

M10D-Night Technical Specifications

Dual-Lens Day&Night IP Camera



M10D with SecureFlex wall mount

M10D: Megapixel IP Camera System With Integrated Recording

The M10D-Night has two integrated image sensors and two lenses. Depending on the current illumination, the camera automatically selects the color image sensor with daylight lens or the more light-sensitive B/W image sensor with IR lens to record the images.

The resolution of 1280 x 960 pixels is about twelve times as high as the CIF images from an analog camera. In VGA (640 x 480) and CIF (320 x 240) mode, the M10D-Night provides up to 4x zoom while creating minimal network load. Bidirectional audio, video motion detection in the image and a passive IR sensor are also part of the standard delivery. The integrated Ethernet, ISDN and RS232 interfaces provide access to all current IT standards, including GSM/GPRS/UMTS (3G).

Digital zoom, digital panning, video motion detection, event-controlled frame rates and freely selectable image sections reduce the storage requirements of the M10 to a minimum. The camera software features integrated alarm management including pre- and post-alarm images, FTP, e-mail, external ring buffer storage on Windows, Linux and Mac OS X computers as well as playback and MultiView functions for up to 30 cameras in the browser. Since the camera does not require additional heating, power can be supplied via the network or ISDN cabling.

Highlights

- In/Outdoor camera (IP65) with wall mount and fully concealed cabling
- Dual image sensors (two lenses), color and IR-sensitive B/W
- Integrated microphone and speaker
- Bidirectional IP & ISDN telephony
- Audio transmission to the browser
- Definable exposure zones
- Integrated video motion detection
- NightVision with up to 1 sec. exp. time
- Digital zoom and panning
- Video/audio recording and playback
- Software DVR for Windows/Linux/OS X
- Alarm management with pre- & post-alarm images

Dual Camera System 2.5 Megapixels

- Fully digital color CMOS image sensor with 1280x960 pixels and backlight correction
- Fully digital B/W CMOS image sensor with 1280x960 pixels and eight-times higher sensitivity than color sensor
- Two 8 mm standard wide-angle lenses: 5-element glass lens 1:2.0, 45° horiz.
- Optional: Tele lens

Automatic Exposure Without Iris

- Auto exposure times from 0.1 msec. to 1 sec.
- Configurable min./max. shutter speeds
- Freely definable exposure windows
- Purely software-based control with exposure windows, white balance, automatic contrast, sharpness filter and backlight correction
- MOBOTIX TrueColor software
- Individual exp. control for both image sensors

Image Formats and Frame Rates

- Color 1280x960, 640x480, 320x240, 160x120
- Dual camera: 2560x960, 1280x480, 640x240
- Free image formats with zoom and panning (e.g. 1000x200 for skyline format)
- Image formats: JPEG, Motion JPEG, MxPEG, BMP
- Frame rate using MxPEG (320x240): 25 fps
- Frame rate using MxPEG (640x480): 12 fps

- Image size (320x240 JPEG): 6 to 20 KB
- Scheduled obscuring of image areas

Image Storage Included

- Internal image storage (up to 600 Mega, 2,500 VGA, 4,000 CIF images or 6 min. video)
- Event and time-controlled image storage
- Adj. number of pre- and post-alarm images
- Browser playback with event search features

Recording Included

- Integrated ring buffer recording by the camera on Windows or Linux file servers
- Event-controlled Snap Shot image recording with pre- and post-event images
- Event-controlled MxPEG recording (video and audio) with 1.3 Mbit/s at 640x480 pixels

Video Management Included

- Ring buffer with up to 1 million alarms on the PC/server (no software installation or FTP!!!)
- Adjustable ring buffer size and delete time
- Image management with time/date search
- Definable MultiView for up to 30 cameras
- Freely definable function buttons
- Windows client with Layout Editor

Event/Alarm Control Included

- Freely definable time functions/repeats
- Passive IR motion detector, signal input
- Temperature, illumination, microphone volume
- Motion detection in definable video motion fields
- TCP/IP messages on IP ports (Ethernet and ISDN)

Alarm Signalling Included

- Signal output and sounds on camera speaker
- E-Mail and FTP via network and ISDN
- TCP/IP messages on IP ports (Ethernet and ISDN)
- Phone call (list & PIN test), with voice message

Audio SIP Telephony/VoIP

- Integrated microphone and speaker
- ISDN telephony (with PIN test)
- Voice-over-IP to/from Windows PC
- Custom voice messages easily recorded
- DHCP-assigned IP address on speaker
- Announcement of dynamic IP address via phone
- Touchtone remote control using phone keys
- Lip-synchronous audio recording (MxPEG)

Software Everything Included

- No software installation required
- Live images and admin. using web browser
- Complete video management software and recording integrated in camera software
- 4 simultaneous browser operating modes: HTML/JavaScript with M-JPEG, streaming (Java), ActiveX (MxPEG), PDA-optimized pages
- PDA interface with HTML-only pages
- Website updates via FTP, also using ISDN
- Several cameras in one browser window
- Simultaneous ISDN dial-in/dial-out using PPP
- Freely definable user groups and access rights

Power Supply 3 Watts

- Power supply injected into cables, fully concealed cabling
- Ethernet: 24...32V DC, 3W power consumption

Mechanics Maintenance-Free

- Fiber-reinforced casing with weather protection
- Integrated wall/ceiling mount with fully concealed cabling
- Weight (incl. SecureFlex wall mount): 850 g
- Dimensions (incl. SecureFlex wall mount): 130 x 240 x 175 mm (w x d x h)

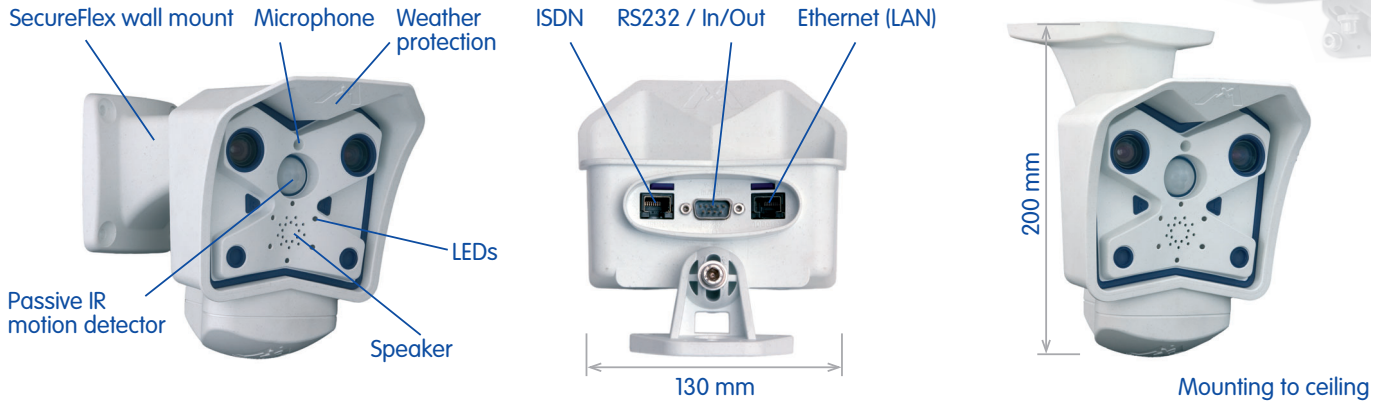
Characteristics

- Hardware resolution:
Two 1280 x 960 CMOS, color and B/W
Free software format with zoom/pan
- Frame/data rates for MxPEG video streaming (50% JPEG):

25 F/s	CIF (320x240)	1.2 Mbps
12 F/s	VGA (640x480)	1.3 Mbps
4 F/s	Mega (1280x960)	1.2 Mbps
- Day lens sensitivity (8 mm/2.0)
1 Lux at 1/60 sec., 0.05 Lux at 1 sec.
- IR/Night lens sensitivity (8 mm/2.0)
0.2 Lux at 1/60 sec., 0.005 Lux at 1 sec.
- Audio codec
64 kBit ISDN and SIP (IP telephony)
- Temperature: -30° ... +60°C, IP 65

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Outdoor wall mount with space for RJ45 wall outlet



L22 Fisheye 90°*

L32 Wide-angle*

L43 Wide-angle

L65 Tele*

L135 Tele



90° hor. x 67° vert.
in 10 m: 20.0 x 13.3 m

60° hor. x 45° vert.
in 10 m: 11.5 x 8.2 m

45° hor. x 34° vert.
in 10 m: 8.2 x 6.1 m

31° hor. x 23° vert.
in 10 m: 5.5 x 4.0 m

15° hor. x 11° vert.
in 10 m: 2.6 x 1.9 m

*not available for M10

Overview M10 Standard Models (see price list for details)

- M10M-Sec-D43: Indoor/outdoor camera for mounting to ceiling or wall, MEGA (1280x960), L43 lens
- M10M-Sec-D135: Indoor/outdoor camera for mounting to ceiling or wall, MEGA (1280x960), L135 tele lens
- M10D-Sec-D43D135: Indoor/outdoor **Dual** camera for mounting to ceiling or wall, MEGA (1280x960), L43 und L135 lenses
- M10M-Sec-N43: Indoor/outdoor camera for mounting to ceiling or wall, MEGA (1280x960), with **B/W** sensor and L43 lens
- M10D-Night-D43N43: Indoor/Outdoor **Dual Day/Night** camera (MEGA) with one color, one **B/W** sensor and two L43 lenses
- M10D-Night-D135N135: Indoor/Outdoor **Dual Day/Night** camera (MEGA) with one color, one **B/W** sensor and two L135 lenses

Standard Delivery Includes

- M10D-Night camera
 - Camera with two camera modules
 - one color, one B/W image sensor and two L43 lenses
 - automatic Day/Night switching
 - SecureFlex wall mount
 - Ethernet cable 50 cm
- SecureFlex wall mount
 - Wall mount made of 30% fiber-reinforced and shock-resistant PBT
 - Dowels and stainless steel screws