**Technical Specifications**

**MOBOTIX M16B AllroundDual**

**Dual. Modular. Unique.**

True to the original: Weatherproof and robust, the latest successor to our successful M1 through M12 dual camera models features interchangeable sensor modules as well as the latest MOBOTIX system technology. The result is a product completely unrivaled in terms of performance, functionality and design.

- Mx6 system platform 2nd generation, with MxBus, H.264 and ONVIF compatibility
- Recording on an internal MicroSD card (4 GB as standard)
- Integrated microphone and speaker
- Integrated shock detector und PIR sensor
- Wall or ceiling mounting (mount included with purchase)
- Can be easily installed on a pole with pole mount (accessory)
- Suitable IR illuminator (PoE+) available as an option

-40 to +60°C
## Technical Specifications: M16B AllroundDual

<table>
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<tr>
<th>Camera Variants</th>
<th>Modular system: M16B Body Mx-M16B with one or two sensor modules of choice (self-assembly)</th>
<th>M16B Sets with two factory-assembled sensor modules</th>
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</thead>
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<tr>
<td>Specialties</td>
<td></td>
<td></td>
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<tr>
<td>Sensor module with Fisheye Lens B016 (180° x 180°), night version optionally with long-pass filter (LPF)</td>
<td>Mx-O-SMA-S-6D016</td>
<td>Mx-O-SMA-S-6N016 LPF: Mx-O-SMA-S-6L016</td>
</tr>
<tr>
<td>Sensor module with Ultra Wide Lens B036 (103° x 77°), night version optionally with LPF</td>
<td>Mx-O-SMA-S-6D036</td>
<td>Mx-O-SMA-S-6N036 LPF: Mx-O-SMA-S-6L036</td>
</tr>
<tr>
<td>Sensor module with Super Wide Lens B041 (90° x 67°), night version optionally with LPF</td>
<td>Mx-O-SMA-S-6D041</td>
<td>Mx-O-SMA-S-6N041 LPF: Mx-O-SMA-S-6L041</td>
</tr>
<tr>
<td>Sensor module with Wide Lens B061 (60° x 45°), night version optionally with LPF</td>
<td>Mx-O-SMA-S-6D061</td>
<td>Mx-O-SMA-S-6N061 LPF: Mx-O-SMA-S-6L061</td>
</tr>
<tr>
<td>Sensor module with Standard Lens B079 (45° x 34°), night version optionally with LPF</td>
<td>Mx-O-SMA-S-6D079</td>
<td>Mx-O-SMA-S-6N079 LPF: Mx-O-SMA-S-6L079</td>
</tr>
<tr>
<td>Sensor module with Tele Lens B119 (31° x 23°), night version optionally with LPF</td>
<td>Mx-O-SMA-S-6D119</td>
<td>Mx-O-SMA-S-6N119 LPF: Mx-O-SMA-S-6L119</td>
</tr>
<tr>
<td>Sensor module with Distant Tele Lens B237 (15° x 11°), night version optionally with LPF</td>
<td>Mx-O-SMA-S-6D237</td>
<td>Mx-O-SMA-S-6N237 LPF: Mx-O-SMA-S-6L237</td>
</tr>
<tr>
<td>Sensor module with Super Tele Lens B500 (8° x 6°), night version optionally with LPF</td>
<td>Mx-O-SMA-S-6D500</td>
<td>Mx-O-SMA-S-6N500 LPF: Mx-O-SMA-S-6L500</td>
</tr>
<tr>
<td>Sensor module with CS-Mount (no lens included)</td>
<td>Mx-O-SMA-S-6DCS</td>
<td>Mx-O-SMA-S-6NCS</td>
</tr>
<tr>
<td>Sensor module with CS Vario Lens B045-100-CS</td>
<td>Mx-O-SMA-S-6DCSV</td>
<td>Mx-O-SMA-S-6NCSV</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hardware</th>
<th>M16B Day</th>
<th>M16B Night</th>
<th>M16B Day &amp; Night</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image sensor with individual exposure zones</td>
<td>Color</td>
<td>Black and White (B/W)</td>
<td>Color &amp; B/W</td>
</tr>
<tr>
<td>Light sensitivity in lux at 1/60 s and 1/1 s</td>
<td>0.1/0.005</td>
<td>0.02/0.001</td>
<td>0.1/0.005 (Color) 0.02/0.001 (B/W)</td>
</tr>
<tr>
<td>Image sensor (color or B/W sensor)</td>
<td>1/1.8&quot; CMOS, 6MP (3072 x 2048), Progressive Scan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microprocessor</td>
<td>i.MX 6 Dual Core incl. GPU (1 GB RAM, 512 MB Flash)</td>
<td></td>
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<tr>
<td>H.264 Hardware Codec</td>
<td>Yes, bandwidth limitation available; output image format up to QXGA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection class M16B Body</td>
<td>IP66 and IK07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection class M16B with 6MP sensor modules</td>
<td>IP66 with all modules; IK04 with B036 to B237; IK07 with B016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intended use</td>
<td>Not for use in hazardous areas (Ex area)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient temperature (range, incl. storage)</td>
<td>-40 to 60°C/-40 to 140°F (cold boot from -30°C/-22°F)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal DVR, ex works</td>
<td>4 GB (microSD)</td>
<td></td>
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<tr>
<td>Microphone/speaker</td>
<td>Yes/Yes</td>
<td></td>
<td></td>
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<tr>
<td>16bit/16kHz HD wideband audio (Opus codec)</td>
<td>Yes (live and audio messages)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passive infrared sensor (PIR)</td>
<td>Yes</td>
<td></td>
<td></td>
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<tr>
<td>Temperature sensor</td>
<td>Yes</td>
<td></td>
<td></td>
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<tr>
<td>Shock detector (tamper detection)</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power consumption (typically at 20°C/68°F)</td>
<td>7.5 watts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PoE Class (IEEE 802.3af)</td>
<td>Class 2 or 3 (variable), factory setting: class 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interfaces Ethernet 100BaseT/MxBus/USB</td>
<td>Yes (MxRJ45)/Yes/Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interface RS232</td>
<td>With MX-232-IO-Box (Order Nr: MX-OPT-RS1-EXT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mounting options</td>
<td>Wall, pole or ceiling (wall and ceiling mount included)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions Mx-M16B (height x width x depth)</td>
<td>210 x 158 x 207 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight Mx-M16B</td>
<td>1,160 g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td>PBT-30GF, color: white</td>
<td></td>
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</tr>
</tbody>
</table>

M16B Day

- Color
- Black and White (B/W)
- 0.1/0.005
- 0.02/0.001
- 0.1/0.005 (Color) 0.02/0.001 (B/W)

M16B Night

- Color & B/W
- 1/1.8" CMOS, 6MP (3072 x 2048), Progressive Scan
- i.MX 6 Dual Core incl. GPU (1 GB RAM, 512 MB Flash)
- Yes, bandwidth limitation available; output image format up to QXGA
- IP66 and IK07
- IP66 with all modules; IK04 with B036 to B237; IK07 with B016
- Not for use in hazardous areas (Ex area)
- -40 to 60°C/-40 to 140°F (cold boot from -30°C/-22°F)
- 4 GB (microSD)
- Yes/Yes
- Yes (live and audio messages)
- Yes
- Yes
- Yes
- 7.5 watts
- Class 2 or 3 (variable), factory setting: class 3
- Yes (MxRJ45)/Yes/Yes
- With MX-232-IO-Box (Order Nr: MX-OPT-RS1-EXT)
- Wall, pole or ceiling (wall and ceiling mount included)
- 210 x 158 x 207 mm
- 1,160 g
- PBT-30GF, color: white

M16B Day & Night

- Color & B/W
- 1/1.8" CMOS, 6MP (3072 x 2048), Progressive Scan
- i.MX 6 Dual Core incl. GPU (1 GB RAM, 512 MB Flash)
- Yes, bandwidth limitation available; output image format up to QXGA
- IP66 and IK07
- IP66 with all modules; IK04 with B036 to B237; IK07 with B016
- Not for use in hazardous areas (Ex area)
- -40 to 60°C/-40 to 140°F (cold boot from -30°C/-22°F)
- 4 GB (microSD)
- Yes/Yes
- Yes (live and audio messages)
- Yes
- Yes
- Yes
- 7.5 watts
- Class 2 or 3 (variable), factory setting: class 3
- Yes (MxRJ45)/Yes/Yes
- With MX-232-IO-Box (Order Nr: MX-OPT-RS1-EXT)
- Wall, pole or ceiling (wall and ceiling mount included)
- 210 x 158 x 207 mm
- 1,160 g
- PBT-30GF, color: white
## Technical Specifications: M16B AllroundDual

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<tr>
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<th>M16B Day</th>
<th>M16B Night</th>
<th>M16B Day &amp; Night</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard accessory</td>
<td>Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detailed technical documentation</td>
<td><a href="http://www.mobotix.com">www.mobotix.com</a> &gt; Support &gt; Download Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online version of this document</td>
<td><a href="http://www.mobotix.com">www.mobotix.com</a> &gt; Support &gt; Download Center</td>
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</tr>
<tr>
<td>MTBF</td>
<td>&gt; 80,000 hours</td>
<td></td>
<td></td>
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<tr>
<td>Protocols</td>
<td>IPv4, IPv6, HTTP, HTTPS, FTP, FTPS, RTP, RTSP, UDP, SNMP, SMTP, DHCP (client and server), NTP (client and server), SIP (client and server) G.711 (PCMA and PCMU) and G.722</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturer's warranty (since May 2018)</td>
<td>3 years</td>
<td></td>
<td></td>
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<tr>
<td>Image Formats, Frame Rates, Image Storage</td>
<td>M16B Day</td>
<td>M16B Night</td>
<td>M16B Day &amp; Night</td>
</tr>
<tr>
<td>Available video codecs</td>
<td>MxPEG/MJPEG/H.264</td>
<td></td>
<td></td>
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<tr>
<td>Image formats</td>
<td>Freely configurable format 4:3, 8:3, 16:9 or customized format (Image Cropping), such as 2592x1944 (5MP), 2048x1536 (QXGA), 1920x1080 (Full-HD), 1280x960 (Mega)</td>
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<tr>
<td>Multistreaming</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Multicast stream via RTSP</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Max. image format (dual image from both sensors)</td>
<td>2x 6MP (6144 x 2048)</td>
<td></td>
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<tr>
<td>Max. frame rate (fps, only single core used)</td>
<td>MxPEG: 42@HD(1280x720), 34@Full-HD, 24@QXGA, 15@5MP, 12@6MP, 6@2x 6MP; MJPEG: 26@HD(1280x720), 13@Full-HD, 9@QXGA, 5@5MP, 4@6MP, 2@2x 6MP</td>
<td>H.264: 25@Full-HD, 20@QXGA</td>
<td></td>
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<tr>
<td>Number of images with 4 GB microSD (internal DVR)</td>
<td>CIF: 250,000, VGA: 125,000, HD: 40,000, QXGA: 20,000, 6MP: 10,000</td>
<td></td>
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<tr>
<td>General Functions</td>
<td>M16B Day</td>
<td>M16B Night</td>
<td>M16B Day &amp; Night</td>
</tr>
<tr>
<td>Digital zoom and pan</td>
<td>Yes</td>
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<tr>
<td>ONVIF compatibility</td>
<td>Yes (Profile S, audio support with camera firmware V5.2.x and higher)</td>
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<tr>
<td>Genetec protocol integration</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Programmable exposure zones</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Snapshot recording (pre/post-alarm images)</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Continuous recording with audio</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Event recording with audio</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Time controlled flexible event logic</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Weekly schedules for recordings and actions</td>
<td>Yes</td>
<td></td>
<td></td>
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<tr>
<td>Event video and image transfer via FTP and email</td>
<td>Yes</td>
<td></td>
<td></td>
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<tr>
<td>Playback and QuadView via web browser</td>
<td>Yes</td>
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<tr>
<td>Bidirectional audio in browser</td>
<td>Yes</td>
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<tr>
<td>Animated logos on the image</td>
<td>Yes</td>
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<tr>
<td>Master/Slave functionality</td>
<td>Yes</td>
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<tr>
<td>Privacy zone scheduling</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Customized voice messages</td>
<td>Yes</td>
<td></td>
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<tr>
<td>VoIP telephony (audio, alert)</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Remote alarm notification (network message)</td>
<td>Yes</td>
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<tr>
<td>Programming interface (HTTP-API)</td>
<td>Yes</td>
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### General Functions

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<th>DVR/Storage Management</th>
<th>M16B Day</th>
<th>M16B Night</th>
<th>M16B Day &amp; Night</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inside camera via microSD card, externally via USB device and NAS, different streams for live image and recording, MxFSS with archive function, pre-alarm and post-alarm images, monitoring recording with failure reporting</td>
<td></td>
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<td></td>
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</tbody>
</table>

### Camera and data security

| MxMessageSystem: Sending and receiving of MxMessages | Yes |

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<tr>
<th>Video Analysis</th>
<th>M16B Day</th>
<th>M16B Night</th>
<th>M16B Day &amp; Night</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video motion detector</td>
<td>Yes</td>
<td></td>
<td></td>
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<tr>
<td>MxActivitySensor</td>
<td>Yes</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Video Management Software</th>
<th>M16B Day</th>
<th>M16B Night</th>
<th>M16B Day &amp; Night</th>
</tr>
</thead>
<tbody>
<tr>
<td>MxManagementCenter</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Mobile MOBOTIX App</td>
<td>Yes</td>
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