



Technical Specifications

MOBOTIX Q71

Hemispherical 360° imaging technology at its best

360° camera technology - compact, complete and versatile. The MOBOTIX Q71 sees everything and always. Its 360° optics are everywhere. For the first time, IR and LED white light are combined in one hemispherical camera. So you can even make the night colorful! 12 megapixels and WDR provide brilliant image quality and impressive details. The integrated audio function makes you heard. Embedded in the MOBOTIX 7 platform with its intelligent apps, the comprehensive video system offers you an infinite range of analysis options.

- 4K effective resolution: 12MP (1:1) effective max. resolution 2880x2880 (original hemispherical image)
- Integrated IR and white light LED spotlight
- 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 for the housing except the lens



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Order Information

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|-------------|-----------------|
| Name | MOBOTIX Q71 |
| Order Code: | Mx-Q71A-12DN016 |

Hardware

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|-----------------------------|---|
| Image sensor (DN) | 12MP (1:1) effective max. resolution 2880x2880 |
| Light sensitivity | <div><div>■ Color sensor (day): 0,1 lx @ 1/60 s; 0,005 lx @ 1 s</div><div>■ BW sensor (night): 0,02 lx @ 1/60 s; 0,001 lx @ 1 s</div></div> |
| Exposure control | Manual and automatic mode 1 s to 1/16,000 s |
| IK protection class | IK10 for the housing except the lens |
| IP / NEMA protection class | IP66 / NEMA 4X (except the lens) |
| Operating temperature range | −40 to 65 °C/−40 to 149 °F |
| Min. cold start temperature | −30 °C/−22 °F |

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|-----------------------------------|--|-----|---------|-------|--|----------|--|-----------------------|---|
| Relative Humidity | 95 % non-condensing | | | | | | | | |
| Internal DVR, out of the box | MicroSD card (8 GB), MxPEG+ recording only | | | | | | | | |
| I/Os | <p>INPUT</p> <ul style="list-style-type: none"> ■ Contact Closure (no galvanic isolation necessary) or up to 50V AC/DC ■ max. length for cables: 50m <p>OUTPUT</p> <ul style="list-style-type: none"> ■ requires pull-up resistor and external power supply (10mA / max. 50V DC - no AC) ■ max. length for cables: depends on loop impedance of the connected cable. <p>Specs for cables connected to the PCB terminals:</p> <p><i>Conductor cross section</i></p> <table> <tr> <td>AWG</td><td>20 - 26</td></tr> <tr> <td>Rigid</td><td>0.14mm² - 0.5mm²</td></tr> <tr> <td>Flexible</td><td>0.14mm² - 0.5mm²</td></tr> <tr> <td>Flexible with ferrule</td><td>0.25mm² - 0.34mm²</td></tr> </table> | AWG | 20 - 26 | Rigid | 0.14mm ² - 0.5mm ² | Flexible | 0.14mm ² - 0.5mm ² | Flexible with ferrule | 0.25mm ² - 0.34mm ² |
| AWG | 20 - 26 | | | | | | | | |
| Rigid | 0.14mm ² - 0.5mm ² | | | | | | | | |
| Flexible | 0.14mm ² - 0.5mm ² | | | | | | | | |
| Flexible with ferrule | 0.25mm ² - 0.34mm ² | | | | | | | | |
| Microphone/Speaker | <p>Integrated Microphone:</p> <ul style="list-style-type: none"> ■ Sensitivity: -35 dB +/-4 dB (0 dB = 1 V/pa, 1 kHz) <p>Integrated Loudspeaker:</p> <ul style="list-style-type: none"> ■ 0.9 W at 8 Ohm <p>Line in / Line out</p> | | | | | | | | |
| Integrated illumination | 850 nm IR and White Light. up to 15 m | | | | | | | | |
| Shock detector (tamper detection) | Yes | | | | | | | | |
| Max. power consumption | max. 25 W | | | | | | | | |
| Average power consumption | 13.2 W | | | | | | | | |
| Electrical surge protection | Available with MX-Overvoltage-Protection-Box (not part of the scope of delivery) | | | | | | | | |

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| PoE standard | PoE Plus (802.3at-2009)/Class 4 (Class 3 can be enabled via HW switch. Note: IR illumination requires Class 4) |
| Interfaces | <ul style="list-style-type: none">■ 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 (Ø x height) | 164 x 47,5 mm |
| Weight | Gross weight: 1.050 g |
| Housing | Aluminum, PBT-30GF |
| Standard accessories | <ul style="list-style-type: none">2 terminal blocks1 mounting cable with sealing, 0.5 m/~2 in2 silicone sealings for patch cable1 Ethernet patch cable RJ45, 50 cm/19.7 in1 Allen wrench 2.5 mm1 Q71 lens wrench blue4 dowels 8 mm4 stainless steel pan head-screws 4.5x60 mm4 stainless steel washers Ø5.3 mm1 Torx wrench TX 204 sealing plugs, white2 IO-plugs1 Important Safety Information1 Camera Connection Flyer |
| Detailed technical documentation | www.mobotix.com > Support > 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 |

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|-----------------------|--|
| 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 Formats, Frame Rates, Image Storage

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|---------------------------|---|
| Available video codecs | <ul style="list-style-type: none"> ■ H.264, H.265 ■ MxPEG+ ■ MJPEG |
| Image resolutions | VGA 640x360, XGA 1024x576, HD 1280x720, FullHD 1920x1080, 4MP 2688x1512, 8MP 1:1 2880x2880 |
| Multi streaming | H.264, H.265 with triple streaming |
| Multicast stream via RTSP | Yes |
| Max. image resolution | 12MP (1:1) effective max. resolution 2880x2880 hemispheric image |
| Max. frame rate (fps) | MxPEG: 20@4k, H.264: 30@4k, H.265: 30@4k |

Camera Software Features

| Feature | Properties |
|----------------------------|--|
| WDR | Up to 120 dB |
| Software features | <ul style="list-style-type: none"> ■ H.264, H.265 Multistreaming ■ Multicast stream via RTSP ■ Digital pan, tilt, zoom/vPTZ (up to 8x zoom) ■ Genetec protocol integration ■ Custom 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) ■ MOBOTIX MessageSystem |
| ONVIF compatibility | Profile G, S, T |
| Master/Slave functionality | Yes |
| Remote alarm notification | email, network message (HTTP/HTTPS), SNMP, MxMessageSystem |

| Feature | Properties |
|------------------------------|--|
| DVR/image storage management | <ul style="list-style-type: none"> ■ MxPEG+ only ■ Internal microSD card (SDHC/SDXC), 8 GB out of the box, max. 1 TB. ■ On external USB and NAS devices ■ Different streams for live image and recording ■ 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 |
| Digitally signed firmware | Yes (to prevent firmware file tampering) |

Video Analysis

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|------------------------|--|
| Video motion detection | Yes |
| MxActivitySensor | Version 1.0, 2.1 |
| MxAnalytics | Heatmap, people counting & object-based counting |
| MOBOTIX App support | No |

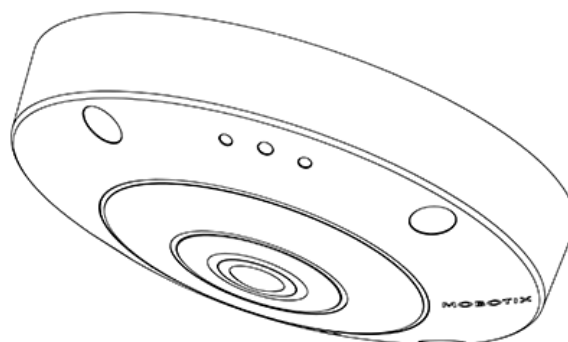
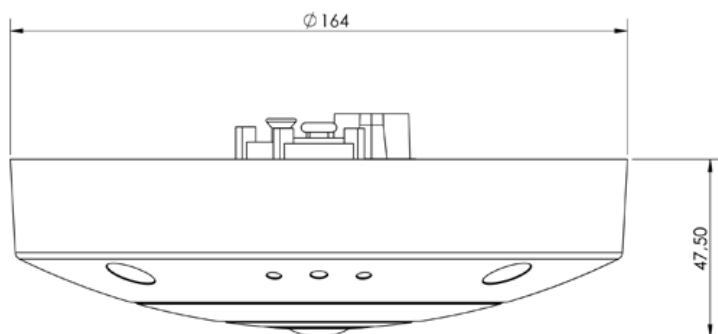
Video Management Software

| Feature | Properties |
|------------------------|---|
| MOBOTIX HUB | Yes www.mobotix.com > Support > Download Center > Software Downloads |
| MxManagementCenter | Yes (latest version recommended) www.mobotix.com > 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 |

Dimensions

NOTE! Download the drilling template from the section or on the MOBOTIX website: 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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MOBOTIX AG • Kaiserstrasse • D-67722 Langmeil • Tel.: +49 6302 9816-103 • sales@mobotix.com • www.mobotix.com

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