-A-SD-DBC-EC	Clear replacement dome with EverClear coating
	MX-A-SD-DBT-EC	Tinted replacement dome with EverClear coating
	Mx-M-SD-C	Corner Mount for MOBOTIX MOVE SpeedDome models; installation only in combination with SpeedDome Wall Mount Mx-M-SD-W
	Mx-M-SD-GN	SD Parapet Mount (Gooseneck) with integrated junction box for MOBOTIX MOVE SpeedDome models
	Mx-M-SD-P	Pole Mount for MOBOTIX MOVE SpeedDome models
	Mx-M-SD-PM	Pendant Mount Kit 25 cm for MOBOTIX MOVE SpeedDome models
	Mx-M-SD-PMEXT	Pendant mount extension 25 cm for use with Pendant Mount Kit Mx-M-SD-PM
	Mx-M-SD-W	Wall Mount for MOBOTIX MOVE SpeedDome models; can be combined with SD Pole Mount Mx-M-SD-P or SD-Corner Mount Mx-M-SD-C
	Mx-M-SD-WM	Wall Mount with room for optional junction box Mx-M-SD-WMUB for MOBOTIX MOVE SpeedDome models

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Picture	Order Code	Description
	Mx-M-SD- WMUB	Wall Mount Junction Box for MOBOTIX MOVE SpeedDome models
	Mx-NPA- UPOE1A- 60W	UPoE Network Power Injector 60 W
	Mx-A-ETP1A- 2601-SET	Media Converter Set Ethernet (PoE+) – Twisted-Pair

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## Dimensions

**NOTE!** Download the drilling template from the section or on the MOBOTIX website: [www.mobotix.com](http://www.mobotix.com) > [Support](#) > [Download Center](#) > [Marketing & Documentation](#) > [Drilling Templates](#).

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

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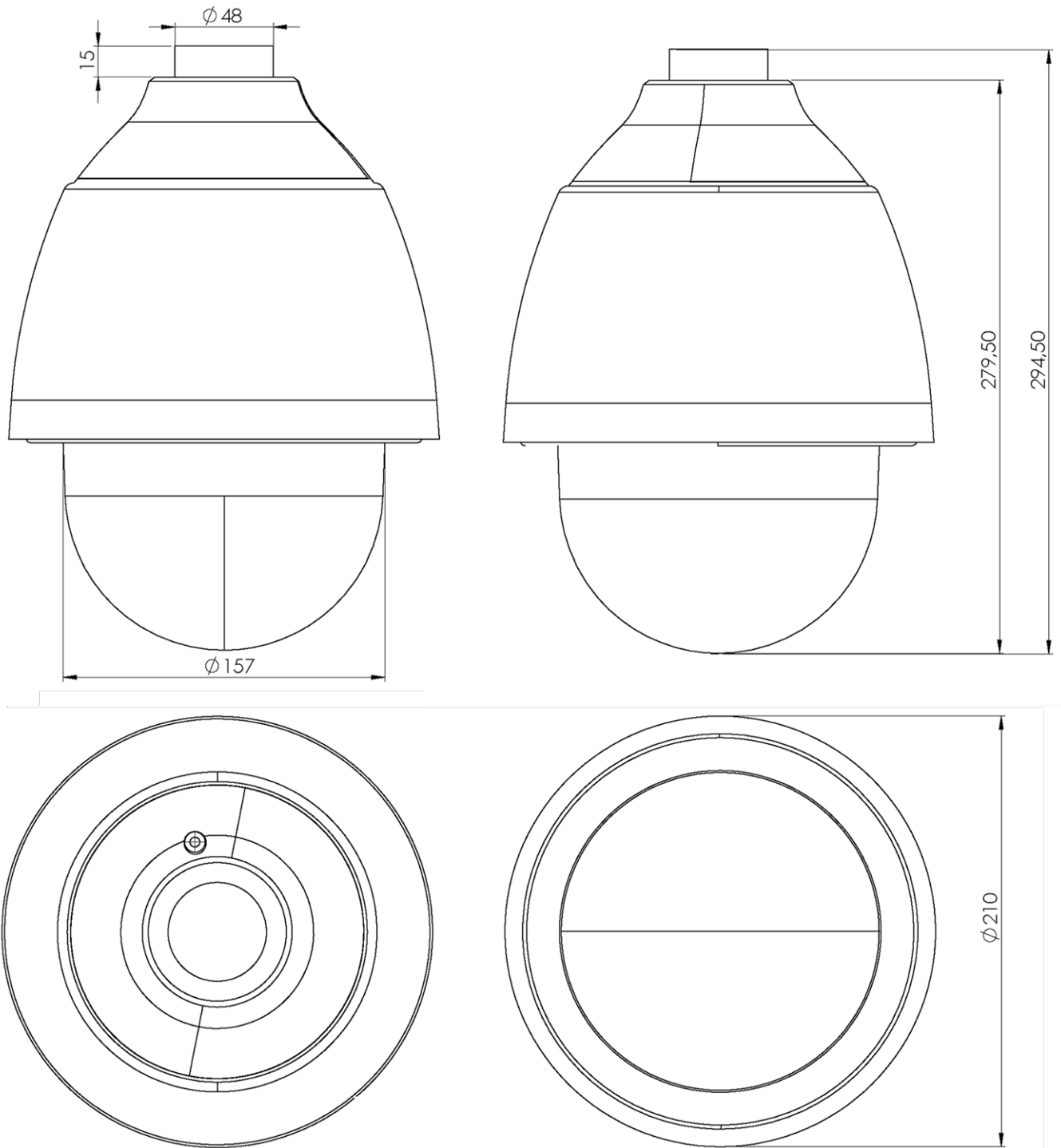


Fig. 1: 2MP Speed Dome Low Light Camera: All measurements in mm

## Further Reading

Manuals and Quick Installation documents



Technical Specifications



MOBOTIX MOVE Installation Hints



# MOBOTIX

BeyondHumanVision

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