



# Technical Specifications

## MOBOTIX MOVE 3MP Speed Dome IR Light Camera

The MOBOTIX MOVE 3MP Speed Dome IR Light Camera is much more than just standard: The extremely fast panning and tilt technology with powerful, long-lasting and at the same time energy-saving electric motors obtains the desired results more quickly. Clear images, even at the highest zoom level and under any lighting conditions, are also a part of our Premium PTZ camera's seamless, complete range of features.

- Servo Feedback – No Drifting
- WDR up to 120 dB
- Electronic Image Stabilizer (EIS)
- H.264/H.265/MJPEG Simultaneous Streaming
- IR LEDs (working distance up to 200 m)
- Triple power (UPoE/DC12 V/AC24 V)
- IP66/IK10 (housing only)
- ONVIF Profile S/G/T Support
- Temp. Range –55 to 55 °C/-67 to 131 °F with integrated heater ON
- 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 40x Optical Zoom
- Auto Object Tracking



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#### Remotely Upgradable Firmware

The firmware of the MOBOTIX MOVE 3MP Speed Dome IR 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 3MP Speed Dome IR 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	3MP Speed Dome IR Light Camera
Order Code	Mx-SD1A-340-IR

## Image Quality

Image Sensor	3MP 1/2.8" Progressive CMOS
Effective (Used) Pixels	H x V = 2065x1553 (3MP)
Pixel Size	2.5 $\mu\text{m}$
Frame Rate (maximum)	<b>WDR on/off:</b> H.265/H.264: 3MP@30 fps MJPEG: 1080p@30fps

## Lens

Minimum Illumination	Color: 0.04 lux B/W: 0.002 lux
Lens Characteristics	Motorized Lens: Zoom, Focus, P-IRIS, Auto-IRIS Focal Length: 4.3 to 170 mm Aperture: F1.6 Horizontal Field of View: 63.7° (Wide), 1.7° (Tele) Vertical Field of View: 49.2° (Wide), 1.3° (Tele)

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## Camera

Day/Night	Automatically switchable IR-cut filter
Shutter Time	1 to 1/10000 s
Shutter Priority Mode	Up to 1/45 s
WDR	Up to 120 dB
Electronic Image Stabilizer (EIS)	Yes
Auto Object Tracking	On/off
Zoom	Optical: 40x, 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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## PTZ Features

Preset positions	Up to 256 positions, 1 Home position
Sequences	Up to 8 sequences with 64 preset positions each
Cruise Paths	Up to 8
Auto Pan Paths	Up to 4

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Display Position	Pan/Tilt degrees can be displayed in live image
Pan Range	360° endless
Tilt Range	-20° to +100°
Pan Speed	Manual Pan Speed: 0.1°-90°/s Preset Pan Speed: 300°/s
Tilt Speed	Manual Tilt Speed: 0.1°-55°/s Preset Tilt Speed: 300°/s
Joystick/Keypoint Control	RS485 protocols DSCP, Pelco-D and Pelco-P

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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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## Audio Codec

Compression/Encoding	G.711/G.726/AAC/LPCM
Streaming	Two-way Configurable resolution, frame rate, bandwidth LBR/VBR/CBR in H.265/H.264.
Audio Input	Line In
Audio Output	Line Out

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## Cyber Security Features

Password Protection	Yes
IP address filtering	Yes
IEEE 802.1X network access control	Yes
Digest authentication	Yes
AES encryption for password protection	Yes
SNMP, TLS, HTTP, HTTPS	Yes

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User and Group Management	Yes
SSL connections	Yes
VPN	Yes
Digital image signature	Yes
RSA encryption (2048 bits)	Yes

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## Network

Interface	10/100 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
Supported Browsers	All current browsers are supported.

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## System Integration

Base Video Analytics	Motion detection, audio 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 and audio 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 Requirements	Forced 4-pair UPoE, max 39.60 W AC24V, max 44.00 W, max 64.90 VA

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PoE Modes Supported	<b>Mode A and Mode B</b> required
Connectors	<ul style="list-style-type: none"><li>▪ RJ45</li><li>▪ 4 x Alarm in, 2x Alarm out terminal block</li><li>▪ DC 12 V terminal block</li><li>▪ AC 24 V terminal block</li><li>▪ Audio In terminal block</li><li>▪ Audio Out terminal block</li><li>▪ CVBS connector (available with max. 2 activated streams)</li><li>▪ RS485 terminal block</li></ul>
IR Illumination	850 nm; up to 200 m distance depending on scenery reflection
Video Storage	Micro SD/SDHC/SDXC card support up to 1 TB, Support for recording to NAS, MOBOTIX HUB, MOBOTIX MOVE NVR
Remotely Upgradable	Yes (see <a href="#">Remotely Upgradable Firmware, p. 2</a> )
Environmental Protection Class	IP66/IK10 (housing only)
Operating Temperature	-55 to 55 °C/-67 to 131 °F with integrated heater ON
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
MTBF	50,000 hours
Warranty	2 years; mechanically wearable parts (motor, gears, belts, etc.) excluded
Dimensions	ø 207.4 x 300.4 mm
Weight	3400 g

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

## Alarm Input/Output Current and Voltage

### Alarm In

5 V with 10 kΩ pull up, 50 mA

### Alarm Out

400 V DC/AC, 120 mA

# 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.

- **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 Level	Detection		Observation		Recognition		Identification	
	Wide	Tele	Wide	Tele	Wide	Tele	Wide	Tele
Mx-SD1A-340-IR	72 m/ 236 ft	2708 m/ 8885 ft	28 m/ 92 ft	1075 m/ 3527 ft	14 m/ 46 ft	542 m/ 1778 ft	7 m/ 23 ft	271 m/ 889 ft

# Accessories

Picture	Order Code	Description
	Mx-M-SD-C	Corner Mount for MOBOTIX MOVE SpeedDome models (only in combination with SpeedDome Wall Mount Mx-M-SD-W/WM)
	Mx-M-SD-GN	Parapet Mount (Gooseneck) with integrated junction box for MOBOTIX MOVE SpeedDome models
	Mx-M-SD-P	Pole Mount for MOBOTIX MOVE SpeedDome models (only in combination with SpeedDome Wall Mount Mx-M-SD-W/WM)
	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 Pole Mount Mx-M-SD-P or Corner Mount Mx-M-SD-C
	Mx-M-SD-WM	Wall Mount with room for optional junction box Mx-M-SD-WMJB for MOBOTIX MOVE SpeedDome models
	Mx-M-SD-WMJB	Wall Mount Junction Box for MOBOTIX MOVE SpeedDome models



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Picture	Order Code	Description
	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!

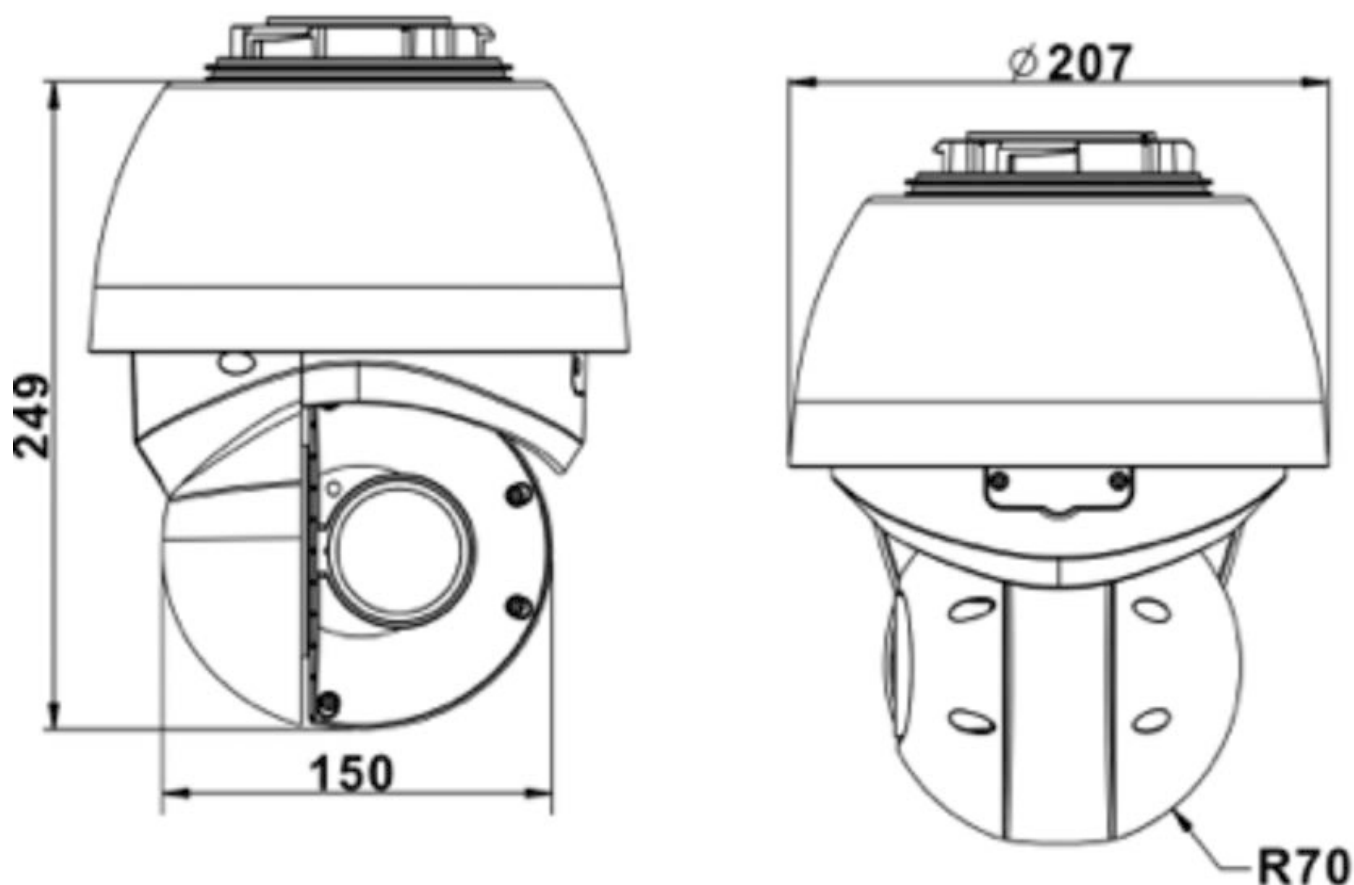


Fig. 1: 3MP Speed Dome IR Light Camera: All measurements in mm

## Further Reading

Manuals and Quick Installation documents



Technical Specifications



MOBOTIX MOVE Installation Hints



# MOBOTIX

BeyondHumanVision

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MOBOTIX AG • Kaiserstrasse • D-67722 Langmeil • Tel.: +49 6302 9816-103 • sales@mobotix.com • www.mobotix.com

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