



Technical Specifications

MOBOTIX D71

Versatile high-resolution imaging technology

The compact MOBOTIX D71 single-lens camera is protected by a weatherproof, impact-resistant polycarbonate dome. Three manually movable axes allow precise alignment of the configurable optics. The MOBOTIX D71 becomes infinitely flexible with intelligent video analysis apps of the MOBOTIX 7 platform.

- 4K UHD or 4MP Ultra LowLight image sensor
- Microphone and speaker integrated
- Shockproof polycarbonate dome
- Platform with the most flexible codec support: H.264, H.265, MxPEG+ and MJPEG
- ONVIF Profile G, S, T conformity guarantees utmost interoperability
- Wide Dynamic Range (WDR) with up to 120 dB
- Easy Plug quick-mounting system
- Robust in any environment: -40 to 65 °C/-40 to 149 °F, IP66, NEMA 4X and IK10



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Order Information

Name	MOBOTIX D71
Order Code:	Mx-D71(A/B)-8DNxxx/Mx-D71(A/B)-4DNxxx

Hardware

Image sensor (DN)	4K 3840x2160/4MP 2688x1512
Light sensitivity	- Color sensor (day): 0,1 lx @ 1/60 s; 0,005 lx @ 1 s - BW sensor (night): 0,02 lx @ 1/60 s; 0,001 lx @ 1 s
Exposure control	Manual and automatic mode 1 s to 1/16,000 s
IK protection class	IK10
IP / NEMA protection class	IP66 / NEMA 4X
Operating temperature range	-40 to 65 °C/-40 to 149 °F
Min. cold start temperature	-30 °C/-22 °F
Relative Humidity	95 % non-condensing
Internal DVR Storage	Internal microSD card (SDHC/SDXC), 8 GB out of the box, max. 1 TB.

Allowed cable dimensions for cables connected to the PCB terminals	<i>Conductor cross section</i> AWG 20 - 26 Rigid 0.14mm² - 0.5mm² Flexible 0.14mm² - 0.5mm² Flexible with ferrule 0.25mm² - 0.34mm²
Input	Contact Closure (no galvanic isolation necessary) or up to 30 Vrms AC / V50 DC Switching thresholds: - Input > 1.6V leads to a detected HIGH - Input < 0.9V leads to a detected LOW (after a high) max. length for cables: 50m
Output	D71-A Requires pull-up resistor and external power supply (10mA / max 30 Vrms AC / max. 50V DC) Output may be loaded with max. 50mA max. length for cables: depends on loop impedance of the connected cable. D71-B Dry contact, form A (max 30 Vrms / max, 50V DC/ 60 W/ 2A DC)
Microphone/Speaker	Integrated Microphone: - Sensitivity: -35 dB +/-4 dB (0 dB = 1 V/pa, 1 kHz) Integrated Loudspeaker: 0.9 W at 8 Ohm Line in / Line out
Integrated illumination	850 nm IR, up to 30 m/100 ft (may be more depending on scene)
Tampering Detection	Integrated Shock Sensor
Max. power consumption	- Max. 25 W/521 mA at 48 VDC - Max. 25 W/1042 mA at 24 VDC
Average power consumption	9.5 W
Electrical surge protection	Available with MX-Overvoltage-Protection-Box (not part of the scope of delivery)
PoE standard	PoE Plus (802.3at-2009)/Class 4 (Class 3 can be enabled via HW switch. Note: IR illumination requires Class 4)
Interfaces	- Ethernet 1000BaseT (RJ45 according to EIA/TIA-568B) - USB-C/USB2.0; High-Speed (V_{out} = 5.1 V, I_{out} = 0.9 A, P_{out} = 4.5 W)
Status LED	multicolor (red, blue, green)
Mounting Options	Wall- or ceiling-mountable

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Dimensions (Ø x height)	164 x 96 mm
Weight	Gross weight: 1.180g
Housing	Aluminum, PBT-30GF
Standard accessories	1 I/O dome, white 2 terminal blocks 1 mounting cable with sealing, 0.5 m/~2 in 2 silicone sealings for patch cable 1 Ethernet patch cable RJ45, 50 cm/19.7 in 1 Allen wrench 2.5 mm 1 D71 lens wrench orange 4 dowels 8 mm 4 stainless steel pan head-screws 4.5x60 mm 4 stainless steel washers Ø5.3 mm 1 Torx wrench TX 20 4 sealing plugs, white 2 Anti-glare rings 2 IO-plugs 1 Important Safety Information 1 Camera Connection Flyer
Detailed technical documentation	www.mobotix.com > Services > Download Center > Marketing & Documentation
MTBF	80,000 hours
Certificates	EN 50121-4, EN 55032, EN 55035, EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 62368-1, EN 63000, AS/NZS CISPR32, 47 CFR Part 15b, NRTL
Protocols	DHCP (client and server), DNS, ICMP, IGMP v3, IPv4, IPv6, HTTP, HTTPS, FTP, FTPS, MQTT, NFS, NTP (client and server), RTP, RTCP, RTSP, SFTP, SIP (client and server), SMB/CIFS, SNMP, SMTP, SSL/TLS 1.3, TCP, UDP, VLAN, VPN, Zero-conf/mDNS
Manufacturer warranty	5 years

Image and Video Properties

Available video codecs	■ H.264, H.265 ■ MxPEG+ ■ MJPEG
Image resolutions	VGA 640x360, XGA 1024x576, HD 1280x720, FullHD 1920x1080, QHD 2560x1440, 4K UHD 3840x2160
Multi streaming	H.264, H.265 with triple streaming
Multicast stream via RTSP	Yes
Max. image resolution	4K UHD 3840x2160/4MP 2688x1512
Max. frame rate (fps)	MxPEG: 20@4K, H.264: 30@4K, H.265: 30@4K

General Software Features

Feature	Properties
WDR	Up to 120 dB
Software features	■ H.264, H.265 Multistreaming ■ Multicast stream via RTSP ■ Digital pan, tilt, zoom/vPTZ (up to 8x zoom) ■ Genetec protocol integration ■ Programmable exposure zones ■ Snapshot recording (pre/post-alarm images) ■ Continuous recording ■ Event recording ■ Time-controlled flexible event logic ■ Weekly schedules for recordings and actions ■ Event video and image transfer via FTP and email ■ Playback and QuadView via web browser ■ Animated logos on the image ■ Master/Slave functionality ■ Privacy zone scheduling ■ Remote alarm notification (network message) ■ Programming interface (HTTP API) ■ MxMessageSystem
ONVIF compatibility	Profile G, S, T, (M with later firmware release)
Master/Slave functionality	Yes

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Feature	Properties
Remote alarm notification	Email, network message (HTTP/HTTPS), SNMP, MxMessageSystem, MQTT
DVR/image storage management	■ On internal microSD card ■ On external USB and NAS devices ■ Different streams for live image and recording ■ MxPEG+ only ■ MxFFS with buffered archive, pre- and post-alarm images, storage monitoring with error reporting
Camera and data security	User and group management, SSL connections, IP-based access control, IEEE 802.1X, intrusion detection, digital image signature
Firmware Tampering Detection	Digital Signature

Video Analysis

Feature	Properties
Video motion detection	Yes
MxActivitySensor	Version 1.0, 2.1, 3.0 and object-based MxAnalytics AI
MxAnalytics	Yes
MOBOTIX App support	Yes

Video Management Software

Feature	Properties
MOBOTIX HUB	Yes www.mobotix.com > Services > Download Center > Software Downloads
MxManagementCenter	Yes (latest version recommended) www.mobotix.com > Services > Download Center > Software Downloads
MOBOTIX LIVE App	Yes (available in Google Play Store (Android) and Apple App Store (iOS)).
3rd Party VMS Software	See ONVIF Profile S, T and G specification

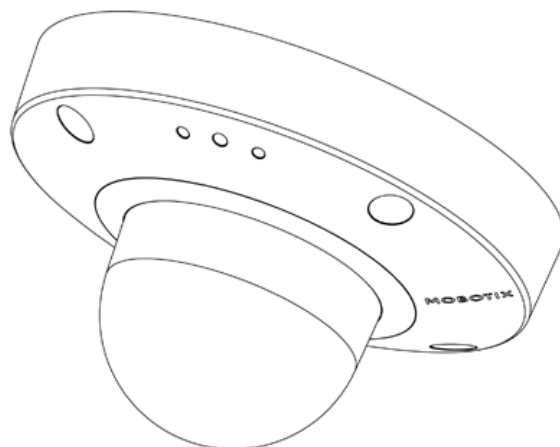
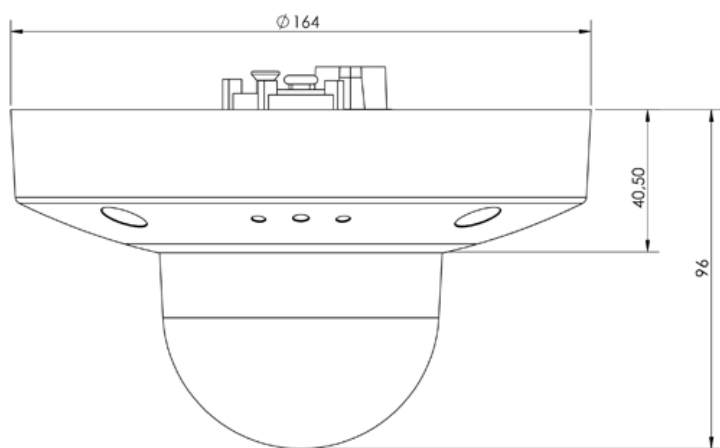
Model Variants

Order Code	Horizontal Angle of View
4K Image Sensor (3840x2160)	
Mx-D71A-8DN050	95°
Mx-D71A-8DN080	60°
Mx-D71A-8DN100	45°
Mx-D71A-8DN150	30°
Mx-D71A-8DN280	15°
4MP Image Sensor (2688x1512)	
Mx-D71A-4DN050	95°
Mx-D71A-4DN080	60°
Mx-D71A-4DN100	45°
Mx-D71A-4DN150	30°
Mx-D71A-4DN280	15°

For a complete list of lenses for MOBOTIX cameras, please see the Lens Table document for MOBOTIX 7 models on www.mobotix.com > Services > Download Center > Marketing & Documentation > Lens Table.

Dimensions

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





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MOBOTIX AG • Am Stundenstein 2 • D-67722 Winnweiler • Tel.: +49 6302 9816-103 • sales@mobotix.com • www.mobotix.com
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