

## MOBOTIX c25 6MP Indoor Camera



*The ceiling-mounted c25 delivers two 180° panorama images of a room.*

### Indoor Ceiling Camera. Easy To Install.

With a diameter of only 12 centimeters and a weight of approximately 200 grams, the c25 is the smallest and lightest hemispheric MOBOTIX video complete system for fast ceiling mounting in protected indoor areas. Features include a light-sensitive 6MP day or night sensor and MxAnalytics. Features all functions like the traditional Q25 outdoor camera.

**Technical specifications subject to change without notice.** For more information on the c25 and on the entire range of MOBOTIX products, such as prices, manuals, video management software for computers and iOS devices, etc., please go to [www.mobotix.com](http://www.mobotix.com) > **Products**. Or contact us by phone (+49 06302 9816-103) or email ([sales@mobotix.com](mailto:sales@mobotix.com)).



## Original MOBOTIX Hemispheric Technology

Unlike the devices of other manufacturers, hemispheric distortion correction in a MOBOTIX system takes place in the camera and not later on the computer using separate video management software. This drastically reduces the image data and bandwidth that needs to be transferred and saved.



## MxAnalytics With Behavioral Detection

Especially interesting for indoor applications like retail, exhibition area, public premises, the c25 provides object counting and automatic Heatmap reporting inside the camera. As a new extension, people behavior can be defined as event trigger, for example duration of stay, moving in the opposite direction, different turns and exceeding speed limits. MxAnalytics does not require any additional infrastructure or extra costs.



## Simple Installation In Suspended Ceilings

The c25 can be easily installed using a standard drill bit (105 mm/4 inch in diameter) in suspended ceilings. The c25, which is connected to an Ethernet cable, is simply slotted in from below using raised spring clips and automatically secured in place.

Technical Data			
<b>Lens Options</b>	B016, B036 (L10, L20)	<b>Min. Light Sensitivity</b>	Day Sensor: 0.1 lux at 1/60 sec Night Sensor: 0.02 lux at 1/60 sec
<b>Image Sensors</b>	1/1.8" CMOS (6MP) Day (Color) or Night (B&W)	<b>Sensor Resolution</b>	6MP: 3072x2048 pixels (Color/B&W)
<b>Max. Frame Rate (MxPEG)</b>	MEGA/HD: 30 fps, QXGA: 15 fps, 6MP: 8 fps	<b>Compression</b>	MxPEG, M-JPEG, JPEG, H.264 (SIP video only)
<b>DVR Recording</b>	Internal: microSD Card External: PC/NAS (to 4 TB)	<b>Audio (optional)</b>	VoIP, sound recording using audio package
<b>Operating Conditions</b>	IP20, 0 to +40 °C	<b>Internal Sensors</b>	Temperature, illumination, shock detector
<b>Image Processing</b>	MxActivitySensor, VMD, image correction, backlight, MxAnalytics	<b>Software (free of charge)</b>	MxManagementCenter, MOBOTIX App

**c25 Indoor Camera With 6MP Moonlight Sensor: Technical Data**

Model versions	Fisheye lens (day/night)* • ultra-wide angle lens (day/night)* * optional with integrated audio package
Operating conditions	Ambient temperature 0°C to 40°C (32°F to 104°F), protection class IP20 (protected from foreign bodies with diameters 12.5 mm or larger, not waterproof)
Intended use	Indoors • For installation in suspended ceilings • Not for use in areas at risk of explosions
Diameter	120 mm (visible), 170 mm (with folded out spring clips)
Depth, weight (without ETH cable)	51 mm, 212 g (incl. lens)
Installation diameter	105 mm
Minimum installation depth	55 mm (owing to spring clips)
Clamping range	1 mm to 26 mm (possible thickness of mounting surface/ceiling panel)
Image sensor	1/1.8" CMOS sensor, 6MP (3072 x 2048), progressive scan
Minimum light sensitivity	Color sensor: 0.1 lux at 1/60 sec; 0.005 lux at 1 sec Black/white sensor: 0.02 lux at 1/60 sec; 0.001 lux at 1 sec
Maximum image size	6MP (3072 x 2048 pixels)
Maximum frame rates MxPEG (fps)	30@HD (1280 x 720), 30@MEGA, 15@QXGA, 10@5MP, 8@6MP
Maximum frame rates MJPEG (fps)	15@HD (1280 x 720), 12@MEGA, 6@QXGA, 4@5MP, 4@6MP
Controls	Two buttons, two status LEDs
Audio	c25 version with audio package (incl. microphone and speaker) or via ExtIO
Image processing	MxLEO, backlight compensation, automatic white balance, image distortion correction, panorama correction
Image formats	Freely configurable format 4:3/8:3/16:9 • User-defined formats (image cropping, e.g., 5MP, QXGA, full HD, MEGA)
Multi-streaming	Yes
PTZ	Digital pan/tilt/zoom, continuous 8x zoom
Intelligent video analysis	MxActivitySensor, video motion analysis, MxAnalytics (Heat maps and counting corridor reports)
DVR	Via integrated microSD card • Externally on USB device • Externally on NAS (max. of 4 TB) • Separate live image feed and full image recording • MxFFS with archiving function • Pre- and post-alarm images • Automatic DVR surveillance including error notification
Alarm/event management	MxActivitySensor • Video motion analysis • Temperature sensor • Shock Detector • Illumination sensor • Further sensors/IO via additional devices • Alarm notification via e-mail, FTP, VoIP
Video telephone	SIP client; intercom is possible via speaker of MX-ExtIO
Security	User/group management, SSL connection, IP address filter, IEEE 802.1x, intrusion detection, digital image signature, tamper detection
Protocols	IPv4, IPv6, HTTP, HTTPS, FTP, RTP, UDP, TCP, SNMP, SMTP, DHCP (client or server), NTP (client or server)



c25 Indoor Camera With 6MP Moonlight Sensor: Technical Data	
Interfaces	Ethernet (MxRJ45), MiniUSB • With optional MX-Bus-IO-Module two additional signal outputs
Power supply	PoE (IEEE 802.3af, class 2), typical power consumption of 4 W
Certifications	<b>EMV:</b> EN 55022:2010 • EN 55024:2010 • EN 61000-6-1:2007 • EN 61000-6-2:2005) • EN 61000-6-3:2007+A1:2011 • EN 61000-6-4:2007+A1:2011 <b>Further certifications:</b> AS/ NZS CISPR22:2009+A1:2010 • CFR47 FCC part15B) • EN 55121-4:2006 • IEC 60950-1 / EN 60950-1 (NRTL)
(Integrated) software functions	Digital zoom • Programmable exposure windows • Snapshot recording • Full feature recording (MxFFS archive, continuous recording, full image recording including sound) • Time and event control • Time tables including holidays • Web functions • Logo generator • Flexible event logic • Master/slave arming • Multiple time-controlled privacy zones • Remote alarm notification • Programming interface/HTTP API
MOBOTIX Video Management Software (VMS) free of charge	MxManagementCenter MxMC, MxControlCenter MxCC, MxEasy, MOBOTIX App
Accessories	- MX-Bus-IO-Module - On-wall mounting set (available soon) - MX-ExtIO (for optional audio)



B016  
180° x 180°



B036  
103° x 77°



# c25 – Technical Specifications

Security-Vision-Systems

**MOBOTIX**

Camera Variants	c25 Day	c25 Night
<b>Lenses, Sensors</b>		
Fisheye Lens MX-B016 (Hemispheric, 180° x 180°)	<b>MX-c25-D016</b>	<b>MX-c25-N016</b>
Ultra Wide Lens MX-B036 (103° x 77°)	<b>MX-c25-D036</b>	<b>MX-c25-N036</b>
Super Wide Lens MX-B041 (90° x 67°)	–	–
Wide Lens MX-B061 (60° x 45°)	–	–
Standard Lens MX-B079 (45° x 34°)	–	–
Tele Lens MX-B119 (31° x 23°)	–	–
Distant Tele Lens MX-B237 (15° x 11°)	–	–
Super Tele Lens MX-B500 (8° x 6°)	–	–
CS-Vario Lens MX-B045-100-CS (39°-89° x 29°-65°)	–	–
Camera Module (body), lens can be orderd separately	–	–
Image sensor with individual exposure zones	Color	B/W
Sensor sensitivity in lux at 1/60 s /1 s	0,1/0,005	0,02/0,001
Image sensor resolution (color or B/W sensor)	6MP (3072 x 2048)	6MP (3072 x 2048)
<b>Hardware Functions</b>		
Protection class	IP20	IP20
Temperature range 0 to 40°C/32 to 104°F	•	•
Temporary internal DVR	64 MB	64 MB
Internal DVR, ex works	4 GB (microSD)	4 GB (microSD)
Microphone/speaker	optional (with audio package)	optional (with audio package)
Passive infrared sensor (PIR)	–	–
Integrated temperature sensor	•	•
Shock detector	•	•
Power consumption (typical)	4 watts	4 watts
Variable PoE class (factory default: 3)	2 or 3	2 or 3
<b>Image Formats, Frame Rates, Image Storage</b>		
Maximum image format (per sensor)	6MP (3072 x 2048)	6MP (3072 x 2048)
Maximum frame rate (MxPEG, max. resolution)	8 fps (6MP)	8 fps (6MP)
CIF images with 4 GB MicroSD DVR	250,000	250,000
VGA images with 4 GB MicroSD DVR	125,000	125,000
HD images with 4 GB MicroSD DVR	40,000	40,000
QXGA images with 4 GB MicroSD DVR	20,000	20,000

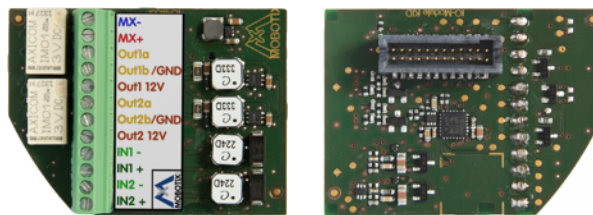
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Camera Variants	c25 Day	c25 Night
<b>General Functions</b>		
Digital zoom (continuous) with panning	•	•
Codecs: Motion-JPEG/MxPEG/H.264 for SIP	•/•/•	•/•/•
Programmable exposure zones	•	•
Snapshot recording (pre/post-alarm images)	50	50
Terabyte ring buffer storage (internal/network)	•	•
Continuous recording with sound (0.2 to 30 fps)	•	•
Event recording with sound	•	•
Time and event control/flexible event logic	•/•	•/•
Weekly schedules/holidays	•	•
Web functionality (FTP, email)	•	•
Playback/QuadView and MultiView	•/•	•/•
Bidirectional sound in browser (with audio package)	•	•
Logo generator, animated	•	•
Master/Slave arming	•	•
Privacy zones (time-controlled)	•	•
Customized voice messages (with audio package)	•	•
VoIP telephony (audio/video, alert – (with audio package)	•	•
Remote alarm notification (network message)	•	•
Signal inputs/outputs and MxBus via	MX-Bus-IO-Module	MX-Bus-IO-Module
Programming interface (HTTP API)	•	•
Security Features (HTTPS/S/L, IP-based access control, IEEE 802.1X network authentication)	•	•
<b>Video Analysis</b>		
Video Motion	•	•
MxAnalytics	•	•
MxActivitySensor (incl. behavioral detection)	•	•
<b>Video Management Software</b>		
MxManagementCenter/MxControlCenter/MxEasy	•/•/•	•/•/•
MOBOTIX App (iOS)	•	•

## MX-Bus-IO-Module For p25/i25/c25

### Connecting And Switching Of External Devices Via MOBOTIX Indoor Cameras p25, i25 and c25

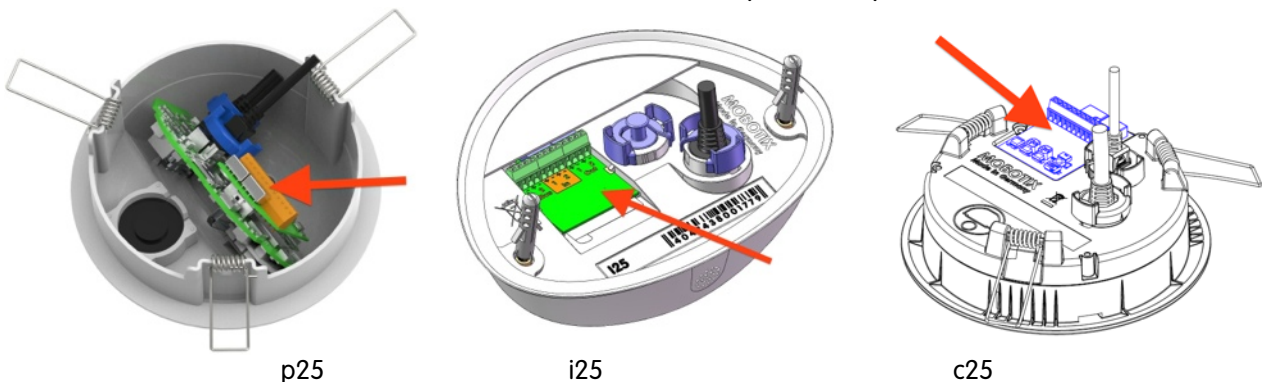
The MX-Bus-IO-Module is a practical, optional extension board for all MOBOTIX Indoor Cameras p25, i25 and c25, which is simply attached to the back of the camera and tightened (for i25 and c25) or mounted on the camera board (only with p25). The module expands every camera to include two extra inputs and two 12V outputs and enables access to the two-wire MxBus. The outputs can be directly connected to a relay and thus higher voltages and loads, e.g., lamps or motors. MxBus is an encoded two-wire cable developed by MOBOTIX for transferring data and current. Using this solution, users can simply and securely power and control various MOBOTIX IO devices over distances of more than 100 m.



**Left:** Front of MX-Bus-IO-Module with green terminal connector for connecting external devices: The 12V-powered ports Out1 and Out2 serve, for instance, to connect relays (e.g., Eltako ER12-002-UC).

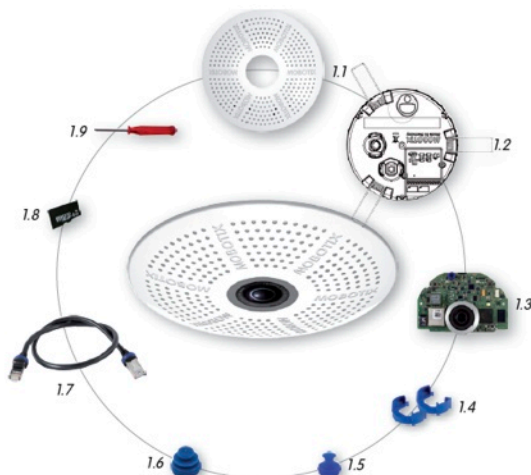
**Right:** Back with black camera socket (plug onto back/board of camera).

### Installation Position Of MX-Bus-IO-Module With Indoor Cameras (Red Arrow):



Terminal Connectors				
<b>MX-</b> <b>MX+</b> <b>Out1 A</b> <b>Out1 B /GND</b> <b>Out1 12V</b> <b>Out2 A</b> <b>Out2 B/GND</b> <b>Out2 12V</b> <b>IN1 -</b> <b>IN1 +</b> <b>IN2 -</b> <b>IN2 +</b>	MxBus connections	MxBus		
	Output 1 A	Relay pot.-free	-	Out-puts
	Output 1 B/GND		Output 1 12 V self-powered	
	Output 1 12 V	-	Output 2 12 V self-powered	
	Output 2 A	Relay pot.-free		
	Output 2 B/GND	-	Inputs	
	Output 2 12 V	-		
	Output 1 -			
	Output 1 +			
	Output 2 -			
Output 2 +				

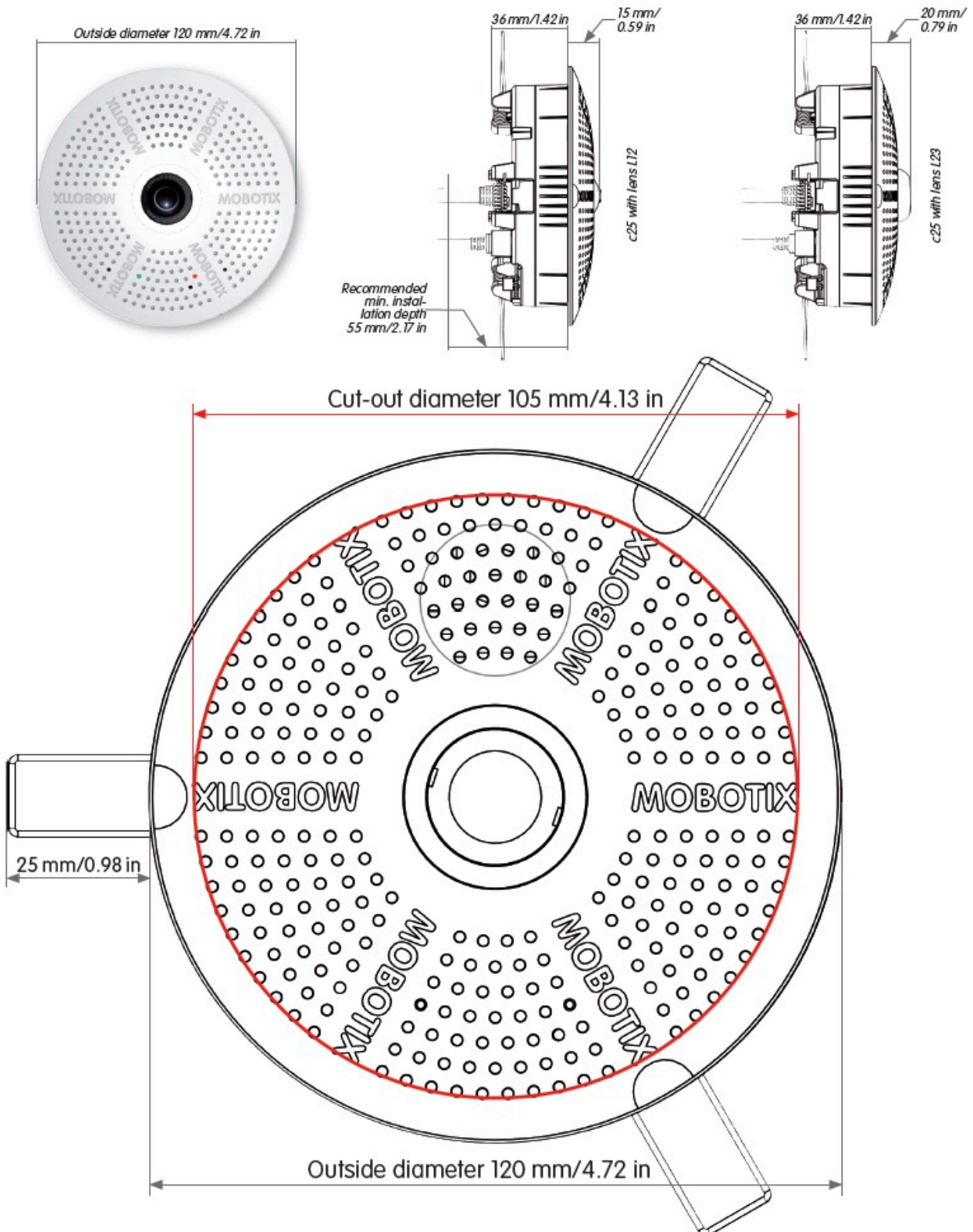
MX-Bus-IO-Module: Technical Data	
Model versions	MX-OPT-IO3-INT
Ambient temperature range	0°C to 40°C (32°F to 104°F)
IP protection class (DIN EN 60529)	None
Intended use	<ul style="list-style-type: none"> <li>• Not for use in areas at risk of explosions</li> <li>• Only combined with MOBOTIX cameras p25, i25 and c25</li> </ul>
Dimensions (L x W x D)	43 x 32 x 18 mm
Weight (without packaging)	10 g
Connectors for MxBus devices	1 (1 x 2 terminals)
Inputs	2 inputs (galvanically isolated; 0 V to 48 V DC)
Outputs	<b>Option 1:</b> 2 outputs (floating); max. capacity per contact: 30 W or 1 A or 48 V AC/DC <b>Option 2:</b> 2 outputs (12 V DC, max. 50 mA per output)
Configuration of inputs/outputs	Via camera software (available in web browser)
Max. power output at 12 V	1.2 W
Terminal specification	AWG26 to AWG21 (wire thicknesses supported at the terminal connectors)
LEDs	No
MxBus emergency operation	No
Power consumption	Typical 1 W
Housing	PBT GF30
Certifications	None, as only used as camera plug-in module
Specific information	<ul style="list-style-type: none"> <li>• Note the MxBus power supply: Max. one additional module (e.g., GPS-Box), otherwise expand with BPA-Box (available soon)</li> <li>• Camera firmware required: 4.3.4.50 and higher</li> </ul>
MTBF	> 80,000 h



Item	Count	Part Name
1.1	1	Housing (installed)
1.2	1	Back plate with spring clips (installed)
1.3	1	Main board with lens MX-B016 or MX-B036 (installed)
1.4	2	Bayonet catch, blue (installed)
1.5	1	USB plug, blue (installed)
1.6	1	Ethernet plug, blue (installed)
1.7	1	Ethernet patch cable, 50 cm/19.7 in, black
1.8	1	MicroSD card pre-installed (SDHC installed, SDXC supported)
1.9	1	Disassembly tool

(Standard delivery from the technical documentation: [www.mobotix.com](http://www.mobotix.com) > Support > Manuals)





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