

M12D-Night Technical Specifications

Dual-Lens Day&Night IP Camera



... the new face of IP video



M12D: Megapixel IP Camera System With Integrated Recording

The M12D-Night has two integrated image sensors and two lenses. Depending on the illumination level, 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 camera provides up to 4x zoom while creating minimal network load (MxPEG: approx. 1 Mbps, CIF 25 fps). Bidirectional audio, video motion detection and a passive IR sensor are also integrated. The Ethernet, ISDN and RS232 interfaces of the camera comply with current IT standards, including GSM/GPRS/UMTS (3G).

Digital zoom, panning, video motion detection, event-controlled frame rates and freely selectable image sections reduce the storage requirements of the M12 to a minimum. The integrated camera software features include alarm management with 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 40 cameras in the browser. Since the camera does not require additional heating (operating temp. -30 to +60°C, -20 to +140°F), power can be supplied via the network.

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 lenses

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 each image sensor

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): 30 fps
- Frame rate using MxPEG (640x480): 30 fps

- Frame rate using MxPEG (1280 x 960): 10 fps
- 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-alarm images
- Event-controlled MxPEG recording (video and audio) with 2.4 Mbps 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 schedule
- Image management with time/date search
- Definable MultiView for up to 30 cameras
- Freely definable function buttons
- MxViewer Windows client with Layout Editor

Event/Alarm Control Included

- Freely definable time functions/repeats
- Passive IR motion sensor, 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 audio messaging
- E-Mail and FTP via network or ISDN
- TCP/IP messages on IP ports (Ethernet and ISDN)
- Phone call (list & PIN code), with voice message

Audio SIP Telephony and VoIP

- Integrated microphone and speaker
- ISDN telephony (with PIN code)
- Voice-over-IP to/from Windows PC
- Custom voice messages easily recorded
- Video IP telephony using SIP standard
- Automatic phone call on event/alarm
- Remote-control of camera from any phone
- Lip-synchronous audio recording (MxPEG)

Software Everything Included

- No software installation required
- Live images and admin. using web browser
- Complete video management and recording software integrated in camera
- 4 simultaneous browser operating modes: HTML/JavaScript with M-JPEG, streaming (Java), ActiveX (MxPEG), PDA-optimized pages
- PDA interface with HTML-only pages (Pocket PC compatible)
- Website updates via FTP, also using ISDN
- Multiple 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 via data cable, fully concealed
- PoE IEEE 802.3af compliant
- 3W power consumption

Mechanics Maintenance-Free

- Fiber-reinforced housing 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):

30 F/s	CIF (320x240)	1,2 Mbps
30 F/s	VGA (640x480)	2,4 Mbps
10 F/s	Mega (1280x960)	2,5 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)
0.1 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

