



# Product Information 2/02

Security-Vision-Systems



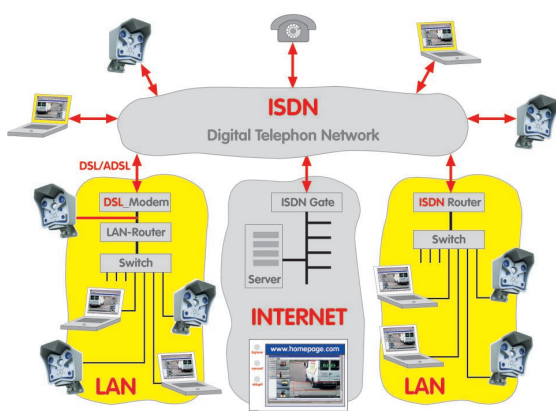
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## Network and ISDN Camera Without Software Installation

**March 22, 2002.** Weatherproof and versatile - the MOBOTIX camera can store images on a PC via LAN or ISDN, update images on the web, record event or time-controlled image sequences in its internal storage, or send image packages via email or FTP. Since an Internet browser (Internet Explorer, Netscape) is all that is required to control the camera, no additional software is required.

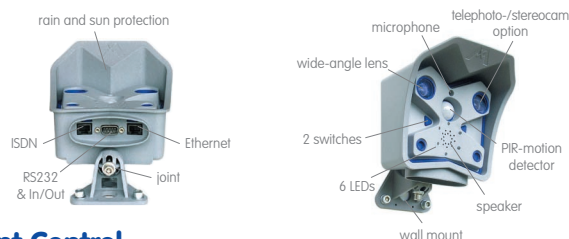
### Computer and Web Server Included

The camera, designed by MOBOTIX in Germany, contains a computer for image processing and Ethernet, ISDN and RS-232 interfaces. It is connected to the local computer network just like a network printer with its own IP address. Once plugged in, all PCs on the LAN can access the camera to view live images of up to 12 images/second; access can be password-protected. No additional software is required as the camera contains a web server that can be accessed by an Internet browser (Internet Explorer, Netscape). Internet access is not required to access the camera.



### ISDN Remote Access

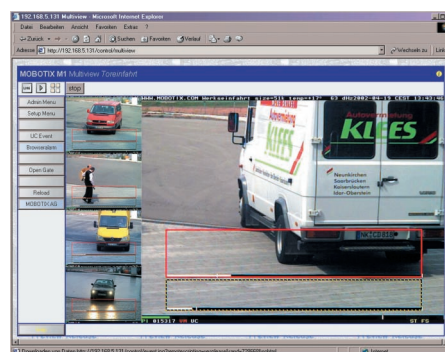
Using the integrated ISDN connection, you can create a point-to-point connection to the camera to view camera images or the camera can dial into the Internet to update images on a home page. Again, this does not require any additional software, as the camera is being accessed like an ISP via an ISDN Router or an ISDN card. As the ISDN line can be used to supply power remotely, a power outlet is not required at the camera location.



### Event Control

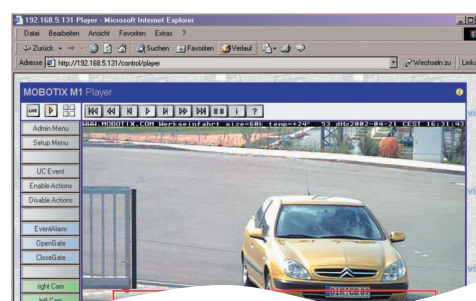
Apart from its flexible time control, the camera features several sensors and integrated motion detection that monitors several adjustable motion detection areas. This allows limiting the images stored, uploaded and sent to only those that are actually created if an event occurs. Not only the camera's sensors, i.e. the passive

infrared (PIR) motion sensor, signal input, microphone, and its buttons but also TCP/IP messages can trigger an event.



### Integrated Image Recorder

The standard version of the camera features a recorder that stores up to 800 images (MIM-Secure: 2,400 images) on an event or time-controlled basis. In addition, the number of pre and post-event images as well as the recording interval can be set. The integrated player can show the image sequences frame by frame or in fast-forward mode in your browser. The camera itself can upload these image sequences to an FTP server automatically, send them by email, or alternatively - using your browser - you can download a compressed file (Tar, WinZip, Stuffit, PowerArchiver) to your computer for offline viewing. All of this requires no software installation, since the image player automatically downloads and then runs in your browser.



### Dual Lens with Wide-angle and Tele Lens

The camera features an optional dual lens system, which can process two images simultaneously, allowing you to use the wide-angle lens to get an overview image and the tele lens to take a closer look at the image center. A power zoom is not required, thus eliminating costly maintenance and enhancing reliability. MOBOTIX cameras are available with three different lenses: 42 mm, 72 mm, and 150 mm (in relation to a standard 35 mm camera).



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## Illuminating Picture Quality

The camera features an advanced CMOS color image sensor - safe against whiteouts without requiring an auto iris. Its software-based image controls quickly adapt to changes in lighting and its automatic white balance, contrast correction and sharpness filters produce brilliant color images. Without any mechanical parts (e.g. a shutter), the camera digitally sets the exposure time between 1/2,000 and 1 seconds, making images recorded at dawn still look as in bright daylight. This would not be possible using standard video-based technology.

## Image Compression Within the Camera

The camera handles compression of the color images (640x480 or 320x240) to JPEG (\*.jpg) format on the fly. A 920 KB RGB image is thus reduced to 50 KB without any visible loss in quality, which means that the camera can store and send more pictures. MOBOTIX' software compression has another distinct advantage: a simple software update will ensure that the camera creates picture and sound formats suitable for web browsers even years from now.



## Crisp Images - Lifelong

All lenses are adjusted for optimum sharpness and are locked in place at the MOBOTIX facility. The 42 and 72 mm lenses are glued in place to prevent maladjustments due to vibration. In conjunction with the integrated software sharpness filter, the auto-focus range starts at 0.5 m (1.6 ft) for the 42 mm and at 1 m (3.3 ft) for the 72 mm lens.

## Simple Installation

If you have ever mounted and adjusted a camera in a weatherproof casing while standing on a ladder, you will appreciate the simple mounting of a lightweight MOBOTIX camera. The integrated wall mount and swivel joint, the locked-in-place lenses, and the power supply through the ISDN or network interfaces guarantee a cost-efficient on-site installation. The entire camera configuration is performed by remote administration via ISDN or the network.

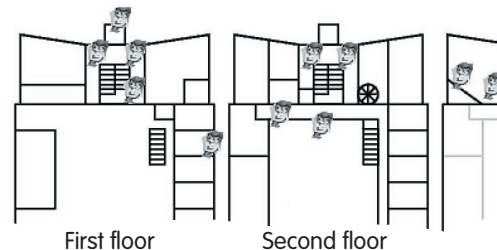
## Weatherproof and Designed for Industrial Use

The Testing and Certification Institute VDE Frankfurt has tested the MOBOTIX camera for weatherproofness and has certified it as IP65. The first digit (6) stands for dustproof efficiency (dust-tight - no ingress of dust) and the second digit (5) stands for water resistance (protected against water jets). The camera housing is made of fiberglass-reinforced PBT synthetic material and is certified for outdoor use

between -20 and +60 degrees Celsius (-4 to 140 degrees F) without additional weatherproof housing.

## Viewing Multiple Cameras

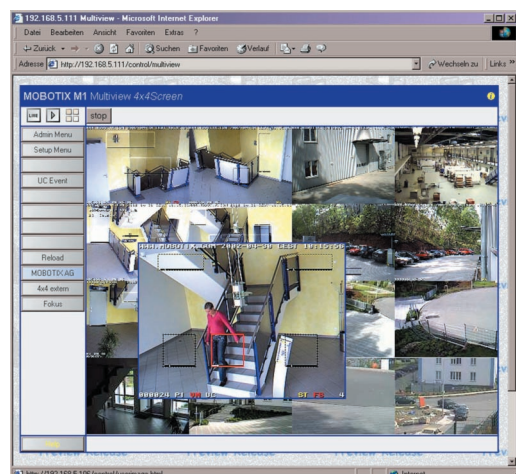
The Multi View page allows viewing several cameras in one browser window; you only need to specify the cameras' IP addresses and the desired refresh rates. Another example of an application would be to create a web site according to the floor plan of the building



with the camera icons serving as hyperlinks (using their IP addresses) for the corresponding cameras. In the event that live thumbnail images of a camera should be displayed on such an overview page, a simple JavaScript application would need to be employed. This would allow displaying live images or the last saved events using a direct http link.

## Server Backup

If image sequences should be recorded for an extended period of time, the camera can automatically save the images to a file server. This could be a remote server that is accessible via FTP or a file share



on a standard Linux or Windows-based server on the local network. In both cases, no additional software needs to be installed on the file server. The camera itself handles all image management tasks, i.e. displaying the image sequences in the browser, searching for specific images or deleting the images after a specific period of time. As the user does not require direct access to the server, the server can be secured by a firewall. If image sequences are to be stored within the camera, it can be upgraded by installing a flash ROM card with up to 1 GB storage capacity.