



# 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-D71A-8DNxxx/Mx-D71A-4DNxxx

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## Hardware

Image sensor (DN)	4K 3840x2160/4MP 2688x1512
Light sensitivity	<ul style="list-style-type: none"><li>▪ Color sensor (day): 0,1 lx @ 1/60 s; 0,005 lx @ 1 s</li><li>▪ BW sensor (night): 0,02 lx @ 1/60 s; 0,001 lx @ 1 s</li></ul>
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

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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.								
I/Os	<p>INPUT</p> <ul style="list-style-type: none"> <li>▪ Contact Closure (no galvanic isolation necessary) or up to 30 Vrms AC / 50V DC</li> <li>▪ Switching thresholds Input &gt;1.6V leads to a detected HIGH Input &lt;0.9V leads to a detected LOW (after a high)</li> <li>▪ max. length for cables: 50m</li> </ul> <p>OUTPUT</p> <ul style="list-style-type: none"> <li>▪ requires pull-up resistor and external power supply (10mA / max. 50V DC - no AC)</li> <li>▪ max. length for cables: depends on loop impedance of the connected cable.</li> </ul> <p>Specs for cables connected to the PCB terminals:</p> <p><i>Conductor cross section</i></p> <table border="0"> <tr> <td>AWG</td> <td>20 - 26</td> </tr> <tr> <td>Rigid</td> <td>0.14mm<sup>2</sup> - 0.5mm<sup>2</sup></td> </tr> <tr> <td>Flexible</td> <td>0.14mm<sup>2</sup> - 0.5mm<sup>2</sup></td> </tr> <tr> <td>Flexible with ferrule</td> <td>0.25mm<sup>2</sup> - 0.34mm<sup>2</sup></td> </tr> </table>	AWG	20 - 26	Rigid	0.14mm <sup>2</sup> - 0.5mm <sup>2</sup>	Flexible	0.14mm <sup>2</sup> - 0.5mm <sup>2</sup>	Flexible with ferrule	0.25mm <sup>2</sup> - 0.34mm <sup>2</sup>
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Microphone/Speaker	<p>Integrated Microphone:</p> <ul style="list-style-type: none"> <li>▪ Sensitivity: -35 dB +/-4 dB (0 dB = 1 V/pa, 1 kHz)</li> </ul> <p>Integrated Loudspeaker:</p> <ul style="list-style-type: none"> <li>▪ 0.9 W at 8 Ohm</li> </ul> <p>Line in / Line out</p>								
Integrated illumination	850nm IR, up to 30 m/100 ft (may be more depending on scene)								
Shock detector (tamper detection)	Yes								

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Max. power consumption    max. 25 W

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 ( $V_{out} = 5.1 \text{ V}$ ,  $I_{out} = 0.9 \text{ A}$ ,  $P_{out} = 4.5 \text{ W}$ )

Mounting Options    Wall- or ceiling-mountable

Dimensions  
( $\varnothing$  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  $\varnothing 5.3 \text{ mm}$   
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](http://www.mobotix.com) > [Support](#) > [Download Center](#) > [Marketing & Documentation](#)

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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, 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	<ul style="list-style-type: none"> <li>▪ H.264, H.265</li> <li>▪ MxPEG+</li> <li>▪ MJPEG</li> </ul>
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	<ul style="list-style-type: none"> <li>▪ H.264, H.265 Multistreaming</li> <li>▪ Multicast stream via RTSP</li> <li>▪ Digital pan, tilt, zoom/vPTZ (up to 8x zoom)</li> </ul>

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Feature	Properties
	<ul style="list-style-type: none"><li>▪ Genetec protocol integration</li><li>▪ Programmable exposure zones</li><li>▪ Snapshot recording (pre/post-alarm images)</li><li>▪ Continuous recording</li><li>▪ Event recording</li><li>▪ Time-controlled flexible event logic</li><li>▪ Weekly schedules for recordings and actions</li><li>▪ Event video and image transfer via FTP and email</li><li>▪ Playback and QuadView via web browser</li><li>▪ Animated logos on the image</li><li>▪ Master/Slave functionality</li><li>▪ Privacy zone scheduling</li><li>▪ Remote alarm notification (network message)</li><li>▪ Programming interface (HTTP-API)</li><li>▪ MxMessageSystem</li></ul>
ONVIF compatibility	Profile G, S, T, (M with later firmware release)
Master/Slave functionality	Yes
Remote alarm notification	email, network message (HTTP/HTTPS), SNMP, MxMessageSystem, MQTT
DVR/image storage management	<ul style="list-style-type: none"><li>▪ On internal microSD card</li><li>▪ On external USB and NAS devices</li><li>▪ Different streams for live image and recording</li><li>▪ MxPEG+ only</li><li>▪ MxFFS with buffered archive, pre- and post-alarm images, storage monitoring with error reporting</li></ul>
Camera and data security	User and group management, SSL connections, IP-based access control, IEEE 802.1X, intrusion detection, digital image signature
Digitally signed firmware	Yes (to prevent firmware file tampering)

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## Video Analysis

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

## Video Management Software

Feature	Properties
MOBOTIX HUB	Yes <a href="http://www.mobotix.com">www.mobotix.com</a> > Support > Download Center > Software Downloads
MxManagementCenter	Yes (latest version recommended) <a href="http://www.mobotix.com">www.mobotix.com</a> > Support > Download Center > Software Downloads
MOBOTIX Cloud	Streaming & Events supported
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
<b>4K Image Sensor (3840x2160)</b>	
Mx-D71A-8DN050	95°
Mx-D71A-8DN080	60°
Mx-D71A-8DN100	45°
Mx-D71A-8DN150	30°

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Order Code	Horizontal Angle of View
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Mx-D71A-8DN280	15°
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<b>4MP Image Sensor (2688x1512)</b>	
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Mx-D71A-4DN050	95°
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Mx-D71A-4DN080	60°
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Mx-D71A-4DN100	45°
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Mx-D71A-4DN150	30°
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Mx-D71A-4DN280	15°
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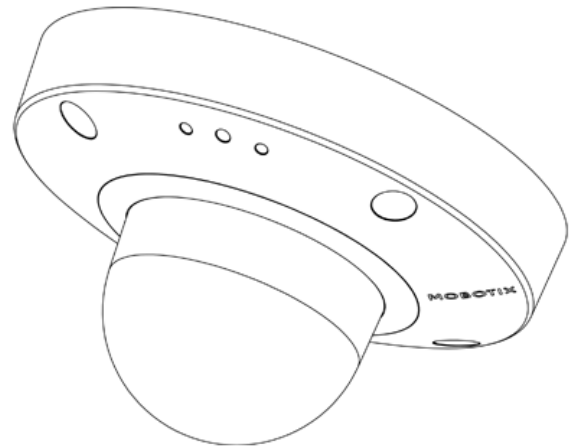
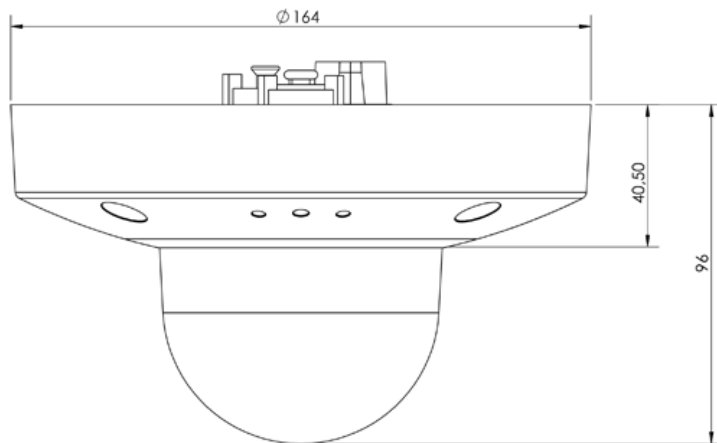
For a complete list of lenses for MOBOTIX cameras, please see the Lens Table document for MOBOTIX 7 models on [www.mobotix.com](http://www.mobotix.com) > [Support](#) > [Download Center](#) > [Marketing & Documentation](#) > [Lens Table](#).



## 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!



# MOBOTIX

BeyondHumanVision

[EN\\_03/25](#)

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