

### MOBOTIX p25 6MP Indoor Camera



Even at difficult low light conditions (approx. 1.5 lux), c25 delivers perfect and detailed video (ceiling-mounted, panorama view).

### The Perfect Ceiling Camera.

The p25 6MP camera model is equipped with the 6MP Moonlight Sensor Technology, providing best low-light performance to cope with every indoor situation. The p25 is positioned extremely price competitive and represents with all included MOBOTIX features and the MOBOTIX video management system MxMC, one of the most attractive security solutions in the market.

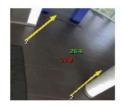
**Technical specifications subject to change without notice.** For more information on the p25 and on the entire range of MOBOTIX products, such as prices, manuals, video management software for computers and iOS devices, etc., please go to **www.mobotix.com > Products**. Or contact us by phone (+49 06302 9816-103) or email (sales@mobotix.com).





#### **Highest Flexibility**

The new p25 is a ceiling camera with a manual pan/tilt functionality providing full installation flexibility. Equipped with a telephoto lens, the p25 can be directed to a specific spot in the room. With a 103 degree lens and mounted in the corner, the p25 covers the entire space in 6MP resolution. A hemispheric version and on-wall kit is available, too. Beside the pre-built models, nearly all lens options can be self-assembled with a p25 day or night body.



#### **MxAnalytics**

The p25 provides people counting and analysis of people behavior, without any extra costs, which is perfect for indoor locations like retail stores, museums, etc. Without any extra PC or license fees, the p25 represents highest flexibility and cost savings for end users.



#### Competitive without Compromise

Beside MxAnalytics, all other MOBOTIX features are included, such as MxActivitySensor – which avoids 95 % of false alarms – on board and/or NAS recording, notification via email, FTP and IP request, and much more.

Technical Data			
Lens Options	B016	Min. Light Sensitivity	Day Sensor: 0.1 lux at 1/60 sec
Image Sensors	1/1.8" CMOS (6MP) Day (Color)	Sensor Resolution	6MP: 3072×2048 pixels (Color)
Max. Frame Rate (MxPEG)	MEGA/HD: 30 fps, QXGA: 15 fps, 6MP: 8 fps	Compression	MxPEG, M-JPEG, JPEG, H.264 (SIP video only)
DVR Recording	Internal: microSD Card External: PC/NAS	Audio (optional)	VoIP, sound recording using audio package
Operating Conditions	IP20, 0 to +40 °C	Internal Sensors	Temperature, illumination, shock detector
Image Processing	MxActivitySensor, VMD, image correction, backlight, MxAnalytics	Software (free of charge)	MxManagementCenter, MOBOTIX App



p25 Indoor Camera With 6MP Moonlight Sensor: Technical Data		
Model versions	Body without lens (day/night)* • Fisheye lens (day/night)* • ultra-wide angle lens (day/night)* • wide angle lens (day) • standard lens (day) • telephoto lens (day) • distance telephoto lens (day)	
	* 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)	89 mm (of which 45 mm visible below ceiling), 270 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	
Lens tilting angle	-5° to -45° (manually adjustable)	
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 status LEDs	
Audio	p25 version with audio package (incl. microphone and speaker) or via ExtlO	
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 • 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	



Security	-vision-	Systems

p25 Indoor Camera With 6MP Moonlight Sensor: Technical Data		
Protocols	IPv4, IPv6, HTTP, HTTPS, FTP, RTP, UDP, TCP, SNMP, SMTP, DHCP (client or server), NTP (client or server)	
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	EMV: 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 Further certifications: 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, MOBOTIX App	
Accessories	- MX-Bus-IO-Module - On-wall mounting set (available soon) - MX-ExtIO (for optional audio)	





Camera Variants	p25 Day	p25 Night
Lenses, Sensors		
Fisheye Lens MX-B016 (Hemispheric, 180° x 180°)	MX-p25-D016	MX-p25-N016
Ultra Wide Lens MX-B036 (103° x 77°)	MX-p25-D036	MX-p25-N036
Super Wide Lens MX-B041 (90° x 67°)	MX-p25-D041	only with body
Wide Lens MX-B061 (60° x 45°)	MX-p25-D061	only with body
Standard Lens MX-B079 (45° x 34°)	MX-p25-D079	only with body
Tele Lens MX-B119 (31° x 23°)	MX-p25-D119	only with body
Distant Tele Lens MX-B237 (15° x 11°)	MX-p25-D237	only with body
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 ordered separately	MX-p25-BOD1 MX-p25-BOD1-AUD	MX-p25-BOD1-N MX-p25-BOD1-N-AUD
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)
Hardware Functions		
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 (p25 with audio package)	optional (p25 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

Image Formats, Frame Rates, Image Storage		
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

- available ex works
- not available



Camera Variants	p25 Day	p25 Night
General Functions		
Digital zoom (continous) 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/SL, IP-based access control, IEEE 802.1X network authentification)	•	•
Video Analysis		
Video Motion	•	•
MxAnalytics	•	•
MxActivitySensor	•	•
Video Management Software		
Trace management somware		
MxManagementCenter	•	•
MOBOTIX App (iOS)	•	•



### MX-Bus-IO-Module

#### **Connecting And Switching Of External Devices Via MOBOTIX Indoor Cameras**

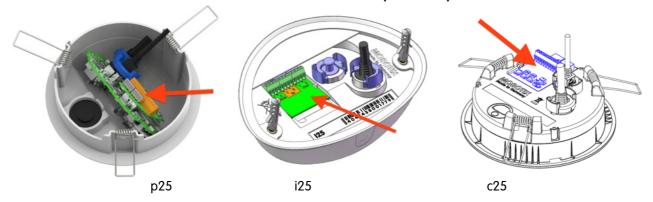
The MX-Bus-IO-Module is a practical, optional extension board for all MOBOTIX Indoor Cameras, which is simply attached to the back of the camera and tightened or mounted on the camera board. The module expands every camera to include two extra inputs and two 12V outputs and enables access to the two-wire 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 Outl 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				
MX- MX+	MxBus connections	MxBus		
Outl A	Output 1 A	Relay	-	
Out1 B /GND	Output 1 B/GND	pot free	Output 1 12 V self- powered	
Outl 12V	Output 1 12 V	-		Out-
Out2 A	Output 2 A	Relay	-	puts
Out2 B/GND	Output 2 B/GND	free	Output 2 12 V self-	
Out2 12V	Output 2 12 V	-	powered	
IN1 -	Output 1 –			
IN1 +	Output 1 +	Inputs		
IN2 - IN2 +	Output 2 –			
IN2 +	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	Not for use in areas at risk of explosions Only combined with MOBOTIX cameras p25, i25 and c25	
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	Option 1: 2 outputs (floating); max. capacity per contact: 30 W or 1 A or 48 V AC/DC Option 2: 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	Note the MxBus power supply: Max. one additional module (e.g., GPS-Box), otherwise expand with BPA-Box (available soon)  Camera firmware required: 4.3.4.50 and higher	
MTBF	> 80,000 h	

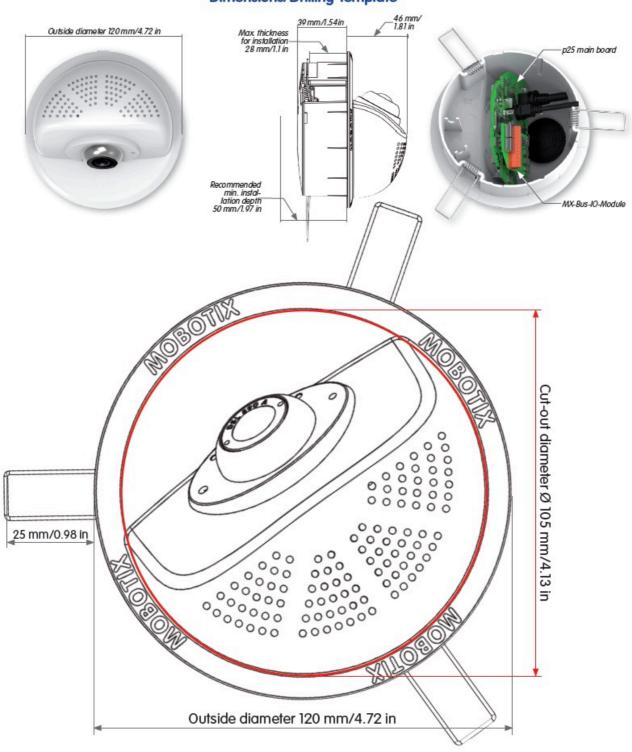


ltem	Count	Part Name
1.1	1	Housing with spring clips and tiltable camera receptacle (installed)
1.2	1	Back cover (installed)
1.3	1	Main board with lens mount (installed)
1.4	1	Lens (only installed in camera models listed in «Variants of the p25»)
1.5	1	Blind cover (only when self-mounting the lens with MX-p25-BOD1)
1.6	1	Ethernet patch cable, 50 cm/19.7 in, black (installed
1.7	1	MicroSD card pre-installed (SDHC montiert, SDXC supported)
1.8	1	Flat-head screwdriver, blue
1.9	1	Lens wrench red (only with MX-p25-BOD1 and lenses D036 to D237)
1.10	1	Allen wrench 1.5 mm

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



### **Dimensions/Drilling Template**



(Excerpt from the technical documenation www.mobotix.com > Support > Manuals)