

MULTIEYE®

Product catalogue 2009/I

Digital Video Surveillance Systems

Future security - Multifunctional - Modular





About artec technologies AG

The public-stock company artec technologies AG from the traditional county seat of Diepholz close to Bremen, Germany, develops and manufactures products and system solutions for the transmission and recording of video/TV in networks. For those purposes, artec technologies is divided into two business areas.

Under the brand-name MULTIEYE, network video recorder and management software is provided for the business area of "digital video security."

In its second area of operation, the company develops and markets products with the brandname "Xentaurix" for streaming media/IPTV applications. Their most significant product, the "XBL Broadcast Logger," is used around the world as a multi-channel recorder for TV and radio broadcast recordings.

At present, more than 13,000 of the systems in both business areas are in use around the world.

Dear Interested Parties!

In the coming year, the product MULTIEYE will have existed for ten years. It began with a single channel digital recorder solution and, in the meantime, has become an entire family of products with which the greatest variety of system solutions can be realized. All MULTIEYE products are compatible with one another, modular in their structure, are scaleable, and easy to modernize. As a result, they offer a high level of investment security for your customers.

Our MULTIEYE software, the basis of all our MULTIEYE products, has been consequently developed and optimized, especially in regard to the processing of high levels of video data generated by megapixel cameras.

In this version of the catalogue, you will find the newest generation of the MULTIEYE recorders. These too have been greatly optimized, give powerful performance and have been conceived for both today's and tomorrow's demands for processing, recording and transmitting video data in networks.

The development, production, order processing, and after-sales service of security-related products place high demands on quality management. For this reason, the company sought and obtained certification according to ISO 9001 in the year 2007. Over and above that, our MULTIEYE products were certified by the highly respected BG testing laboratory as „BGV cash-points.“

We look forward to good and mutually beneficial co-operation!

Your Ingo Hoffmann
Chairman



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The brandname MULTIEYE stands for a platform of highly professional video surveillance products characterized by well laid-out operation, scalability, high performance and ease of modernization. All MULTIEYE products are 100% compatible with one another and can be operated simultaneously. As a result, the MULTIEYE software features are basically identical for all products.

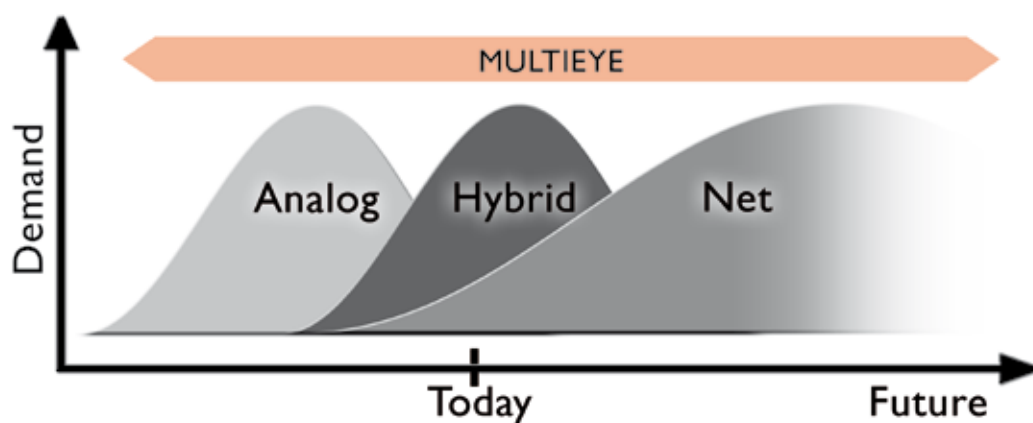
With MULTIEYE-NET software, highly professional PC- and server-based network video recorders (NVR) of 2 – 32 IP video channels can be provided. MULTIEYE-NET is innovative, multifunctional software which, because of its modular structure, can be modernized and adapted to the specific demands of customers and/or projects at any time. The software provides the highest level of flexibility, expandability, and future security.

MULTIEYE recorders are available in a wide variety of models; as pure network video recorders (NVR), HYBRID recorders for both analog and IP video channels (HVR), or as digital video recorders (DVR) with exclusively analog video inputs. Depending on the model, the recorders provide 8 – 32 channels and up to 16 TB of storage capacity. Because of the modular architecture of their hardware and software, the MULTIEYE recorders are built for the future and can be optimally adapted to specific applications and their requirements.

HYBRID-DVR kits consist of MULTIEYE software, video boards, and a user's manual and are primarily used for OEM recorders.

With the exception of the MX recorder servers, all MULTIEYE products have been certified by the highly respected BG testing laboratory as „BGV cash-points.“

The following is a list of the MULTIEYE software features which are relevant to all MULTIEYE products.



The seamless transition from analog to network-based video surveillance has already been achieved by MULTIEYE.

MULTIEYE® FEATURES

Easy operation through Drag & Drop

Through Drag & Drop, MULTIEYE software is very easy to operate. The user interface has a well laid-out, user-friendly concept. Each user's individual settings, e.g. the personal multiscreens, are stored separately.

Clear-cut license models

Why make matters difficult when they can be done easily? MULTIEYE comprises a fundamentally expandable product at an optimal price-performance ratio. The software can be expanded manually or via artec technologies AG's licensing server. All licenses are bundled with a USB dongle.

Development and production according to ISO 9001:2000

The development and manufacture of all artec technologies AG's products is done in accordance with DIN ISO 9001:2000 and correspondingly meets the highest demands for quality assurance.

Our own basic technologies

MULTIEYE software is based on several technologies developed especially by artec technologies AG. The patented CVoD process makes event-related, time-shifted playback possible within networks. With the DirectStream technology, IP video data is recorded and processed directly. As a result, recording rates up to 800 fps/ips and image data processing up to 1,000 megapixels/second per server can be achieved, depending upon the configuration of the individual system. The MD indexing procedure enables ultrafast video analysis of recorded data, via networks as well. With the broadband remote transmission process, video data is optimized in such a way that even megapixel cameras can be polled via DSL lines, yet zoomed-in areas retain their maximum resolution when transmitted.

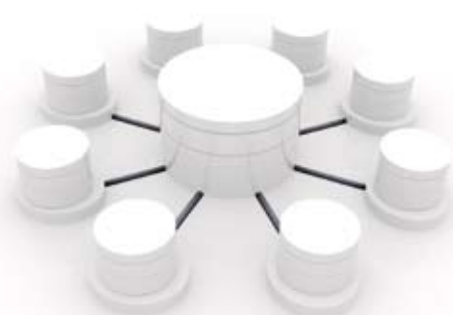
BGV "Kassen" certification

In August, 2008, MULTIEYE software was certified by the highly respected BG testing laboratory for use at "cash-points" and, correspondingly, can be used for optical room surveillance in banks. As a result, special features such as pre- and post-alarms as well the as storage of suspicious-event alarms are also available to end users.

Quadplex® operation

Enables the simultaneous operation of

- Livedisplays
- Recordings
- Playback and evaluation
- Remote inquiry



MULTIEYE® FEATURES



Support of network cameras and video servers

MULTIEYE supports network cameras and video servers from over 60 manufacturers such as

4XEM, ACTi, Advantech, Allnet, Apro, artec technologies, ArecontVision, Aviosys, AXIS, Basler, Bosch, Bosslan, Canon, Cellvision, Conceptronic, Con-nec Tec, Convision, DigiLan, Digitus, D-Link, Eltis, ELMO, ENEO, Everfocus, Eyetelligent, For-A, FlexWatch, Grand, Grandtec, Hawking, Hunt Intellinet, IOImage, IQEye, IPX, JVC, Leadtek, LevelOne, Lindy, Lilin, Linudix, Lumene-ra, Misumi, Mobotix, Moxa, Panasonic, Pixord, Planet, PTAV, Samsung, San-tec, Siemens, Sony, Sanyo, Stardot, SparkLan, Surveyor, Sweex, Toshiba, TRC, VCS, Visicom, Vivotec, Xannet, Y-Cam, Yoko

Programmable multiscreens with “hotspot” monitor

For the easy viewing of live displays, a selection of eight programmable mul-tiscreens for covering from one to 32 cameras is available. Each specific user's multiscreens can be stored separately. The “hotspot” monitor can be confi-gured individually and embedded in a multiscreen or pulled out and displayed on a separate monitor. With the optional VideoCenter II, up to 320 cameras can be administered.



Central motion detection

All connected network cameras and video servers can be displayed on a moti-on-detection matrix with up to 2304 individual fields. Because of the matrix's high resolution, fields for the surveillance of specific objects can be marked.

PTZ control

Via software popup, joystick or directly through the live image including Direct-Move function

Multimonitor operation

MULTIEYE supports the operation of up to four monitors simultaneously. Multiscreens, players, live images and hotspots can be individually moved about among the monitors.



Multifunctional storage management

MULTIEYE offers a choice between dynamic and static storage management. With dynamic storage administration, the video data is automatically distri-buted among the available harddrive(s), whereas static recording makes it possible to allocate individual storage spaces for each video source. MUL-TIEYE supports the operation of up to 24 harddrives/partitions or network drives and can administer up to 24 TB per server

MULTIEYE® FEATURES

Event-driven recording

In addition to continuous recording or timer operation, single or all video channels can also record on an event-driven basis, per motion detection, contact-activation and even in response to a signal word via the DataLog interfaces (COM, TCP).

Playback

Playback is done on the local multiplayer and/or with the NetworkPlayer. Both visually and functionally, the players are identical and differ only in minor areas. They provide four-fold display with motion histogram, video analysis with MotionSearch and MotionTracker, an export function for images and videos, and a number of other features. Playback can be operated and controlled by keyboard combinations as well as with a jog shuttle.

Efficient evaluation

To provide ultrafast analysis of video data, the player is equipped with highly efficient video analysis features. By means of a special index procedure, data volumes in the multidigit range of terabytes can be analyzed in just a few seconds. With the MotionSearch function, one or more event areas can be defined in the player to enable the display of image changes in variable sizes.

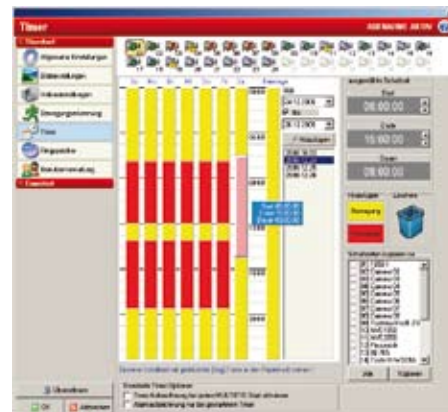
Remote inquiry and remote configuration

Remote polling can be carried out via LAN, WAN, Internet or telephone connection, for both live display and playback. What is more, MULTIEYE provides several license-free polling variants from which the customer can choose.

- LiveViewer with alarm popup display; can be freely positioned on the desktop
- Multiscreen for remote display and remote configuration of a server
- Standard browser without ActiveX or Java enhancements
PDA/mobile telephone compatible
- Network player for simultaneous playback, video analysis and image/video export. A license is included in the software.

Highest functional security

MULTIEYE includes video outage detection with alarm notification. In addition, it provides watchdog functions for automatic software and/or hardware restarts, crash recovery for continued operation without problems after power outage as well as the MULTIEYE shell for exclusive MULTIEYE operation with access exclusion from the Windows level.



MULTIEYE® FEATURES



SystemRestorer

The SystemRestorer is particularly intended for service purposes. With it, the entire MULTIEYE configuration (including user administration) can be stored and re-instated. In addition, reference images from all connected cameras can be stored to enable comparison of these with the existing camera positions in case of a service call.

Alarm and routine indicator

In case of motion, alarm contact or disturbance, alarm notifications can be dispatched via Email, SMS, Windows News Service and/or further third-party programs – with or without alarm images.

The integrated routine indicator transmits Emails with status messages and event protocols at predefined times. Optimal for the remote control of system functionality.

User administration

MULTIEYE's user administration is group oriented. Users and user groups with varying degrees of authorization – even up to camera levels – can be defined. An integrated true "four-eyes principal" excludes abuse.

Audio recording

Depending on the hardware equipment, MULTIEYE software supports up to 32 audio sources per unit, which are recorded lip-synchronized with their associated videos. The audio sources can be coordinated with single or multiple video sources.

Data interfaces

MULTIEYE provides a flexible data interface. In connection with COM or TCP interfaces, the DataLog module can receive, process, display, store and – through full-text search – evaluate data from cash-points (POS), barcode scanners, ATMs, access control systems, identification recognition or measurement data acquisition systems.

Expandability

MULTIEYE has a modular structure. A large variety of software and hardware components are available for the creation and implementation of individual, tailor-made systems. Expansion licenses, software modules such as AutoBackup, Shell, VideoCenter II, DataLog, NetworkPlayer on up to video boards for the expansion of a HYBRID system, all combine to make MULTIEYE one of the most variable products on the market. MULTIEYE products are compatible with the EBÜS alarm system and can be switched over to alarm centers running that system.



MULTIEYE® FEATURES

Live Updates

Current software updates are available through the Internet. Optionally, they can be obtained as update CDs within the context of a support contract.

PDA support

Live cameras can be polled directly from PDAs without the installation of additional software.

SDK

SDK provides third parties with the possibility to integrate MULTIEYE into their applications.

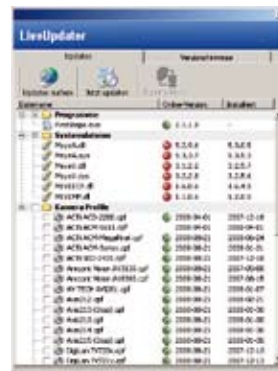
OEM, customizing and multilingualism

MULTIEYE can be adapted to a customer's corporate image quite easily. Further, an independent modified OEM version can be created as well. In the standard version, MULTIEYE provides eight languages. What is more, new languages and fonts can quickly and easily be added through a special context-oriented editing program.

Compatibility

MULTIEYE offers a wide range of interfaces and is compatible with

- Video sensors: via:sys, ioimage
- Alarm centers: including those running the EBÜS system
- Plant management: WinGuard
- Access controls: Delta Controls, Bewator 2010, Rosslare
- Cash-points: Casio, Huth, Vectron, etc.



MULTIEYE SOLUTIONS

for example:



analog cameras



digital cameras



EX IO server



Licence Plate Re-
cognition Module
(ALPR)



LAN / Internet



MultiEye Net



DVR cards
MultiEye SVV



MultiEye Hybrid
NET Recorder



LAN / Internet



Video Center



Live Viewer



Networkplayer



PDA/Handy

MULTIEYE-NET

Network Videorecorder- & Managementsoftware



MULTIEYE®-NET SOFTWARE



Highlights

- Scalable network video recorder and management software with up to 32 IP video channels
- Modular software architecture, individually expandable
- Quadplex-operation
- Support of JPEG, M-JPEG and MPEG-4 IP video codecs
- Image data processing up to 1000 Mpixels/s through DirectStream technology
- Support for all common network cameras and video servers from over 60 manufacturers
- Future security: up to 20 Mpixel image size per IP Video input
- Zooming during live operation and playback
- Motion detection for all IP video channels
- Data storage of up to 24 TB per recorder
- Multifaceted remote polling and configuration
- PDA ready (without additional software)
- Fast evaluation of events
- Interfaces to cash-points, IO servers, video sensors, control stations, access controls

With MULTIEYE-NET software, highly professional PC- and server-based network video recorders (NVR) with 2 – 32 IP video channels can be achieved, for use with notebooks as well. The site-plan based video management solution VideoCenter II is available for larger systems with numerous servers. MULTIEYE-NET software has been certified for “BGV Kassen” and is developed and manufactured in accordance with international, industrial quality standards.

During the continued development and improvement of the software, we have placed great emphasis on well laid-out operation, scalability, high performance and ease of modernization. Added to that is the integration of network cameras and video servers from well-known manufacturers.

MULTIEYE-NET stands for innovative and multifunctional software which, with its modular structure, can easily be modernized as well as adapted to specific customer and project needs. The software provides the highest degree of flexibility, expandability and future security.

Article-no.	Description
810159	2/32 Channel MULTIEYE-NET starter, Network Video Recorder and Management Software, expandable up to 32 channels by IP-4.
810160	4/32 Channel MULTIEYE-NET Network Video Recorder and Management Software, expandable up to 32 channels by IP-4
810165	8/32 Channel MULTIEYE-NET Network Video Recorder and Management Software incl. IP-HD Module, expandable up to 32 channels by IP-4.
810167	16/32 Channel MULTIEYE-NET Network Video Recorder and Management Software incl. IP-HD Module, expandable up to 32 channels by IP-4
810169	24/32 Channel MULTIEYE-NET Network Video Recorder and Management Software incl. IP-HD Module, expandable up to 32 channels by IP-4.
810168	32/32 Channel MULTIEYE-NET IP Video Recorder and Management Software incl. IP-HD Module
810161	IP-4 license, key for activation of/up to 4 additional IP video channels
810163	IP-HD module, license key for enabling usage of multi-megapixel IP cameras with resolution > 1.4 megapixels, server license.
810151	NetworkPlayer, software and server license for MotionTracking, MotionSearch, playback, backup and storage of video sequences and still images over network, 1-4 channel playback, integrated cache. Can be used as single player for playback of copied videos on media, server license for 1 (additional) user. Note: with all NVR, Business and Enterprise recorders 1 network player is already included.

Included in delivery are the MULTIEYE-NET software including a NetworkPlayer license, user's manual on CD, quick introduction, and a USB dongle.

Please see page 30 for software and hardware expansions for MULTIEYE-NET.

Technical data

MULTIEYE-NET	
IP video inputs	Up to 32 channels. The basic software provides 2 channels which can be increased up to 32 with incremental IP-4 licenses for IP cameras and video servers
IP cameras and video servers	Support of common network cameras and video servers from presently more than 60 manufacturers: from Axis to Yoko. Transmission formats: JPEG, M-JPEG or MPEG-4 (with RTSP protocol)
Image resolution: IP video	Standard up to 1.4 mil. pixels, expandable up to 20 mil. pixels per video channel with the IP-HD license
Recording rate/Image data processing*	Up to 800 fps/ips and up to 1000 Mpixel/s, dependent on CPU, resolution, codec and compression
Codecs	JPEG, M-JPEG and MPEG-4, variable for each camera, dependent on the camera model
Alarm inputs, outputs	Up to 96 alarm inputs and 96 relay outputs through EX-IO server or per video sensors
PTZ control	Control via popup menu, keyboard and/or triaxial joystick
Live monitoring	Via 8 programmable multiscreens with hotspot monitor functions
Text overlay	Time, date, free text to 50 characters, variable positioning, font size & type variable
Data imprint and recording	For POS, ZUKO, etc., optionally with up to 10 lines @ 40 characters
Motion detection	Matrix with up to 2034 individual fields, selection of unlimited no. of fields
Weekly timer	Adjustable per camera, continuous, motion detection, no recording, holiday function
Playback	1 – 4 fold display, simultaneous or synchronized playback
Search criteria	Date, time, motion detection, MotionTrack, MotionSearch (image area search), motion histogram
IP video outage recognition	Audio and optical messages, via network as well
Video export	In AVI format, single or multiple videos with internal player for external playback
Snapshots	In BMP or JPEG format
Authentication	Digital certification through invisible watermark in image export
Ring-storage management	Dynamic or static recording, up to 24 hard drives, NAS/SAN
Pre-alarm storage	Adjustable from 5 to 900 seconds for each camera
Password protection	Multilevel password protection, freely definable user groups with individual rights, also true “four-eye principle”
Remote polling	Via browser without plugins, LiveViewer with popup display and optical and/or audio alarm, network player for network-based analysis and playback, VideoCenter II optional
Remote maintenance and configuration	Via MULTIEYE RemoteControl function (MRC)
Web and video serversrver	Integrated
Functional security	Software WatchDog, crash recovery, network video outage recognition
Alarm messages	Per email, SMS, ICQ, Windows News Service, external programs, with or without alarm image
Routine messages	For automatic status reports on the recorder functions, programmable with/without log files, time and day of the week
Logbook	yes
Software update	Per live updater via the Internet or on a CD-ROM within the context of a service contract
Menu languages	Da, de, en, fr, it, nl, pt, sv, others added continually
Compatibility	The software is compatible with all other products in the MULTIEYE family
PC/Server system recommendation	Intel based motherboard, CoreTM 2 duo processor, 1 GB RAM, 1 X HDD for operating system and software, 1 X HDD for video data, DVD burner, Windows 2000, XP or 2003 server, well ventilated cabinet
Delivery contents	Software on CD with Quick Guide and USB dongle

*Megapixels/second represents a value for image processing speed. The values stated refer to the processing and encoding of image data in or of M-JPEG Codecs. Other values apply to the processing of other Codecs such as MPEG-4, H.264, transcoding of streams, recorder live display and remote monitoring. Calculation tables are available for dimensioning network-based video surveillance. Please contact our support personnel for exact planning.

Number of data hard drives necessary:

You need approximately 0.1 MB/s per MPixel/s for the storage of M-JPEG data, and about 0.025 MByte/s per MPixel/s for MPEG-4 data. For every 10 MByte/s of video data to be stored, we recommend an additional hard drive.

MULTIEYE®-HYBRID DVR-KITS



Highlights

- Up to 32 analog, IP video and audio inputs
- Modular software and hardware architecture
- Quadplex operation
- Support of JPEG, M-JPEG and MPEG-4 IP video codecs
- Recording rates up to 300 fps/ips through DirectStream technology
- Support for all common network cameras and video servers from over 60 manufacturers
- Future security: up to 20 Mpixel image size per IP Video input
- Zooming during live operation and/or playback
- Motion detection for all channels
- Support for NAS servers
- Multifaceted remote polling and configuration
- PDA ready (without additional software)
- Fast evaluation of events through MotionSearch und MotionTrack
- Interfaces to cash-points, IO servers, video sensors, control stations, access controls
- Certified BGV cash-points

System recommendation

Intel® based motherboard, Core™2 Duo processor, 1 GB RAM, 1 X HDD for operating system and software, 1 X HDD for video data, DVD burner, Windows 2000, XP or 2003 server, well ventilated cabinet.

MULTIEYE®-HYBRID Digital Video Recorder Kits 4 - 32 Channels

With MULTIEYE-HYBRID DVR kits, highly professional digital video recorders can be created. MULTIEYE software supports the simultaneous operation of both analog and digital camera technologies in one system. Up to 32 analog and IP video cameras can be combined and operated with each other in one recorder as desired. Yet the integration of IP cameras is just as simple as setting up analog cameras.

With MULTIEYE-HYBRID, special emphasis has been placed on easy, clear operation, high image quality, operational security and options for subsequent expansion. MULTIEYE-HYBRID provides a multifunctional, highly innovative video recorder and management system. Because of its modular construction, it can be modernized and adapted to specific customer requirements at any time.

Express installation with Plug & Play

After the PCI video board and the software have been installed and the cameras connected, the system is immediately ready for operation. This is made possible by the combination of the functionality of modern PCs and servers with the innovative hardware and software of the HYBRID-DVR kits.

Item code.	Description
810100	5/32 Channel DVR 425 STARTER-KIT*
810000	5/32 Channel DVR-Kit 1625*
810110	5/32 Channel DVR-Kit 1650*
810061	9/32 Channel DVR-Kit 1650/8*
810120	5/32 Channel DVR-Kit 16100*
810071	9/32 Kanal DVR-Kit 16100/8*
810075	9/32 Channel DVR-Kit 16200/8*
810080	25/32 Channel DVR-Kit 32100/24*
810161	IP-4 license, key for activation of/up to 4 additional IP video channels.
810163	IP-HD Modul, license key for enabling usage of Multi-Megapixel IP cameras with resolution > 1.4 Megapixel, for all NVR, Business and Enterprise recorders.

(All Kits inclusive NetworkPlayer)

Please find Soft- and Hardware-Enhancements at page 30

* The integrated demo IP channel is dropped when enhancement with IP4 art.no 810161

MULTIEYE®-HYBRID DVR-KITS

Technical data

DVR-Kit Typ	425	16100	32100
Article no.	810100	810120	810084
Analog video inputs, activated	4	4	8
Expandable to	-	16	32
IP video input, (expandable through IP-4 to 4/8 etc.)	1	1	1
IP video channels expandable to	28	28	24
ips analog PAL/NTSC	25/30	100/120	100/120
MPixel/s* up to	120	95	90
Audio inputs	1	4	4
Connectors for expansion boards EX-4	-	3	-
Connectors for EX-IO boards	-	2	2
Dimensions H x L in mm	95 x 122	110 x 192	105 x 193
PCI voltage	+5V		

General

Maximum inputs	Up to 32 analog, analog and IP
Analog video inputs	BNC, 1Vss, 75 ohm termination deactivation possible, video norm: PAL or NTSC
IP video channels	Transmission codecs: JPEG, M-JPEG or MPEG-4 (with RTSP)
Monitor output analog	Via BNC output per RCA adapter
Alarm inputs, outputs	Optionally via EX-IO boards or EX-IO servers
Codecs (software compression)	JPEG, M-JPEG and MPEG-4, adjustable for each camera, compression infinitely variable
PTZ control	Serial and IP, control via popup menu, keyboard and/or triaxial joystick
Audio	Lip-synchronized recording, independent of the recording rate configuration
Analog image resolution	CIF, 2CIF, DI / 4CIF, adjustable for each camera
Image resolution IP video	Standard up to 1.4 mil. Pixels, expandable through IP-HD module up to 20 Mpixels per IP video input
Live Monitoring	Through 8 programmable multiscreens
Text Overlay	Time, date, free text up to 50 characters, freely positionable, font size & type variable
Data imprint and recording	For POS, ZUKO etc. optionally with up to 10 lines á abt. 40 characters
Motion Detection	Matrix with up to 2304 individual fields, unlimited number of fields selectable
Weekly timer	Adjustable per camera, continuous, motion detection, no recording
Playback	1 – 4 fold display, simultaneous or synchronous playback
Search criteria	Date, time, motion detection, MotionTrack, MotionSearch (image area search), motion histogram
Video outage recognition	For analog and IP video sources, acoustic and optical messages, via network as well
Video Export	In AVI format, single or several videos with internal player for external playback
Snapshots	In BMP or JPEG format
Authentication	Digital certification through invisible watermark in exported image
Ring-storage management	Dynamic or static recording, up to 24 harddrives/partitions, NAS, SAN
Password protection	Multilevel password protection, freely definable user groups with individual rights, also true “four-eye principle”
Remote polling	Via browser without plugins, LiveViewer with popup display and optical and acoustic alarm, NetworkPlayer for network-based analysis and playback, VideoCenter II optional
Remote maintenance and configuration	Via MULTIEYE RemoteControl function (MRC)

**Megapixels/second represents a value for image processing speed. The values stated refer to the processing and encoding of image data in or of M-JPEG Codecs. Other values apply to the processing of other Codecs such as MPEG-4, H.264, transcoding of streams, recorder live display and remote monitoring. Calculation tables are available for dimensioning network-based video surveillance. Please contact our support personnel for exact planning.

Number of data hard drives necessary:

You need approximately 0.1 MB/s per MPixel/s for the storage of M-JPEG data, and about 0.025 MByte/s per MPixel/s for MPEG-4 data. For every 10 MByte/s of video data to be stored, we recommend an additional hard drive.

Unlimited demo-license

MULTIEYE®-HYBRID MPEG-4 DVR-KITS



Highlights

- Up to 32 analog, IP video and audio inputs
- Real-time operation through MPEG-4 ASP hardware codec
- Modular software and hardware architecture
- Quadplex operation
- Support of JPEG, M-JPEG and MPEG-4 IP video codecs
- Recording rates up to 800 fps/ips through DirectStream technology
- Support for all common network cameras and video servers from over 60 manufacturers
- Future security: up to 20 Mpixel image size per IP Video input
- Zooming during live operation and/or playback
- Motion detection for all channels
- Support for NAS servers
- Remote polling and remote configuration
- PDA ready (without additional software)
- Fast evaluation of events through MotionSearch and MotionTrack
- Interfaces to cash-points, IO servers, video sensors, control stations, access controls

System recommendation

Intel® based motherboard, Core™2 Duo Processor, 1GB RAM, 1 X HDD for operating system and software, 1 X HDD for video data, DVD burner, Windows 2000, XP or 2003 Server, well ventilated cabinet

MPEG 4 DVR kits with on-board compression for real-time recording with D1/4CIF

With MULTIEYE-HYBRID DVR kits, highly professional real-time digital video recorders can be created. MULTIEYE software supports the simultaneous operation of both analog and digital camera technologies with recording rates up to 800 ips. Up to 32 analog and IP cameras can be combined and operated with each other in one recorder as desired. Yet the integration of IP cameras is just as simple as setting up analog cameras.

With MULTIEYE-HYBRID, special emphasis has been placed on easy, clear operation, high image quality, operational security and options for subsequent expansion. MULTIEYE-HYBRID provides a multifunctional, highly innovative video recorder and management system. Because of its modular construction it can be modernized and adapted to specific customer requirements at any time.

MPEG-4 ASP@Level 5

This codec offers the highest possible compatibility with other video systems and is provided with all the features necessary for optimal MPEG-4 videos.

Express Setup with Plug & Play

After the PC video board and the software have been installed and the cameras connected, the system is immediately ready for operation. This is made possible by the functionality of modern PCs and servers in concert with the innovative hardware and software of the HYBRID-MPEG-4 DVR kits.

Article-no.	Description
810087	5/32 channel DVR-Kit MP8200/4*
810088	5/32 channel DVR-Kit MP8200/4EX*
810089	9/32 channel DVR-Kit MP8200*
810090	9/32 channel DVR-Kit MP8200EX*
810091	17/32 channel DVR-Kit MP16400*
810092	25/32 channel DVR-Kit MP24600*
810093	32 channel DVR-Kit MP32800*
810161	IP-4 license, key for activation of/up to 4 additional IP video channels.
810163	IP-HD Modul, license key for enabling usage of Multi-Megapixel IP cameras with resolution > 1.4 Megapixel, for all NVR, Business and Enterprise recorders.

(All Kits inclusive NetworkPlayer)

Please find Soft- and Hardware-Enhancements at page 30

* The integrated demo IP channel is dropped when enhancement with IP4 art.no 810161

MULTIEYE®-HYBRID MPEG-4 DVR-KITS

Technical data

DVR-Kit Typ	MP4100	MP8200	2x MP8200	3x MP8200	4x MP8200
Article no.	810087	810089	810091	810092	810093
Analog video inputs, activated	4	8	16	24	32
IP video input (expandable through IP-4 to 4/8 etc.)	1	1	1	1	1
IP video channels expandable to	28	16-28	16	8	-
ips analog PAL/NTSC max.	100/120	200/240	400/480	600/720	800/960
MPixel/s*	100	80	40	20	-
Audio inputs	4	8	16	24	32
Board type and number	1xPCI	1xPCI	2xPCI	3xPCI	4xPCI
Connectors for EX-IO boards	2	2	4	6	8
Dimensions H x L in mm	110mm x 245mm				
PCI voltage	+3,3V, +5V-12V				

General

Max. inputs	Up to 32 analog, analog and IP
Analog video inputs	BNC, 1Vss, 75 ohm termination deactivation possible, video norm: PAL or NTSC
IP video channels	Transmission codecs: JPEG, M-JPEG or MPEG-4 (with RTSP)
Monitor output	Via BNC output per RCA adapter
Alarm inputs, outputs	Optionally via EX-IO boards or EX-IO servers
Codec	MPEG-4 ASP@Level 5, JPED and M-JPEG. Compression infinitely variable
PTZ control	Serial and IP control via popup menu, keyboard and/or triaxial joystick
Audio	MPEG-I layer II compression, lip-synchronized recording independent of recording rate configuration
Analog image resolution	CIF, 2CIF, DI / 4CIF, individually adjustable for each camera
Image resolution IP video	Standard up to 1.4 mil. Pixels, expandable through IP-HD module up to 20 mil. pixels per IP video input
Live Monitoring	Through 8 programmable multiscreens
Text Overlay	Time, date, free text to 50 characters, freely positionable, font size/type variable
Data imprint and recording	For POS, ZUKO etc. optionally with up to 10 lines á abt. 40 characters
Motion Detection	Matrix with up to 2304 individual fields, unlimited number of fields selectable
Weekly timer	Adjustable per camera, continuous, motion detection, no recording
Playback	1 – 4 fold display, simultaneous or synchronous playback
Search criteria	Date, time, motion detection, MotionTrack, MotionSearch (image area search), motion histogram, text
Video outage recognition	For analog and IP video sources, acoustic and optical messages, via network as well
Video Export	In AVI format, single or several videos with internal player for external playback
Snapshots	In BMP or JPEG format
Authentication	Digital certification through invisible watermark in exported image
Ring-storage management	Dynamic or static recording, up to 24 harddrives/partitions, NAS, SAN
Password protection	Multilevel password protection, freely definable user groups with individual rights, also true “four-eye principle”
Remote polling	Via browser without plugins, LiveViewer with popup display and optical and acoustic alarm, NetworkPlayer for network-based analysis and playback, VideoCenter II optional
Remote maintenance and configuration	Via MULTIEYE RemoteControl function (MRC)

*Megapixels/second represents a value for image processing speed. The values stated refer to the processing and encoding of image data in or of M-JPEG Codecs. Other values apply to the processing of other Codecs such as MPEG-4, H.264, transcoding of streams, recorder live display and remote monitoring. Calculation tables are available for dimensioning network-based video surveillance. Please contact our support personnel for exact planning.

Number of data hard drives necessary:

You need approximately 0.1 MB/s per MPixel/s for the storage of M-JPEG data, and about 0.025 MByte/s per MPixel/s for MPEG-4 data. For every 10 MByte/s of video data to be stored, we recommend an additional hard drive.

All MPEG-4 video boards are compatible with one another and can be implemented together in a recorder.

²Unlimited demo-license (by enhancement with IP4, this channel is dropped, Art. no. 810161)

MULTIEYE supports the following manufacturers of network cameras, videosever and hardware

4XEM ACTi Advantech Allnet Apro artec tech-
 nologies AG Arecontvision Aviosys Axis
 Basler Bosch Bosslan Canon Cellvision Con-
 ceptronic Connec Tec Convision DigiLan
 Digitus D-Link Eltis ELMO ENEO Eyetelli-
 gent For-A FlexWatch Grand Grandtec
 Hawking Hunt Intellinet IOlimage IPX IQEye
 JVC Leadtek LevelOne Lindy Li-lin Linudix
 Lumenera Misumi Mobotix Moxa MULTIEYE
 MVE Panasonic Pixord Planet PTAV Sam-
 sung Siemens Santec Sony Sanyo Santec
 SparkLan Stardot Surveyor Sweex Toshiba
 TRC VCS Videotec Visicom Xannet Y-Cam Yoko

MULTIEYE Recorder

MULTIEYE Recorder overview

	Network video recorder		HYBRID Video recorder	HYBRID Realtime Video recorder	
Type	NVR ^{NG}	NVR MX	BUSINESS ^{NG}	ENTERPRISE ^{NG}	MX ENTERPRISE
					
Channel	bis 32				
Analog inputs expandable to	-	-	bis 32	bis 32	bis 32
Max. storage capacity	3 TB	16 TB	3 TB	3 TB	16 TB
RAID 5	-	✓	-	-	✓
Software CODEC	✓	✓	✓	✓	✓
integrated MPEG-4 Hardware CODEC	-	-	-	✓	✓
BGV Kassen version available	✓	-	✓	✓	-

MULTIEYE®-NVR RECORDER

Product description

MULTIEYE network recorders are the logical development of our MULTIEYE-HYBRID technology". As a pure NVR, the system operates exclusively with network-based video sources such as IP cameras, video encoders/servers, etc. As a result, it overcomes the physical limitations of analog video transmission technology. The advantages are obvious and are reflected by factors such as very high scalability, flexibility, functionality and economic viability.

A MULTIEYE-NET recorder can record up to 32 IP video sources and thus places complete video and alarm management at your disposal. Multiple users can simultaneously access it by means of PCs in your network. In this way, video networks can be implemented which are not only economic to set-up, but can also support your operational business effectively.

The MX recorders are both recorders and storage servers in one unit and can be delivered with an internal storage capacity of up to 16 TB. These MX recorders were conceived for highly professional usage and, through their redundant RAID harddrives and power supply packs, provide a maximum of data and outage security.

Because of their high functionality and performance, MULTIEYE-NVR recorders lend themselves to nearly all types of video surveillance applications, both commercial and industrial. Modular construction and the diversity of enhancement options, as well as the possibility of easy online updates, guarantee a very high level of investment security and provide you with a system which can grow along with your future requirements.

MULTIEYE-NVR recorders are also available as certified „BGV cash-point“ versions.

When ordering any MULTIEYE recorders, please include the appropriate harddrives for video data (for MX include RAID controllers)! For calculating the storage capacity needed, we recommend you use our harddrive calculator at www.artec.de/support.



Highlights

- Scalable network video recorders with up to 32 IP video inputs
- Modular software and hardware architecture
- Quadplex operation
- Support of JPEG, M-JPEG and MPEG-4 IP video codecs
- Image processing rates up to 1000 Mpixel/s* through DirectStream technology
- Support for all common network cameras und video-servers from over 60 manufacturers
- Future security: supports IP cameras with up to 20 Mpixels
- Zooming during live operation and playback
- Motion detection for all IP video channels
- Storage capacity up to 3 TB, MX series internally up to 16 TB
- Multifaceted remote polling and configuration
- PDA ready (without additional software)
- Fast evaluation of events through MotionSearch and MotionTrack
- Interfaces to cash-points, IO servers, video sensors, control stations, access controls
- MX series: highest operational security through RAID and dual power supply packs
- 2 X 1 Gbit network boards

NET NVR^{NG}

Article no. NG0108



Details

- 8/32 channel network video recorder
- 8 active IP video channels, expandable up to 32 through REC IP-4 licenses
- Image data processing up to 800 Mpixels/s*
- Internal harddrive for operating system and MULTIEYE software
- 3 integrated HDD exchange slots
- Storage capacity selectable up to 3 TB
- 19" housing with lockable front panel, 4 rack-unit height
- Motherboard with Intel® chipset and Intel® Core™2 Duo
- CD/DVD burner
- USB and PS2 ports
- Incl. shell and NetworkPlayer
- Operating system: Windows XP Professional (available in various languages)
- For further details, please refer to pages 27/28

NET NVR MX^{NG}

Article no. NG0508



Details

- 8/32 channel network video recorder
- 8 active IP video channels, expandable up to 32 through REC IP-4 licenses or hardware
- Image data processing up to 1000 Mpixels/s*
- Internal harddrive for operating system and MULTIEYE software
- 16 slots for swappable harddrives, hotplug capable
- Storage capacity selectable up to 16 TB
- 19" housing with 4 rack-unit height
- Motherboard with Intel® chipset and Intel® Core™2 Quad
- CD/DVD burner
- USB and PS2 ports
- Incl. shell and NetworkPlayer
- Operating system: Windows XP Professional (available in various languages)
- For further details, please refer to pages 27/28

Article no. NG0308



certified BGV Kassen
incl. certificate and EX-IO Server

Options

- Swappable data harddrives 500 GB, 1000 GB
- REC IP-4 activation license for activating 4 additional IP video channels
- EX-IO server (alarm inputs/outputs)
- REC-EX audio
- IP-HD module
- VideoCenter II
- AutoBackup module
- DataLog module
- Joystick controller
- EBÜS-system compatible
- Factory guarantee extended to three years

Options

- Swappable data harddrives 500 GB, 1000 GB
- RAID controller
- REC IP-4 activation license for activating 4 additional IP video channels
- EX-IO server (alarm inputs/outputs)
- REC-EX audio
- IP-HD module
- VideoCenter II
- AutoBackup module
- DataLog module
- Joystick controller
- EBÜS-system compatible
- Operating system: Windows 2003 Server
- Factory guarantee extended to three years

BUSINESS

The MULTIEYE-HYBRID recorders of the Business series will convince you of their operational convenience, functional diversity and economics. While developing the MULTIEYE-HYBRID system, we placed great emphasis on operational security and quality. As a result, MULTIEYE-HYBRID produces recorder-image quality such as that known only in the HDTV area until now.

“HYBRID” means the capability to administer and record both analog and IP cameras. Accordingly, even the basic recorder units are equipped with 32 camera inputs. Of those eight analog and one IP video input demo are already activated. Easily and without complications, you can activate additional inputs online later.

Because of their high functionality and performance, MULTIEYE-HYBRID recorders lend themselves for nearly all types of video surveillance applications, both commercial and industrial. Modular construction and the diversity of enhancement options, as well as the possibility for easy online updates, guarantee a very high level of investment security and provide you with a system which can grow along with your future requirements.

MULTIEYE-HYBRID video recorders are also available as „BGV Kassen“ versions.

When ordering any MULTIEYE recorders, please include the appropriate harddrives for video data. For calculating the storage capacity needed, we recommend you use our harddrive calculator at www.artec.de/support.



Highlights

- Scaleable Hybrid video recorders with up to 32 channels
- Analog, IP video and audio inputs, expandable per license
- Modular software and hardware architecture
- Quadplex operation
- Support of JPEG, M-JPEG and MPEG-4 IP video codecs
- Analog recording rates up to 100 fps/ips, image data processing up to 800 Mpixels/s* through DirectStream technology
- Support for all common network cameras und video-servers from over 60 manufacturers
- Future security: supports IP cameras with up to 20 Mpixels
- Zooming during live operation and playback
- Motion detection for all IP video channels
- Storage capacity up to 3 TB
- Multifaceted remote polling and configuration
- PDA ready (without additional software)
- Fast evaluation of events through MotionSearch and MotionTrack
- Interfaces to cash-points, IO servers, video sensors, control stations, access controls
- 2 X 1 Gbit network boards

BUSINESS^{NG}

Article no. NG0209



Details

- 8/32 channel HYBRID video recorder
- 8 active analog video inputs, expandable up to 32 inputs through REC EX-L4 licenses
- 1 active demo IP video input, expandable up to 24 through REC IP-4 licenses*
- Analog recording rate 100 fps/ips
- Image data processing up to 800 Mpixels/s
- 2 audio inputs for lip-synchronized recording
- Internal harddrive for operating system and MULTIEYE software
- 3 integrated HDD exchange slots
- Storage capacity selectable up to 3 TB
- 19" housing with lockable front panel, 4 rack-unit height
- Motherboard with Intel® chipset and Core™2 Duo
- CD/DVD burner
- USB and PS2 ports
- Incl. shell and NetworkPlayer
- Operating system: Windows XP Professional (available in various languages)
- For further details, please refer to pages 27/28

*(by enhancement with IP4, this channel is dropped, Art. no. 810161)

Options

- Swappable data harddrives 500 GB, 1000 GB
- REC IP-4 activation license for activating 4 additional IP video channels
- REC EX-L4 activation license for activating 4 additional analog video inputs
- REC-IO alarm inputs/outputs
- EX-IO server
- REC-EX audio
- IP-HD module
- VideoCenter II
- AutoBackup module
- DataLog module
- EBÜS-system compatible
- Factory guarantee extendable to three years

BUSINESS^{NG} „BGV KASSEN“

Article no. NG0309



Details

- 8/32 channel HYBRID video recorder
- 8 active analog video inputs, expandable up to 32 inputs through REC EX-L4 licenses
- 1 active demo IP video input, expandable up to 24 through REC IP-4 licenses*
- Analog recording rate 100 fps/ips
- Image data processing up to 800 Mpixels/s
- 2 audio inputs for lip-synchronized recording
- Internal harddrive for operating system and MULTIEYE software
- 3 integrated HDD exchange slots
- Storage capacity selectable up to 3 TB
- 19" housing with lockable front panel, 4 rack-unit height
- Motherboard with Intel® chipset and Core™2 Duo
- CD/DVD burner
- USB and PS2 ports
- Incl. shell and NetworkPlayer
- Operating system: Windows XP Professional (available in various languages)
- REC-IO alarm inputs/outputs
- For further details, please refer to pages 27/28

*(by enhancement with IP4, this channel is dropped, Art. no. 810161)

Options

- Swappable data harddrives 500 GB, 1000 GB
- REC IP-4 activation license for activating 4 additional IP video channels
- REC EX-L4 activation license for activating 4 additional analog video inputs
- REC-IO alarm inputs/outputs
- EX-IO server
- REC-EX audio
- IP-HD module
- VideoCenter II
- AutoBackup module
- DataLog module
- EBÜS-system compatible
- Factory guarantee extendable to three years

ENTERPRISE

The MULTIEYE-HYBRID real-time recorders of the ENTERPRISE series will convince you of their operational convenience, functional diversity and economics. While developing this system, we placed great emphasis on operational security and quality. As a result, MULTIEYE-HYBRID video recorders deliver image quality such as that known only in the HDTV area until now.

“HYBRID” means the capability to administer and record videos with both analog and IP cameras. The recorders can be delivered with 8, 16 and 24 analog and four additional IP video channels. The 32-channel version is available with 32 analog inputs. On the first three models, additional IP camera channels can be activated at any time.

MX video recorders are both recorder and storage server in one unit and can be delivered with an internal storage capacity of up to 24 TB. The MXNG recorders were conceived for highly professional usage and, through their redundant RAID harddrives and power supply packs, provide maximum data and outage security.

With their high functionality and performance, MULTIEYE-HYBRID video recorders lend themselves for nearly all types of video surveillance applications, both commercial and industrial. Modular construction and the diversity of enhancement options, as well as the possibility for easy online updates, guarantee a very high level of investment security and provide you with a system which can grow along with your future requirements.

MULTIEYE-HYBRID video recorders are also available as certified „BGV cash-point“ versions.

When ordering any MULTIEYE recorders, please include the appropriate harddrives for video data. (For MX recorders including RAID controllers!) For calculating the storage capacity needed, we recommend you use our harddrive calculator at www.artec.de/support.



Highlights

- Scaleable HYBRID video recorder with up to 32 channels
- Analog, IP video and audio inputs
- Real-time operation: MPEG-4 ASP@L5 hardware codec
- Modular software and hardware architecture
- Quadplex operation
- Support of JPEG, M-JPEG and MPEG-4 IP video codecs
- Analog recording rates up to 800 fps/ips, image data processing up to 1000 Mpixels/s* through DirectStream
- Support for many common network cameras and video servers from over 60 manufacturers
- Future security: supports IP cameras with up to 20 Mpixels
- Zooming during live operation and playback
- Motion detection for all IP video channels
- Storage capacity up to 3 TB, MX series internally up to 16 TB
- Multifaceted remote polling and configuration
- PDA ready (without additional software)
- Fast evaluation of events through MotionSearch and MotionTrack
- Interfaces to cash-points, IO servers, video sensors, control stations, access controls
- MX series: highest functional security through RAID 5 and dual power supply packs
- 2 X 1 Gbit network boards

ENTERPRISE^{NG}

Article no. NG4012



Details

- 12/32 channel HYBRID video recorder
- 8 active analog video inputs
- 4 active IP video channels, expandable up to 24 through REC IP-4 licenses
- Analog recording rate 200 fps/ips
- Image data processing up to 800 Mpixels/s*
- 8 audio inputs for lip-synchronized recording
- Internal harddrive for operating system and MULTIEYE software
- 3 integrated HDD exchange slots
- Storage capacity selectable up to 3 TB
- 19" housing, 4 rack-unit height, with lockable front panel
- Motherboard with Intel® chipset and Core™2 Duo
- CD/DVD burner, USB and PS2 ports
- Incl. shell and NetworkPlayer
- Operating system: Windows XP Professional (available in various languages)
- For further details, please see pages 27/28

Article no. **NG0312**



certified BGV Kassen
incl. certificate and EX-IO Server

Options

- Swappable data harddrives 500 GB, 1000 GB
- REC IP-4 activation license for activating 4 additional IP video channels
- REC-IO alarm inputs/outputs
- EX-IO server
- IP-HD module
- VideoCenter II
- AutoBackup module
- DataLog module
- Joystick controller
- EBÜS-system compatible
- Factory guarantee extended to three years

ENTERPRISE MX^{NG}

Article no. NG0512



Details

- 12/32 channel HYBRID video recorder
- 8 active analog video inputs
- 4 active IP video channels, expandable up to 24 through REC IP-4 licenses
- 8 audio inputs for lip-synchronized recording
- Analog recording rate 200 fps/ips
- Image data processing up to 1000 Mpixels/s*
- Internal harddrive for operating system and MULTIEYE software
- 16 integrated swappable HDD slots, hotplug capable
- Storage capacity selectable up to 16 TB
- 19" housing with 4 rack-unit height
- Motherboard with Intel® chipset and Core™2 Quad
- CD/DVD burner
- USB and PS2 ports
- Incl. shell and NetworkPlayer
- Operating system: Windows XP Professional (available in various languages)
- For further details, please see pages 27/28

Options

- Swappable data harddrives 500 GB, 1000 GB
- RAID controller
- REC IP-4 activation license for activating 4 additional IP video channels
- REC-IO alarm inputs/outputs
- EX-IO server
- IP-HD module
- VideoCenter II
- AutoBackup module
- DataLog module
- Joystick controller
- EBÜS-system compatible
- Operating system: Windows 2003 Server
- Factory guarantee extended to three years

MULTIEYE® RECORDER ENHANCEMENT

Harddisks & Enhancements for NVR, BUSINESS, ENTERPRISE

All harddrives in aluminum HDD drawers with LCD-function display, ventilator and temperature monitoring, integrated ventilator. Only in conjunction with initial delivery.



Article no.	Description
NGI500	REC DVI/VGA-2, 2-channel monitor exit
NGI499	REC DVI/VGA-4, 4-channel monitor exit
NGI501	REC HDD 500GB Harddisk
NGI502	REC HDD 1TB Harddisk
NGI550	REC ATX power supply redundant
NGI600	REC RAID System, Raid I Systemharddisk
NGI611	REC RAID 500GB Raid I
NGI612	REC RAID 1TB Raid I

Harddisks & Enhancements for all MX systems

Only with initial delivery.



Article no.	Description
NGI600	REC RAID System, Raid I Systemharddisk
NGI602	REC RAID 8TB
NGI603	REC RAID 10TB
NGI604	REC RAID 12TB
NGI605	REC RAID 16TB
NGI500	REC DVI/VGA-2, 2-channel monitor exit
NGI499	REC DVI/VGA-4, 4-channel monitor exit
NGI550	REC ATX power supply redundant

MULTIEYE Recorder Enhancements & accessories



Article no.	Description
NGI050	REC EX-L4, for activation of 4 additional analogue video inputs for BUSINESS NG recorder.
NGI001	REC IP-4, license key for activation of 4 additional IP video channels, for all NVR, Business and Enterprise recorders.
NGI002	REC IP-HD Modul, license key for enabling usage of Multi-Megapixel IP cameras with resolution > 1.4 Megapixel, for all NVR, Business and Enterprise recorders.
NGI052	REC 200, Upgrade for increasing analogue recording rate to 200/240 fps/ips, for BUSINESS recorders. Only available with initial delivery.
NGI053	REC IO, Alarm in- and outputs extension with each 8 opto-decoupled inputs and 2 relay switching outputs. For BUSINESS and ENTERPRISE recorders. Only available with initial delivery
NGI054	REC BNC Box für BUSINESS II Recorder als Alternative zu den Kabelpeitschen. 16-fach BNC Anschlussfeld, 19", 1 HE, geschlossene Ausführung aus Stahlblech, Lieferung inklusive 2 Stück Video Anschlusskabel mit je 1 m Länge
NGI055	REC-EX-Audio 16 for lip-synchronized audio recording of up to 16 audio sources (micro or Line). Scope of delivery: audio PCI board with 2 breakout cables and activation key. For Business recorders.
NGI056	REC EX-8, MPEG-4 board with additional 8 analogue & 8 audio inputs, connector for EX-IO, overall recording rate analog 200(240) fps/ips. For all Enterprise Recorder. Only available as factory upgrade!
140100	Mini condenser microphone, with integrated preamplifier, very sensitive, for all MULTIEYE-HYBRID DVR kits and MULTIEYE recorders, input supply voltage 12V DC
810620	3-Axis USB-Joystick, 12 switching functions, 2 of them on top of joystick knob
810510	External converter USB/RS 485, for controlling high-speed-dome-cameras.

MULTIEYE® RECORDER OVERVIEW

Technical data

	NVR ^{NG}	NVR MX ^{NG}	BUSINESS ^{NG}	ENTERPRISE ^{NG}	ENTERPRISE MX ^{NG}
					
Type	Netzwerk- videorecorder	Netzwerk- videorecorder	HYBRID Videorecorder	HYBRID Realtime Videorecorder	HYBRID Realtime Videorecorder
Channel max.	32	32	32	32	32
Active analogue video inputs	-	-	8	8/16/24/32	8/16/24/32
Analogue video inputs per software license expandable to	-	-	32	-	-
Active IP video channels	8	8	1 ¹	4 (keine bei NG 32)	4 (keine bei MX 32)
IP video channels, per soft- ware license expandable to	32	32	24	24	24
Audio inputs	-	-	4	8/16/24/32	8/16/24/32
FBAS video outputs	-	-	1	1-4	1-4
Recording rate	800 MPixel/s*	1000 MPixel/s*	100 fps 800 MPixel/s*	200/400/600/800 fps 800 MPixel/s*	200/400/600/800 fps 1000 MPixel/s*
Max. storage capacity in TB	3	16	3	3	16
RAID 0,1,5,6,10,50	-	•	-	-	•
19" housing dimensions: WxDxH (mm)	430x522x176	430x662x176	430x522x176	430x522x176	430x662x176
Voltage supply, 110 – 230V AC, 50/60 Hz, consumption (W)	400	Redundant 2 x 500	400	400	Redundant 2 x 500
surrounding temperature	+5°C bis +35°C				
Certification as per	ROHS, ISO 9001, CE, TÜV GS				

¹ unlimited demo license (by enhancement with IP4, this channel is dropped, Art. no. 810161)

*Megapixels/second represents a value for image processing speed. The values stated refer to the processing and encoding of image data in or of M-JPEG Codecs. Other values apply to the processing of other Codecs such as MPEG-4, H.264, transcoding of streams, recorder live display and remote monitoring. Calculation tables are available for dimensioning network-based video surveillance. Please contact our support personnel for exact planning.

Number of data hard drives necessary:

You need approximately 0.1 MB/s per MPixel/s for the storage of M-JPEG data, and about 0.025 MByte/s per MPixel/s for MPEG-4 data. For every 10 MByte/s of video data to be stored, we recommend an additional hard drive.

MULTIEYE® RECORDER OVERVIEW

General technical data

QUADPLEX and HYBRID operation	Simultaneous recording, playback, monitoring and remote transmission, mixed operation of analog and IP cameras with one user interface)
Video norm	PAL, NTSC
Live monitoring	Via PC monitor with 8 programmable multiscreens with hotspot display and analog camera operation via the 1 – 4 video outputs
Image resolution	Analog CIF, 2CIF, D1/4CIF (PAL AND NTSC), individually variable for each camera, IP video sources up to 1280 X 1024 pixels, higher resolution with IP-HD license up to 20 Mpixels per IP video channel
Compression procedure	MPEG-4, JPEG, M-JPEG, compression infinitely variable, image preview of the compression setting
PTZ control	Serial and via network, control via popup menu, keyboard and/or triaxial joystick
Alarm inputs/outputs	Internally up to 32 alarm inputs and 8 relay outputs, externally up to 96 inputs and outputs through EX-IO servers or video sensors
Motion detection	Matrix with 2304 individual fields, selectivity of fields unlimited
Camera outage recognition	For analog and IP cameras (interruption of network communication), messages optical, acoustic, and/or via Email
Text imprint/overlay	Time, date, free text: 50 characters, freely positionable fields, font size & type, text and background colors variable, 10 additional fields in DataLog operation
Weekly timer	Adjustable per camera, continuous, motion detection, alarm contact, out, individual holidays programmable
VGA monitor outputs	1 X SVGA, expandable with max. of 2 dual-head graphic boards up to 4 X SVGA
Recording modes	Continuous, event-activated, time-activated, SDK
Ring storage	dynamic or static storage segmentation up to 16 harddrives, NAS/SAN
Pre-alarm storage	Individually adjustable for each camera von 5 – 900 seconds
Storage capacity	Up to 3 TB for standard recorders and up to 16 TB for MX systems
Recording playback	1 – 4 channel playback, simultaneous, time-synchronized, variable playing speeds
Search criteria	Date, time, motion detection, MotionTrack, MotionSearch (image area search), motion histogram, text (with DataLog)
Video/individual image export	AVI format, single videos, processes, with or without player/BMP or JPEG
Authentication	Digital certification through invisible watermark in exported image
Alarm message dispatch	Via Email, SMS, ICQ, with/without alarm image, Windows News Service, external programs
Video remote polling	Cameras with the LiveViewer, adjustable popup and acoustic alarm, playback via the NetworkPlayer, monitoring and remote maintenance via MULTIEYE RemoteControl (MRC), web polling of live cameras and recording (integrated web & video servers), VideoCenter II optional
Password protection	Multilevel password protection, freely definable user groups with individual rights, true “four-eye principle”
Functional security	Video board Watchdog, crash recovery, auto-record, video outage recognition, recorder status reports
Logb files	For event documentation
Software update	With LiveUpdater via the Internet
Menu languages	De, Dk, En, Fr, It, NI, Pt, Se, others continuously being added
Operating system O/S	MS Windows XP, protection from unauthorized access; deactivation of the Windows GUI through MULTIEYE shell
Housing, connections	19” industrial rack, depending on the version with lockable front panel, integrated harddrive with operating system and MULTIEYE software, 3 – 24 swap slots, DVD-RW and floppy-disk drive, integrated ventilator control and monitoring of the cabinet's interior temperature, with alarm function. Ports: BNC: video, cinch: audio and video monitor out. All racks include VGA connection, audio in/out, LAN Gbit, 4 – 6 X USB 2.0

2 Unlimited demo license (after expansion with IP-4, this channel is deactivated, Article no. 810161)

MULTIEYE® RECORDER MATRIX

	BUSSINESS ^{NG}	ENTERPRISE ^{NG}	ENTERPRISE MX	NVR ^{NG}	NVR MX
Analog cameras	•	•	•	-	-
M-JPEG video compression	•	-	-	•	•
MPEG-4 video compression	•	•	•	•	•
IP cameras (JPEG, M-JPEG, MPEG-4)	•	•	•	•	•
Audio recording	•	•	•	-	-
Up to 16 TB harddrive storage in the recorder	-	-	•	-	•
Redundant power supply pack	-	-	•	-	•
Additional operating system harddrive, operating system Windows XP Pro., MULTIEYE shell, network playback license, gigabit network connection, CD/DVD burner, disk drive, slots for swappable data harddrives, USB ports	•	•	•	•	•

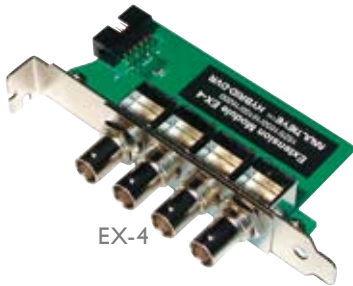
Optional expansions

REC IO alarm board	•	•	•	-	-
REC EX-L4, analog channels	•	-	-	-	-
REC IP-4, IP camera channels	•	•	•	•	•
IP-HD module (up to 20 Mpixels)	•	•	•	•	•
REC EX-audio 16	•	-	-	•	•
REC 200 (100 -> 200 fps)	•	-	-	-	-
REC EX-8	-	•	•	-	-
REC BNC Box	•	-	-	-	-
RAID Controller (0, 1)	•	•	•	•	•
EX IO server, AutoBackup, DataLog, NetworkPlayer licenses, triaxial joystick	•	•	•	•	•
OS Windows 2003 Server	-	-	•	-	•

HARDWARE ENHANCEMENTS

for DVR-Kits and Recorder

Article-no.	Description
810010	EX-4 video expansion board, with 4 analogue BNC inputs (75 Ohm detachable) connectable to all I6xxx video boards. Incl. Activation key.
810405	EX-24 Set, adapter board with 24 analogue BNC inputs (75 Ohm detachable). Enables usage of 2 x I6xxx boards in one PC. Delivery includes 2 pieces of BNC I2 breakout cable. Attention: activation keys EX-L4 for more camera inputs are not incl. Please order them separately.
810420	BNC box for DVR kits I6200,32100 and MPxxx, as alternative to breakout cable. 16x BNC connector panel, 19", 1 U, closed sheet steel box, black, delivery includes 2 pieces of video connecting cable with 1 m length.
810025	EX-IO alarm board, expansion with each 8 opto-decoupled inputs and 2 relay switching outputs. For all I6xxx. 32100 und MP video boards. (max. 2 x EX-IO per video board).
810701	EX-IO Server 6066, integrated Ethernet port, the 6066 has 6 opto-decoupled, digital inputs and 6 relay outputs for 250 VAC @ 5A, and 30 VDC @ 5A. The 6066 will be delivered with activation key for usage with MULTIEYE-HYBRID DVR kits, NET software and recorders.
810175	EX-IO Server software license, for activation of 6066 units not supplied by us
810200	EX-audio I6, for lip-synchronized audio recording of up to 16 audio sources (micro or Line). Scope of delivery: audio PCI board with 2 breakout cables and activation key.
I40100	Mini condenser microphone, with integrated preamplifier; very sensitive, for all MULTIEYE-HYBRID DVR kits and MULTIEYE recorders, input supply voltage 12V DC.



EX-4



BNC Box



EX-IO Alarmboard



EX-Audio I6



Mini condensor microphone

EX-IO SERVER

Use switch inputs and outputs via network where they are needed

With the EX-IO server, you no longer need to lay separate cables to external devices and actuators for the reverse control of and by MULTIEYE systems. When connected directly to a computer network, the EX-IO provides you with a ready-to-run network server, six non-potential contact inputs and six switch outputs via TCP/IP – right there where you need them. That saves installation costs and expands the action radius of your MULTIEYE system. Due to TCP/IP communications, devices can be accessed, or processes (such as image recording or messaging via SMS, Email, etc.) activated around the world via the Internet.

The EX-IO server is compatible with MULTIEYE-HYBRID DVR Kits, MULTIEYE-HYBRID recorders, as well as with MULTIEYE-NET Software. Up to 16 EX-IO servers (96 inputs, 96 outputs) per MULTIEYE system are supported.

Technical data

Type	6066
Number of channels	12
I/O type	6 relay outputs and 6 digital inputs
Relay output	AC: 250V 5A DC: 30V 5A
Digital input	Contact input - relay controlled - voltage controlled DC 0 ... +3V: status= 0 DC +10 ... +30V: status=1
Network connection	RJ 45, 10/100 BaseT Ethernet
Voltage supply	10-30V DC
Power consumption	2 Watt
Attachment accessories	Wall bracket, clamp-track holder

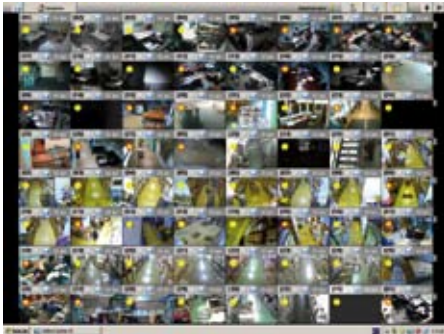
Article no.	Description
810701	EX-IO Server 6066, integrated Ethernet port, the 6066 has 6 opto-decoupled, digital inputs and 6 relay outputs for 250 VAC @ 5A, and 30 VDC @ 5A. The 6066 will be delivered with activation key for usage with MULTIEYE-HYBRID DVR kits, NET software and recorders.
130003	EX-IO wall plug transformer 12V 0,8A



Typical applications

- Remote operation of doors, gates and barriers
- Remote switching of illumination systems and electrical devices
- Switching on external alarm units (e.g. motion notification, hand sensors, etc.) for controlling image recording
- Switching on third-party systems (e.g., access control, robbery and fire alarm systems) for controlling image recording and messaging

USER REPORT



PROJECT “Alwayssecur” Portugal

Project objective:

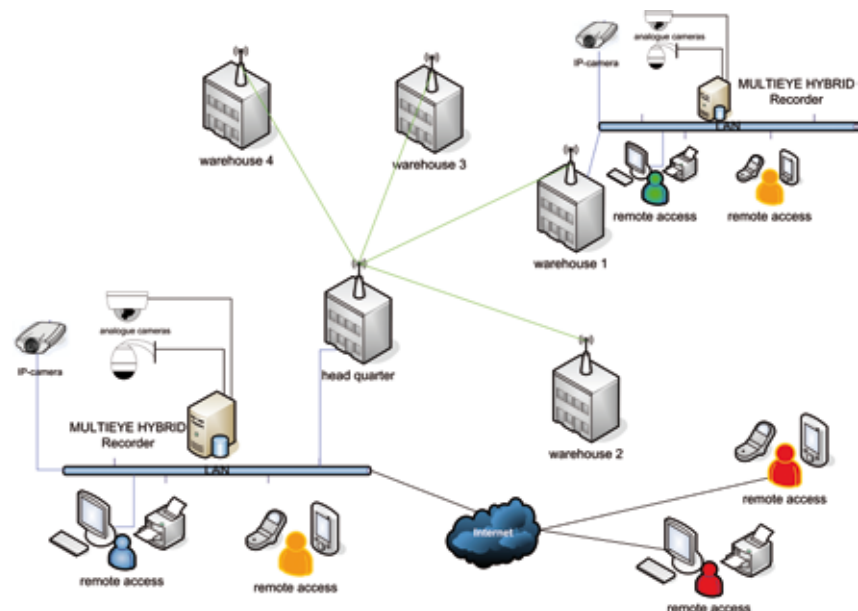
Shoplifting surveillance in a wholesale store with remote surveillance via LAN, Internet and using “Smartphones”.

Implementation:

Video surveillance with analog cameras, dome cameras and IQeye megapixel cameras.

The cameras are recorded on five MULTIEYE ENTERPRISE recorders. Three-VideoCenter II provide the access to and operation of the systems from three different work-stations. In addition, the systems can be accessed by a few other stations such as smartphones with limited access rights.

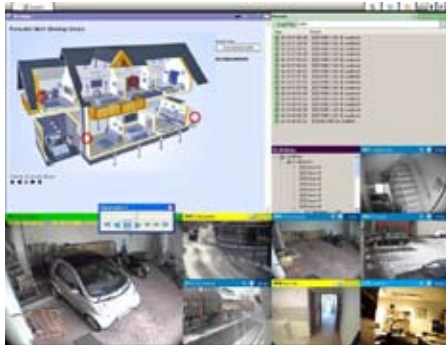
- 5 MULTIEYE ENTERPRISE recorders in 2 networks (Total storage 5 TB)
- 5 megapixel cameras
- 10 IP cameras
- 3 Speed dome cameras
- 142 analog cameras
- 3 VideoCenter II
- 3 additional surveillance stations
- 5 NetworkPlayer



MULTIEYE Software enhancements

for all MULTIEYE products

VIDEOCENTER II



Highlights

- Site-plan based video management software for cross-system display and operation of unlimited MULTIEYE systems
- Administration of up to 256 video cameras
- Live display with full quality and resolution through DirectStream network transmission
- Integrated site-plan editor for simple positioning of interactive icons
- Support for up to 4 monitors
- For each monitor, freely definable monitor layout (live and playback windows, hotspots, browser, IO control windows, event lists, etc.)
- User management
- Dynamic hotspot function
- Browser integration: display of HTML pages (e.g. emergency plans of action)
- Instant replay of recordings and time-shift playback
- Automatic alarm-image call-up
- PTZ control via software, keyboard or operational unit
- Retroactive control of alarm inputs and outputs
- Simple installation and configuration

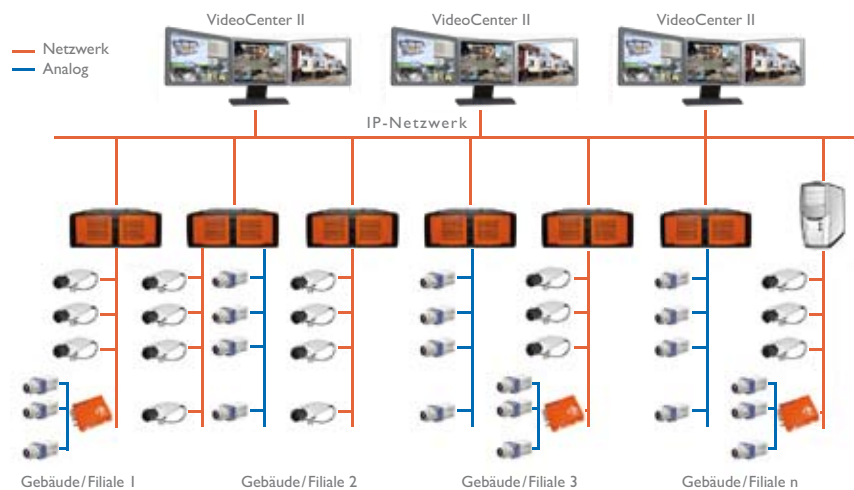
System recommendation

Intel® based motherboard, Core™2 Duo Processor, 1GB RAM, DVD burner, Windows 2000, XP or 2003 Server, well ventilated cabinet, Dual Head

Keep an eye on things with VideoCenter II

MULTIEYE VideoCenter II is a site-plan based, cross-system video management solution for administering a virtually unlimited number of MULTIEYE systems and simultaneously displaying up to 256 video windows on up to 4 work-station monitors. The highly configurable VideoCenter II software is suited for a large variety of applications.

The intuitive user interface enables efficient interaction with the video surveillance system and provides all the relevant information in real time via IP networks. In this way, you can keep an eye on everything, open doors or barriers, and receive up-to-date information on critical events within your company, regardless of whether it is in a local suburb or far removed in one of your branches or other places of business.



Client licensing

VideoCenter II is a video management solution which can be deployed at a number of locations with simultaneous remote operation of MULTIEYE-HYBRID / NET systems. Several VideoCenter II clients can access the same MULTIEYE system in the same network at the same time. VideoCenter II itself can address a virtually unlimited number of MULTIEYE systems in a network, although a VideoCenter II client's simultaneous access is limited to a maximum of 10 MULTIEYE systems. For extended playback functions (images, video storage, MotionSearch, etc.) the NetworkPlayer function must be activated on the MULTIEYE recorder(s).

The software license is authorized via a USB dongle which is inserted into a free USB port on the PC with the installed VideoCenter II. A license is required for each client.

Artikel-Nr. Lieferausführungen

NG2100	VideoCenter II Monitoring Station 2 x DVI output consisting of a 19" PC with dual DVI output.
NG2101	VideoCenter II Monitoring Station 4 x DVI output consisting of a 19" PC with quad DVI output

NETWORKPLAYER

Function

The NetworkPlayer makes it possible for you to easily access your MULTIEYE-HYBRID and NET systems via your network or the Internet. In this way, you can efficiently evaluate recordings and export relevant sequences or images to secure evidence on local storage media such as DVDs or the hard-drive of your PC or notebook – remotely as well.

The NetworkPlayer has properties nearly identical to the Multiplayer: e.g. simultaneous playback of up to 4 videos; quicker fast forward and rewind; access to individual sequences; table summaries with filter functions; histogram overviews; motion diagrams; MotionTrack; MotionSearch; snapshot functions with storage and printing capabilities; protection of the videos against over-writing.

Server / Clients

After entry of the activation key-code, the NetworkPlayer server function on the MULTIEYE-HYBRID PC is activated and the videos can be started at client locations.

The NetworkPlayer software can be installed on several clients; in case only one NetworkPlayer server license is installed on the MULTIEYE-HYBRID/ NET PC, only one participant/user can access the MULTIEYE PC at a time.

However, if five licenses are obtained, 5 participants/users (maximum) can be granted simultaneous access to the MULTIEYE PC.

Delivery contents

- Program CD
- Operating instructions
- Activation key for one MULTIEYE-HYBRID NetworkPlayer license

Article-no.	Description
810151	Network Player, Software and Server license for MotionTracking, MotionSearch, playback, backup and storage of video sequences and still images over network, 1-4 channel playback, integrated cache. Can be used as single player for playback of copied videos on media, server license for 1 additional user.

One NetworkPlayer server license is already included in every MULTIEYE standard set (recorder, kit, NET).



Highlights

- Remote evaluation, playback and archiving of video sequences and images via LAN, Internet, GSM/UMTS
- Simultaneous 1 – 4 channel playback of M-JPEG and MPEG-4 streams
- Conversion of M-JPEG/MPEG-4 to reduce the necessary transmission band width
- Ultra-fast remote video analysis of recordings with hotspot markers through MotionSearch, MotionTrack, motion diagram, histogram
- Integrated cache function for fast forward and rewind, as well as access to specific recording sequences
- Utilization as a stand-alone player for archived and exported recordings
- Server license for one user at a time, installation on several PCs possible

System recommendation

Intel® based motherboard, Core™2 Duo Processor, 1GB RAM, DVD burner, Windows 2000, XP or 2003 Server, well ventilated cabinet, Dual Head

DATALOG MODULE



Highlights

- Data transfer via RS-232 and network
- Data blend-in into live camera images with fade out or in of up to 10 lines
- Freely configurable font type & size, color, background color as well as position
- Automatic alarm messages on key words
- Event search via key words, time, date
- Fully network capable

The DataLog module is a data interface for all MULTIEYE products (from version 2.0.1). This enhancement enables the integration of data devices such as cash-points (POS), ATMs, access controls, scanners (bar code readers), SPS controllers, GPS receivers, etc.

Via the MULTIEYE recorder's RS-232 interface as well as via the network (TCP), the data is blended into the live camera image and tied to the video recording. The recorded data can be evaluated by key words (e.g., "cancel") and displayed together with the relevant video.

Through such key words, notifications can automatically be dispatched via mail or SMS. The MULTIEYE software supports the operation of up to 32 devices per recorder!

The DataLog module can be operated with analog and/or IP cameras.

Article-no.	Description
810172	DataLog module
810173	DataLog license, for an additional data source.

SHELL MODULE



Highlights

- No access to the Windows level without authorization
- Direct start-up of the shell desktop
- Interconnection to several programs possible
- Ideal tool for exclusive operation as a recorder

Software to protect against undesired use of Windows

With the shell module, users can be denied access to Windows. Then only MULTIEYE is functional.

In this case, MULTIEYE can only be closed down via the shell desktop interface. Access to the Windows interface can only be obtained with a password. Supplementary programs can be connected to the shell interface, such as LiveViewer or Office applications. The optics of the shell desktop interface can be individually adapted.

Article-no.	Description
810153	Shell module

AUTOBACKUP MODULE

Automatic backup of videos

With the MULTIEYE AutoBackup software module you can automate the archiving of your image and audio recordings and in this way protect yourself from data loss by overwriting (ring storage), outages or sabotage. Archiving can then be done on a time- or event-controlled basis or continuously, either locally or on storage media via network. For each camera, you can individually predefine which segments of your recordings are to be archived.

This means that you may fulfill the requirements of data privacy protection laws by, for example, only archiving relevant recordings. By software activation, this function can later be added on all MULTIEYE-HYBRID/NET systems, adding to the security of your investment in the MULTIEYE system.

Activating the software function

Enhancement of your MULTIEYE system with the auto-backup function is simply done by software activation. To do this, an activation key is either typed or pasted into the MULTIEYE software user interface.

After completion of the licensing, you have AutoBackup at your disposal for a maximum of 32 cameras and audio channels. For several MULTIEYE DVRs/NVRs you will need an individual license key per unit/system.

Archiving options

Alarm videos: here only those videos will be backed up which were recorded by contact-alarm activation.

Store only protected videos: back up only protected videos: alarm-activated videos can be protected against overwriting. With this setting only protected recordings will be archived.

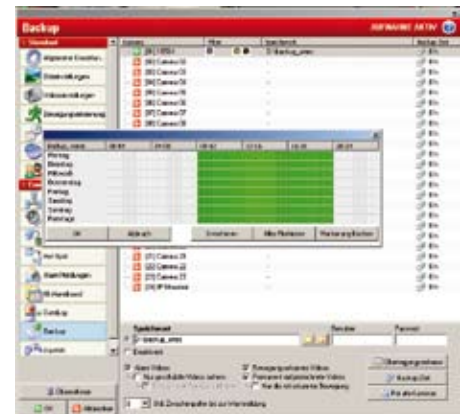
Cancel protection after backup: After archiving is completed, the overwrite protection of the archived video file will be shut off.

Motion-activated videos: only motion-activated recordings are archived.

Videos with motion field: only those recordings/sequences will be archived which contain a change in the image content (motion).

Continuous: With this setting all recordings are archived.

Of course, archiving can also be done with a combination of the previously named criteria. Upon fulfillment of the predefined criteria, archiving can be done immediately or at previously predefined times of day. In addition to automatic archiving, the process can also be started and/or stopped manually via the operator interface.



Highlights

- MULTIEYE software enhancement for automatically exporting and archiving video and audio recordings
- Continuation, time- or event-controlled archiving
- Manual start and stop of the backup process possible
- Storage on local media
- Storage via network on external computers or file servers
- Extensive criteria for selecting the recordings to be saved; e.g. continuously, only alarm-activated or protected videos, only recordings with changes in content, etc.
- Individual configuration for each camera
- Upgrade through simple software activation
- Playback or evaluation of exported recordings by means of the NetworkPlayer

Article-no.	Description
810190	AutoBackup module, for automatic copying and/or archiving of videos, time- or alarm-triggered, on internal/external data volumes or drives. network version.

IP-HD MODULE



HDTV Recording – A milestone in image quality

What previously had been limited to HDTV television and digital photographic cameras is now possible in video surveillance systems – multimegapixel image formats! A unique combination of megapixel network cameras and hybrid-based digital recorders and/or IP camera recorder software enables a degree of exact detail never before attained in CCTV. With this high level of image quality, it is now possible to do without analog dome cameras in many applications because of the ability to digitally zoom in on live surveillance as well as playback. For example: with a three megapixel camera (2048 X 1536 pixels), up to four access lanes at a gas/petrol station can be surveyed with an exactness of detail which previously required four analog cameras. MULTIEYE software for all MULTIEYE recorders, DVR kits and NET software supports the operation of multimegapixel cameras, for example those from IQeye, Lumenera, Arecont Vision.

Article-no.	Description
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810163	IP-HD Module for the use of multi-megapixel IP cameras with a resolution larger than 1.4 megapixels, server license
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DESKTOPLOGGER MODULE



With the Desktop Logger (DTL) module and MULTIEYE systems, PC monitors can be kept under optimal remote surveillance. This remote surveillance of monitors works on a client-server basis via network. The DTL software scans, encodes and streams the monitor images with full resolution via network to a MULTIEYE system. In the MULTIEYE system, several monitor images are displayed and recorded per second. Recording of the desktop images is done in standard video format in the MULTIEYE system, dependent upon activity; i.e., if no work is being done at a PC, no recordings are made. DTL software supports all monitor resolution formats as well as dual- and/or quad-monitor operation on a PC.

Article-no.	Description
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810180	DesktopLogger module DTL
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VIDEO LICENSE KEY FOR ACTIVATION



Article-no.	Description
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810161	IP-4 license, key for activation of/up to 4 additional IP video channels.
810415	EX-L4 license, key for activation of 4 additional analog video inputs for DVR kits 16200, 32100 and EX-24 set.

MULTIEYE pro/4 Upgrade to MULTIEYE-HYBRID

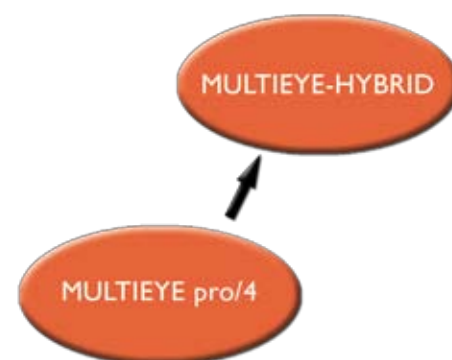
With the MULTIEYE-HYBRID software upgrade, existing MULTIEYEpro/4 recorders can now be upgraded to MULTIEYE-HYBRID without the need to exchange or replace hardware. MULTIEYE-HYBRID software now offers many new features, including:

- Activation of up to 32 (max. of 16 analog) camera inputs per recorder
- Operation of both analog and IP cameras with one recorder
- 2 audio inputs (if and when an audio card is supported)
- Freely programmable multiscreens
- PTZ camera remote control
- 1 – 4 fold playback, synchronized as well
- Remote surveillance via browser
- Remote maintenance
- Alarm notification
- Recording of audio sources through the EX-AUDIO16 board (optional)
- Cash-point data interface can be retrofitted
- Software actualization via Internet

With MULTIEYE-HYBRID software, you can not only comfortably expand your established system through the use of network (IP) cameras; the software will provide you with completely new recording functions and capacities up into the TB range as well!

The upgrade can be obtained under Article No. 812100 and is valid for one MULTIEYE-pro/4 system.

Delivery includes: Software on CD-ROM, user's manual, brief tutorial, and activation license. As an added bonus, the software upgrade includes an IP video input. With the IP-4 license, the unit can be expanded to 4/8 IP video inputs.



NOTE:

- Functions with Windows 2000, XP and 2003. Win98, ME and NT 4.0 are not supported
- MULTIEYEpro/4 I/O alarm boards are not supported. The EX-IO server can be used as an alternative

System recommendation

Intel® based motherboard, Core™2 Duo Processor, 1GB RAM, 1x HDD for operating system and software, 1x HDD for video data, DVD burner, Windows 2000, XP or 2003 server, well ventilated cabinet

Article-no.	Description
812100	Software upgrade of MULTIEYEpro/4 systems to MULTIEYE-HYBRID, with the upgrade all advantages and functionalities of the MULTIEYE-HYBRID software can be used. After the upgrade the system can be expanded to up to 32 inputs (max. 16 analogue). The delivery contains 1 IP video channel (expandable with IP-4).
810161	IP-4 license, key for activation of/up to 4 additional IP video channels.
812101	new MultiEye-Hybrid upgrade with new functions, available expected by July 2009

USER REPORT



Project Disco MAD

Germany's safest disco according to RTL, VOX, PRO7, DPA, BILD

- 80% fewer bodily injuries within one year after implementation of the system
- Live control of selected cameras online, by visitors as well, at www.mad.de

Project objective

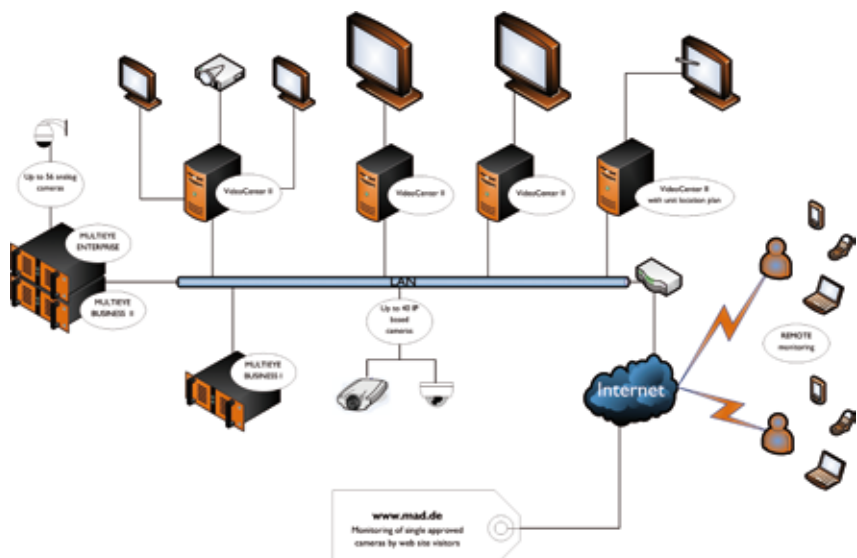
Surveillance of the discotheque MAD and its environs such as the parking lot, emergency exits and dwelling as well as remote switching of the emergency exits. The cameras in the entry and cash-point areas are recorded in real time at 25 ips. Remote surveillance occurs via LAN, Internet and Smartphone (Iphone).

Implementation

Surveillance of all sensitive areas in the Disco is done via analog, dome and network cameras. Recording is done with an ENTERPRISE recorder with 8 analog and 16 IP inputs, a BUSINESS I recorder with REC 100 expansion for a recorder performance of 100 images and a 32-channel BUSINESS II recorder. The video data is displayed through a VideoCenter II in two separate office spaces on 2 TFT displays and a beamer though a VideoCenter II. Two additional surveillance stations with VideoCenter II are located in the private dwelling of the operator.

The security personnel has a special surveillance station which is equipped with a site plan. From here, cameras can be accessed and emergency exits switched via the site-plan.

- MULTIEYE Enterprise 8 analog real-time channels, 16 IP channels
- MULTIEYE Business II 32 analog channels
- MULTIEYE Business I 16 analog channels + REC 100
- Expansion to 72 cameras is planned (60 are already in place).
- 6 VideoCenter II
- 7 surveillance stations (office, cash-point, dwelling I & 2, laptop, Smartphone, sanitary area)
- 3 EX-IO servers for switching lights and emergency exits



ACCESSORIES

Videoserver, IP-cameras, lenses, services

VIDEO SERVER



Highlights

- Real-time network transmission of up to 4 simultaneous video streams in D1 resolution (750 X 576 pixels)
- MPEG-4 compression for high quality video streams (DVD quality) and individual images
- Variable video image size, image rate and bandwidth
- Serial interface
- Optimally tuned for use with MULTIEYE-HYBRID and/or NET systems
- Easy integration into third-party systems via HTTP API
- Multicasting and Internet streaming
- CIF up to full D1 resolution at 30/25 FPS per channel
- Digital time code integrated into each channel
- Hardware motion recognition per channel
- Two-way audio per channel
- 2 optoisolated digital inputs and outputs per channel
- Serial interface

Real-time video server

With the new video servers, you have at your disposal powerful real-time encoders for the easy integration of existing analog cameras or other video sources. When connected directly to an IP network, remote locations can be incorporated into the surveillance and managed and recorded. This integration reduces costs as well as securing your previous investments.

The video servers have been optimally conceived for combination with MULTIEYE-HYBRID/NET or HYBRID recorders, but they can also be utilized as separate solutions for IP-based video transmission. They offer MPEG-4 transmission with up to 25 (PAL) or 30 (NTSC) images per second in the 4CIF format - per input.

Depending on the model, one or four video inputs are available. In addition, the units also provide RS232/485 interfaces, bi-directional audio as well as alarm inputs and switch outputs. The video encoders are configured by means of a standard web browser.

Delivery contents

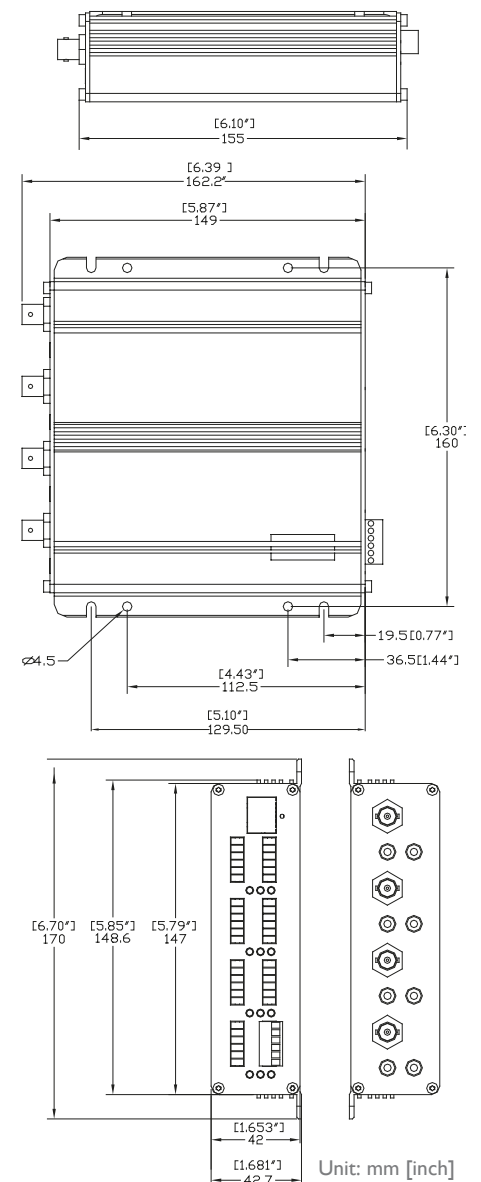
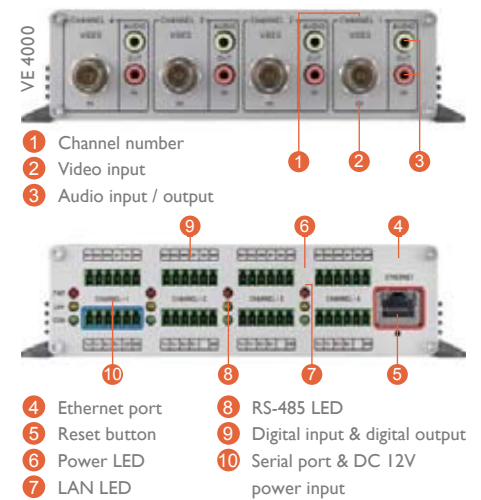
- 230 V AC power supply
- Network connection cable
- Terminal clamps

Article-no.	Description
840750	ACD2100, 1-channel video server
840700	ACD 3100, 1-channel video decoder
112822	ACD 2200, 4-channel video server

VIDEO SERVER

Technical data

Type	ACD 2100	ACD 3100	ACD 2200
Video inputs (Single mode)	1x analog composite, BNC (1 Vss)	-	4x analog composite, BNC (1 Vss)
Video outputs (Single mode)	1x loop out, analog composite, BNC	1	1x Quad, analog composite, BNC
Videonorm	PAL / NTSC		
Audio inputs	1x mono	1x mono	4x mono
Audio outputs	1x mono	1x mono	4x mono
Alarm inputs	2x DI	2 TTL	8x DI
Outputs	2x DA	2 TTL	8x DA
COM-Ports	1x	1x	4x
Network	1x 10/100 Base-T		
Video standard	MPEG-4		
Video data rate	Variable		
Video resolution	Full DI (720x480 in NTSC, 720x576 in PAL) CIF (352x240 in NTSC, 352x288 in PAL) QCIF (160x112 in NTSC, 176x144 in PAL) (per channel)		
Variable image rates	Yes		
Audio standard	PCM		
Audio data rate	8 Bit/s		
Audio sampling rate	8 kHz		
Motion detection	3 areas programmable	-	3 areas programmable
Network protocols	HTTP, SMTP, DHCP, UDP, TCP, IP, RTP, RTSP, FTP, PPPoE (Unicast, Multicast)		
Software update	via Website		
Configuration	Via web browser (web server integrated)		
Input voltage	230 V AC (1A) / 12 V DC	230 V AC (1A) / 12 V DC	230 V AC (3A) / 12 V DC
Power consumption	7,5 W	10,3 W	16,0 W
Dimensions W x D x H in mm	112 x 119 x 37,2	112 x 119 x 37,2	170 x 149 x 42,7
Weight	0,35 kg	0,35 kg	0,82 kg
Operating temperature	0 - 40 °C (20 - 80% Rh)		
Authorizations	CE, UL		



NETWORK CAMERAS

ACTi IP Videocameras

Article-no.	Description
840200	ACM-4200 Megapixel IP-camera (Indoor), 1,3 Megapixel, M-JPEG/MPEG-4, Micron MegaPixel CMOS Modul, Audio, CS Mount, lens f4,2mm/F1.8, 3,3 V DC.
840500	ACM-571 IP, M-JPEG/MPEG-4 IP-Kamera, CIF up to Full D1 resolution at 30/25 fps/ips, 420 TV lines, DC 12V or Power Over Ethernet (IEEE 802.3af).
840400 NEU	ACM-560 I, Megapixel IP-Kamera M-JPEG/MPEG-4, 1,3 Megapixel, up to 8 fps/ips at 1280x1024 resolution, Micron MegaPixel CMOS Modul, Audio, CS Mount, lens f4,2mm/F1.8, Power over Ethernet (IEEE 802.3af).
840401	ACM-561 I, Megapixel IP-Kamera M-JPEG/MPEG-4, 1,3 Megapixel, up to 8 fps/ips at 1280x1024 resolution, Micron MegaPixel CMOS Modul, Audio, CS Mount, lens f4,2mm/F1.8, Power over Ethernet (IEEE 802.3af).
840502	ACM-131 IP, IP-IR Bullet Camera (Indoor), M-JPEG/MPEG-4, CIF up to Full D1 resolution at 30/25 fps/ips, 420 TV lines, Sony SuperHAD CCD Modul, Audio, lens f4,3mm/F2.0, DC 12V DC or Power over Ethernet (IEEE 802.3af).
840504	ACM-123 I, Megapixel Day/Night IP-IR Bullet Camera (Outdoor), M-JPEG/MPEG-4, up to SXGA resolution at 8 fps/ips, Micron MegaPixel CMOS Modul, Audio, lens f3.3~12mm/F1.4, DC 12V or Power over Ethernet, IP66 weather-proof.
840600	ACM-331 IP, IP-IR 3-inch Dome Kamera, M-JPEG/MPEG-4, CIF up to Full D1 resolution at 30/25 fps/ips, 420 TV lines, Sony SuperHAD CCD Modul, Audio, lens f4,3mm/F2.0, Power over Ethernet (IEEE 802.3af).
840601	ACM-340 I, Megapixel IP-Dome Camera (Indoor), M-JPEG/MPEG-4, up to SXGA resolution at 8 fps/ips, Micron MegaPixel CMOS Modul, Audio, lens f4,2mm/F1.8, DC 12V DC or Power over Ethernet (IEEE 802.3af).
840602	ACM-341 I, Megapixel IP-Dome Camera (Indoor), M-JPEG/MPEG-4, up to SXGA resolution at 8 fps/ips, Micron MegaPixel CMOS Modul, Audio, lens f4,2mm/F1.8, DC 12V DC or Power over Ethernet (IEEE 802.3af).

Arecont Vision Megapixelcameras

Article-no.	Description
830110	AV1300-M, 1,3 Megapixel, M-JPEG, up to 25 fps/ips, 0,1 Lux, man./Auto-Shutter, 1/2" CS, 12V DC or PoE, 3 watt. Lens not included in delivery.
830111	AV1300-AI, 1,3 Megapixel, M-JPEG, up to 25 fps/ips, 0,1 Lux, man./Auto-Shutter, 1/2" CS, DC auto iris, 12-48V DC or PoE, 3 watt. Lens not included in delivery.
830112	AV1300-DN, 1,3 Megapixel Day/Night (motorized IR Cut filter), M-JPEG, up to 24 fps/ips, 0,1 Lux (F 1.4), man./Auto-Shutter, 1/2" CS, 12-48V DC or PoE, 3 watt. Lens not included in delivery.
830120	AV2100-M, 2,0 Megapixel, M-JPEG, up to 24 fps/ips, 0,1 Lux, man./Auto-Shutter, 1/2" CS, 12-48V DC or PoE, 3 watt. Lens not included in delivery.
830121	AV2100-AI, 2,0 Megapixel, M-JPG, up to 24 fps/ips, 0,1 Lux, man./ Auto-Shutter, 1/2" CS, DC auto iris, 12-48V DC or PoE, 3 watt. Lens not included in delivery.
830122	AV2100-DN, 2,0 Megapixel Day/Night (motorized IR Cut filter), M-JPEG, up to 24 fps/ips, 0,1 Lux (F 1.4), man./Auto-Shutter, 1/2" CS, 12-48V DC or PoE, 3 watt. Lens not included in delivery.
830130	AV3100-M, 3,0 Megapixel, M-JPEG, up to 15 fps/ips, 0,2 Lux, man./Auto-Shutter, 1/2" CS, 12-48V DC or PoE, 3 watt. Lens not included in delivery.
830131	AV3100-AI, 3,0 Megapixel, M-JPEG, up to 15 fps/ips, 0,2 Lux, man./ Auto-Shutter, 1/2" CS, DC auto iris, 12-48V DC or PoE, 3 watt. Lens not included in delivery.
830132	AV3100-DN, 3,0 Megapixel Day/Night (motorized IR Cut filter), M-JPEG, up to 15 fps/ips, 0,2 Lux (F 1.4), man./Auto-Shutter, 1/2" CS, 12-48V DC or PoE, 3 watt. Lens not included in delivery.
830850	AV5100-M, 5,0 Megapixel, M-JPEG, up to 15 fps/ips, 0,3 Lux, man./Auto-Shutter, 1/2" CS, 12-48V DC or PoE, 3 watt. Lens not included in delivery.
830851	AV5100-AI, 5,0 Megapixel, M-JPEG, up to 15 fps/ips, 0,3 Lux, man./Auto-Shutter, 1/2" CS, DC auto iris, 12-48V DC or PoE, 3 watt. Lens not included in delivery.

NETWORK CAMERAS

830852	AV5100-DN, 5,0 Megapixel Day/Night (motorized IR Cut filter), M-JPEG, up to 8 fps/ips, 0,3 Lux (F 1.4), man./Auto-Shutter, 1/2" CS, 12-48V DC or PoE, 3 watt. Lens not included in delivery.
830230	AV3130-M, 3,0/1,3 Megapixel, Day/Night (Dual Sensor), M-JPEG, up to 15 fps/ips, 0,01 Lux (F 1.4), man./Auto-Shutter, 1/2" CS, 12-48V DC or PoE, 3 watt. Lens not included in delivery.
830160	AV 8180 Panoramic camera (180°), 4 x 2 Megapixel, M-JPEG, 22 fps/ips, 0,2 Lux (F 2.0), man./Auto Shutter, 4 x 1/2 ", 12-48V DC or PoE, 6 watt min. (lenses included, not changable).
830161	AV 8360 Panoramakamera (360°), 4 x 2 Megapixel, M-JPEG, 22 fps/ips, 0,2 Lux (F 2.0), man./Auto Shutter, 4 x 1/2 ", 12-48V DC or PoE, 6 watt min. (lenses included, not changable).

AXIS Video-/Megapixelcameras

Article-no. Description

852000	AXIS 209MFD, 1/3" RGB CMOS, 1,3 Megapixel, progr. scan, 3,6 mm, F1,8, fixed iris, horizontal angle of view: 74°, 3 to 10000 Lux, F1,8, Pan ±10°, tilt 0 - 90°, rotation ±10°, MPEG-4, Motion JPEG, max. 1280 x 1024, up to 8 fps in max resolution
852001	1/3" RGB CMOS, 1,3 Megapixel, progr. scan, 3,6 mm, F1,8, fixed iris, horizontal angle of view: 74°, 3 to 10000 Lux, F1,8, Pan ±10°, tilt 0 - 90°, rotation ±10°, MPEG-4, Motion JPEG, max. 1280 x 1024, up to 8 fps in max resolution, vandal-resistant casing, incl. heating, IP65
852002	AXIS M301 I, 1/4" progr. scan RGB VGA CMOS, 3,0 mm, F2,0, fixed iris, horizontal angle of view: 66°, 1 lux, F2,0, H.264, Motion JPEG, MPEG-4, 640x480 to 160x120, 30 fps in all resolutions
852003	AXIS P3301, 1/4" RGB, VGA CMOS / progr. scan, Varifocal 2,8 to 10 mm, F1,3, DC-iris angle of view: 23° - 72°, 1 Lux, F1,3, Pan 360°, tilt 170°, rotation 340°, H.264 Motion JPEG, up to max. 640x480, 30 fps in all resolutions
852004	AXIS P3301-V, 1/4" RGB, VGA CMOS / progr. scan, Varifocal 2,8 to 10 mm, F1,3, DC-iris angle of view: 23° - 72°, 1 Lux, F1,3, Pan 360°, tilt 170°, rotation 340°, H.264 Motion JPEG, up to max. 640x480, 30 fps in all resolutions, vandal-resistant casing,
852005	AXIS 216MFD, 1/3" RGB CMOS, 1,3 Megapixel, progr. scan, Variofocal 2,8 - 10 mm, F1,3, DC-iris angle of view: 27° bis 100° horizontal, 2 Lux, F1,3, pan 360°, tilt 170°, rotation 340°, MPEG-4, Motion JPEG, up to max. 1280x1024, up to 8 fps at 1280x1024, 13 fps at 1024x768, 20 fps at 800x600
852006	AXIS 216MFD-V, 1/3" RGB CMOS, 1,3 Megapixel, progr. scan, Variofocal 2,8 - 10 mm, F1,3, DC-iris angle of view: 27° bis 100° horizontal, 2 Lux, F1,3, pan 360°, tilt 170°, rotation 340°, MPEG-4, Motion JPEG, up to max. 1280x1024, up to 8 fps at 1280x1024, 13 fps at 1024x768, 20 fps at 800x600, vandal-resistant casing,
852007	AXIS M101 I, 1/4" RGB, VGA CMOS/ progr. scan, 4,4 mm, F2,0, fixed iris, fixed focus, horizontal angle of view: 47°, 1 Lux, F2,0 AXIS M103 I-VV: 0 Lux with illumination LED on, H.264, Motion JPEG, MPEG-4, 640 x 480 to 160 x 120, 30 fps in all resolutions
852008	AXIS M101 I-W, 1/4" RGB, VGA CMOS/ progr. scan, 4,4 mm, F2,0, fixed iris, fixed focus, horizontal angle of view: 47°, 1 Lux, F2,0 AXIS M103 I-WV: 0 Lux with illumination LED on, H.264, Motion JPEG, MPEG-4, 640 x 480 to 160 x 120, 30 fps in all resolutions incl. VV-LAN
852009	AXIS P131 I, 1/4" progr. scan / RGB VGA CMOS, 4,0 mm, F1,2, fixed iris angle of view, horizontal: 42°, 0,6 to 30000 Lux, F1,2, H.264, Motion JPEG, MPEG-4, 640x480 to 160x120, 30 fps in all resolutions





852010 AXIS Q1755, 1/3" CMOS, progr. scan, 2 Megapixel, f 5.1 - 51 mm, F1.8 - 2.1, Auto day/night IR filter, autofocus, near focus limit 10mm (wide) or 800mm (tele)
Angle of view, horizontal: 5.4° - 50°, M37x0.75 mounting thread for optional lens adaptor, Color: 2 lux at 30IRE, F1.8, B/W: 0.2 lux at 30IRE, F1.8, 10x optical and 12x digital, total 120x zoom, H.264, Motion JPEG, HDTV 1080i 1920 x 1080, HDTV 720p 1280 x 720, 30/25 fps in all resolutions

852011 AXIS 214 PTZ, 1/4" Sony ExView HAD CCD, 4, l - 73.8 mm, F1.4 - 3.0, auto focus, auto day/night, near focus limit 10 mm (wide) or 800 mm (tele) to infinity
Angle of view, horizontal: 2.7° - 48°, Color mode: 0.3 lux at F1.4, 30IRE, Black/white mode: 0.005 lux at F1.4, 30IRE, 20 preset positions, ± 170° pan range, 100°/s pan speed, -30° - 90° tilt range, 90°/s tilt speed, 18x optical, 12x digital zoom,

852012 AXIS 232D+, 1/4" Sony EXView HAD CCD, F1.4 - 3.0, f=4, F1.4 - 3.0, f=4, 1 mm wide to 73.8 mm tele, autofocus, angle of view, horizontal: 2.8° - 48°, Color: 0.3 lux at 30IRE, B/W: 0.005 lux at 30IRE, 18x optical, 12x digital zoom, 360° endless pan range, 360°/s pan speed, 0° - 90° (± 3°) tilt range, 360°/s tilt speed, 50 preset positions, MPEG-4, Motion JPEG, 160x120 to 704x576, Up to 30/25 fps at 2CIF/CIF/QCIF

852013 AXIS 233D, 1/4" ExView HAD CCD with progr. scan, F1.4 - 4.2, 3.4 - 119 mm, F1.4 - 4.2, autofocus, automatic day/night, horizontal angle of view: 1.73° - 55.8°, Color: 0.5 lux at 30 IRE, B/W: 0.008 lux at 30 IRE, E-flip, 100 preset positions, Pan: 360° endless, 0.05 - 450°/s, Tilt: 180°, 0.05 - 450°/s, 35x optical zoom and 12x digital zoom, total 420x zoom,

Basler Megapixelcameras

Article-no. Description

851000 BIP-640c C/CS, CCD 1/3" VGA 640x480 (Sony ICX424)
Image Sensor 1/3" Sony Wfine progressive scan RGB CC, 640 (H) x 480 (V), Max sensor readout rate: 71 fps, 0.98 lux (F 1.0 / 30 ms), PoE (Power over Ethernet IEEE 802.3af) or 7 to 20VDC, power consumption is 5 W max at 12 VDC, 0° to 50° C (32° to 122° F), 20 % to 80 % relative humidity (non-condensing), FCC Class B, CE, RoHS



851001 BIP-1000c C/CS, CCD 1/3" XGA 1024x768 (Sony ICX204)
Image Sensor 1/3" Sony Wfine progressive scan RGB CC, 1024 (H) x 768, Max sensor readout rate: 30 fps, (V, 1.3 lux (F 1.4 / 30 ms), PoE (Power over Ethernet IEEE 802.3af) or 7 to 20VDC, power consumption is 5 W max at 12 VDC, 0° to 50° C (32° to 122° F), 20 % to 80 % relative humidity (non-condensing), FCC Class B, CE, RoHS



851002 BIP-1300c C/CS, CCD 1/3" 1.3MP 1296x966 (Sony ICX445)
1/3" Sony EXview HAD progressive scan RGB CCD, 1280 (H) x 960 (V), Max sensor readout rate: 30 fps, 1.54 lux (F 1.0 / 75 ms), PoE (Power over Ethernet IEEE 802.3af) or 7 to 20VDC, power consumption is 5 W max at 12 VDC, 0° to 50° C (32° to 122° F), 20 % to 80 % relative humidity (non-condensing), FCC Class B, CE, RoHS

851003 BIP-1600c C/CS, CCD 1/2" 2MP 1600x1200 (Sony ICX274)
1/1.8" Sony Wfine progressive scan RGB CCD, 1600 (H) x 1200 (V), Max sensor readout rate: 30 fps, 0.60 lux (F 1.4 / 30 ms), PoE (Power over Ethernet IEEE 802.3af) or 7 to 20VDC, power consumption is 5 W max at 12 VDC, 0° to 50° C (32° to 122° F), 20 % to 80 % relative humidity (non-condensing), FCC Class B, CE, RoHS



851004 BIP-640c-dn C/CS, CCD 1/3" VGA 640x480 (Sony ICX424)
Image Sensor 1/3" Sony Wfine progressive scan RGB CC, 640 (H) x 480 (V), Day / Night, Max sensor readout rate: 71 fps, 0.98 lux (F 1.0 / 30 ms), PoE (Power over Ethernet IEEE 802.3af) or 7 to 20VDC, power consumption is 5 W max at 12 VDC, 0° to 50° C (32° to 122° F), 20 % to 80 % relative humidity (non-condensing), FCC Class B, CE, RoHS

- 851005 BIP-1000c-dn C/CS, CCD 1/3" XGA 1024x768 (Sony ICX204)
Image Sensor 1/3" Sony Wfine progressive scan RGB CC, 1024 (H) x 768, Day / Night, Max sensor readout rate: 30 fps, (V, 1.3 lux (F 1.4 / 30 ms), PoE (Power over Ethernet IEEE 802.3af) or 7 to 20VDC, power consumption is 5 W max at 12VDC, 0° to 50° C (32° to 122° F), 20 % to 80 % relative humidity (non-condensing), FCC Class B, CE, RoHS
- 851006 BIP-1300c-dn C/CS, CCD 1/3" 1.3MP 1296x966 (Sony ICX445)
1/3" Sony EXview HAD progressive scan RGB CCD, 1280 (H) x 960 (V), Day / Night, Max sensor readout rate: 30 fps, 1.54 lux (F 1.0 / 75 ms), PoE (Power over Ethernet IEEE 802.3af) or 7 to 20VDC, power consumption is 5 W max at 12 VDC, 0° to 50° C (32° to 122° F), 20 % to 80 % relative humidity (non-condensing), FCC Class B, CE, RoHS

IQeye Megapixelcameras

Article-no. Description

- I12847 IQeye 510 NLNPNE, Wide Dynamic Range camera, WVGA, up to 60 fps/ips, 0,4 lux, 12VDC or PoE acc. IEEE 802.3af, 3 Watt. Lens not included in delivery.
- I12890 IQeye 511 NLNPNE, Megapixel colour network camera, 1,3 Megapixel, up to 30 fps/ips, 0,2 lux, man/auto shutter, 12VDC or PoE acc. IEEE 802.3af, 3 watt. Lens not included in delivery.
- I12845 IQeye 511 BIPEDV, dome housing ("internal use"), 1,3 Megapixel, up to 30 fps/ips, 0,2 lux. Incl. Lens 1/3", 4,0 - 9,0mm. 12 VDC or PoE acc. IEEE 802.3af, 3 watt.
- I12873 IQeye 711 NLNPNE, Megapixel colour network camera, 1,3 Megapixel, up to 30 fps/ips, 0,1 lux, man/auto Shutter. 12VDC or PoE acc. IEEE 802.3af, 3 watt. Lens not included in delivery.
- I12888 IQeye 711 B2NPDI, dome housing ("internal use"), 1,3 Megapixel, up to 15 fps/ips, 0,2 lux. Incl. Lens 1/3", 2,5 - 7,0mm. 12 VDC or PoE acc. IEEE 802.3af, 3 watt.
- I12891 IQeye 702 NLNPNE, Megapixel colour network camera, 2,1 Megapixel, up to 20 fps/ips, 0,2 Lux, man/auto Shutter. 12 VDC or PoE acc. IEEE 802.3af, 3,6 watt. Lens not included in delivery.
- I12889 IQeye 712 B2NPDI, dome housing ("internal use"), 2,0 Megapixel, up to 15 fps/ips, 0,2 lux. Incl. Lens 1/3", 2,5 - 7,0mm. 12 VDC or PoE acc. IEEE 802.3af, 3 watt.
- I12894 IQeye 703 NLNPNE, Megapixel colour network camera, 3,1 Megapixel, up to 12 fps/ips, 0,3 lux, man/auto shutter. 12 VDC or PoE acc. IEEE 802.3af, 3,6 watt. Lens not included in delivery.
- I12853 IQeye 705 NLNPNE, Megapixel colour network camera, 5 Megapixel, up to 10 fps/ips, 0,3 lux, man/auto shutter. 12 VDC or PoE acc. IEEE 802.3af, 3,6 watt. Lens not included in delivery.
- I12892 IQeye 752 NLNPNE, Day/Night megapixel color network camera, 2,1 Megapixel, up to 12 fps/ips, 0,09 lux, man/auto shutter. 12 VDC or PoE acc. IEEE 802.3af, 3,6 watt. Lens not included in delivery.
- I12893 IQeye 753 NLNPNE, Day/Night megapixel color network camera, 3,1 Megapixel, up to 12 fps/ips, 0,09 lux, man/auto shutter. 12 VDC or PoE acc. IEEE 802.3af, 3,6 watt. Lens not included in delivery.
- I12859 IQeye 755 NLNPNE, Day/Night megapixel color network camera, 5 Megapixels, up to 10 fps/ips, 0,09 lux, man/auto shutter. 12 VDC or PoE acc. IEEE 802.3af, 3,6 watt. Lens not included in delivery.
- I12874 IQeye 811 V3NPSS, All-Weather Camera System, 1,3 Megapixel, 30 pfs/ips, 0,1 lux. Incl. Varifocal Lens 1/2", 4,0 - 10,0 mm. 802.3af POE Power Module.
- I12875 IQeye 811 V4NPSS, All-Weather Camera System, 1,3 Megapixel, 30 fps/ips, 0,1 lux. Incl. Varifocal Lens 1/2", 5 - 50 mm. 802.3af POE Power Module.
- I12876 IQeye 802 V1NPSS, All-Weather Camera System, 2 Megapixel, 20 fps/ips, 0,2 lux. Incl. Varifocal Lens 1/2", 4,0 - 10,0 mm. 802.3af POE Power Module.
- I12877 IQeye 802 V2NPSS, All-Weather Camera System, 2 Megapixel, 20 fps/ips, 0,2 lux. Incl. Varifocal Lens 1/2", 12,0 - 36,0 mm. 802.3af POE Power Module.
- I12878 IQeye 802 V7NPSS, All-Weather Camera System, 2 Megapixel, 20 fps/ips, 0,2 lux. Incl. IR-Corrected Varifocal Lens 1/2", 4,5 - 13 mm. 802.3af POE Power Module.
- I12879 IQeye 803 V2NPSS, All-Weather Camera System, 3 Megapixel, 12 fps/ips, 0,3 lux. Incl. Varifocal Lens 2/3", 12,0 - 36,0 mm. 802.3af POE Power Module.



NETWORK CAMERAS

I 12880	IQeye 803 V7NPSS, All-Weather Camera System, 3 Megapixel, 12 fps/ips, 0,3 lux. Incl. IR-Corrected Varifocal Lens 1/2", 4,5 - 13,0 mm. 802.3af POE Power Module.
I 12881	IQeye 805 V7NPSS, All-Weather Camera System, 5 Megapixel, 10 fps/ips, 0,3 lux. Incl. IR-Corrected Varifocal Lens 1/2", 4,5 - 13,0 mm. 802.3af POE Power Module.
I 12882	IQeye 852 V5NPSS, All-Weather Camera System, 2 Megapixel, 20 fps/ips. Incl. Day/Night Lens 1/2", 4,0 - 10,0 mm. 802.3af POE Power Module.
I 12883	IQeye 852 V6NPSS, All-Weather Camera System, 2 Megapixel, 20 fps/ips. Incl. Day/Night Lens 1/2", 10,0 - 40,0 mm. 802.3af POE Power Module.
I 12884	IQeye 852 V7NPSS, All-Weather Camera System, 2 Megapixel, 20 fps/ips. Incl. IR-Corrected Varifocal Lens 1/2", 4,5 - 13,0 mm. 802.3af POE Power Module.
I 12885	IQeye 853 V6NPSS, All-Weather Camera System, 3 Megapixel, 12 fps/ips. Incl. Day/Night Lens 1/2", 10,0 - 40,0 mm. 802.3af POE Power Module.
I 12886	IQeye 853 V7NPSS, All-Weather Camera System, 3 Megapixel, 12 fps/ips. Incl. IR-Corrected Varifocal Lens 1/2", 4,5 - 13,0 mm. 802.3af POE Power Module.
I 12887	IQeye 855 V7NPSS, All-Weather Camera System, 5 Megapixel, 10 fps/ips. Incl. IR-Corrected Varifocal Lens 1/2", 4,5 - 13,0 mm. 802.3af POE Power Module.
I 12895 NEW	IQeye 040SI-V9, Wide dynamic Range Camera, 0,3 Megapixel, up to 30 fps/ips, 0,2 lux. Incl. Varifocal Lens, 3,5-9,0 mm. 802.3af PoE Power Modul, 2,8 watt. Available from Nov 2008.
I 12896 NEW	IQeye 041SI-V10, Wide dynamic Range Camera, 1,3 Megapixel, up to 15 fps/ips, 0,2 lux. Incl. Varifocal Lens, 3,5-9,0 mm. 802.3af PoE Power Modul, 2,8 watt. Available from Nov 2008.
I 12897 NEW	IQeye 042SI-V11, Wide dynamic Range Camera, 2 Megapixel, up to 15 fps/ips, 0,2 lux. Incl. Varifocal Lens, 3,5-9,0 mm. 802.3af PoE Power Modul, 2,8 watt. Available from Nov 2008.

Note: The image per second (ips) refers to the declaration of the manufacturer. In combination with MULTIEYE systems, the repeat rate depends on the recorder performance, image size and network capacity.

Panasonic

Article-no. Description

I 12940	BL-C1CE, network camera, 1/4" CMOS chip, JPEG or M-JPEG, 15 fps/ips, 4 lux, 10/100 BaseT, incl. power supply.
I 12941	BL-C20CE, WLAN network camera, 1/4" CMOS chip, JPEG or M-JPEG, 15 fps/ips, 4 lux, 10/100 BaseT, incl. power supply.
I 12942	BL-C11CE, Indoor Pan/Tilt IP-IR Camera, 1/6" CMOS Sensor, JPEG or M-JPEG, 30 fps/ips, 3 lux, 10/100 BaseT, incl. power supply.
I 12943	BL-C13CE, Indoor Pan/Tilt IP-IR/WLAN Camera, 1/6" CMOS Sensor, JPEG or M-JPEG, 30 fps/ips, 3 lux, 10/100 BaseT, incl. power supply.
I 12901	BL-C30, WLAN network camera, 1/4" CMOS chip, JPEG or M-JPEG, Pan/Tilt area +/-50°/+10°/-40°, 8 presets, WLAN 802.11, 10/100 BaseT, 15 fps/ips, 1 lux, incl. power supply.
I 12902	BB-HCM331, network camera for indoor and outdoor usage, color/ B/W, 1/4" CCD chip, JPEG or M-JPEG, Pan/Tilt area +/-60°/+20°/-45°, 20 presets, 10/100 BaseT, Alarm in- and outputs, SD-slot, 3 Lux, max 25fps, incl. power supply.



SANTEC IP Videokameras

Article no. Description

822100	SNC-240, 1/4" IP colour camera, 400 TV lines, 25 fps/ips, 1,5 lux, M-JPEG/MPEG-4.
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NETWORK CAMERAS

112510	SNC-360, 1/3" IP colour camera, 480 TV Lines, 25 fps/ips, 0,5 lux, M-JPEG/MPEG-4.
822114	SNC-380DN, 1/3" IP day/night colour camera with PoE function, 520 TV lines, 25 fps/ips, 0,5 lux, M-JPEG/MPEG-4.
822116	SNC-390DN, 1/3" IP day/night colour camera with PoE, 540 TV lines, 25 fps/ips, 0,3 lux, M-JPEG/MPEG-4.
822117	SNC-565IR, 1/3" IP day/night colour camera in weatherproof housing with Motorzoom-lens, IR-LED and PoE, 540 TV lines, 25 fps/ips, 0,3/0,001 lux, lens 3,8 - 38,0 mm, IR-LED up to 30 m, M-JPEG/MPEG-4.
822118	SNC-521IR/B, 1/3" IP day/night colour camera in weatherproof housing, IR-LED and PoE, 540 TV lines, 25 fps/ips, 0,3 lux, lens 2,8 - 11,0 mm, IR-LED up to 20 m, M-JPEG/MPEG-4.
822119	SNC-612, 1/3" IP day/night colour dome camera, 540 TV lines, 25 fps/ips, 0,3 lux, lens 2,8 - 11,0 mm, M-JPEG/MPEG-4.
822120	SNC-620, 1/3" IP day/night-colour dome camera in weatherproof housing with PoE, 540 TV lines, 25 fps/ips, 0,3 lux, lens 2,8 - 11,0 mm, M-JPEG/MPEG-4.
822121	SNC-650, 1/3" IP day/night-colour dome camera in weatherproof housing with Motorzoom-lens and PoE, 540 TV lines, 25 fps/ips, 0,3/0,001 lux, lens 3,8 - 38,0 mm, M-JPEG/MPEG-4.
822122	SNC-670ID/B, 1/3" IP day/night domcamera in weatherproof housing, 540 TV lines, 25 fps/ips, 0,7 lux, lens 3,8 - 38,0 mm, M-JPEG/MPEG-4.



SANTEC Videoserver

Article-no.	Description
822113	SVS 1001 1 chanel IP Network server, 25 fps/ips, M-JPEG/ MPEG-4, RS 485 connector
822101	SVS 1004 4 chanel IP Network server, 25 fps/ips, M-JPEG, RS 485

TOSHIBA

Article-no.	Description
112742	TOSHIBA IK-WB21A, 1/4 SuperCCD Megapixel IP-SpeedDome-Kamera, 1,26 Megapixel, up to 30 fps/ips (VGA) and 7,5 fps/ips (SXGA). Lens 22-X optical zoom 4-88 mm. Incl. 12VDC PSU, 10 Watt.



LENSES



Standard Lenses

Article-no.	Description
I 10556	T3Z2910 CS 1/3", CS-Mount, 2,9 - 8,2 mm, F 1.0, manual iris
I 10550	TG3Z2910 FCS/ 3I 1/3", CS-Mount, 2,9 - 8,2 mm, F 1.0, DC iris
I 10551	TG3Z2910 IR/ 3I 1/3", CS-Mount, 2,9 - 8,2 mm, F 1.0, DC iris, IR corrected
I 10557	T4Z2813 CS 1/3", CS-Mount, 2,8 - 12,0 mm, F 1.3, manual iris
I 10558	T4Z2813 IR 1/3", CS-Mount, 2,8 - 12,0 mm, F 1.3, manual iris, IR corrected
I 10552	TG4Z2813 FCS/ 3I 1/3", CS-Mount, 2,8 - 12,0 mm, F 1.3, DC iris
I 10553	TG4Z2813 IR/ 3I 1/3", CS-Mount, 2,8 - 12,0 mm, F 1.3, DC iris, IR corrected
I 10559	T5Z8513 IR 1/3", CS Mount, 8,5 - 40,0 mm F 1.3, manual iris, IR corrected
I 10554	TG5Z8513 IR/3I 1/3", CS Mount, 8,5 - 40,0 mm F 1.3, DC iris, IR corrected
I 10560	T10Z0513 CS 1/3", CS Mount, 5,0 - 50,0 mm F 1.3, manual iris
I 10555	TG10Z0513 FCS/3I 1/3", CS Mount, 5,0 - 50,0 mm F 1.3, DC iris
I 10561	H3Z1014CS 1/2", CS Mount, 10,0 - 30,0 mm F 1.4-16C, manual iris

Megapixel Lenses

Article-no.	Description
I 10524	Megapixel lens 2/3", C-Mount, manual fix focal 8 mm, F 1.4, incl. C/CS Mount Adapter
I 10525	Megapixel lens 2/3", C-Mount, manual fix focal 12 mm, F 1.4, incl. C/CS Mount Adapter
I 10526	Megapixel lens 1/2", C-Mount, manual fix focal 5 mm, F 1.4, incl. C/CS Mount Adapter
I 10527	Megapixel lens 1/2", C-Mount, manual vario focal 4,0-8,0 mm, manual iris, F 1.4, incl. C/CS Mount Adapter
I 10530	Megapixel lens 1/2", C-Mount, manual vario focal 4,0-8,0 mm, F 1.4, auto iris DC, incl. C/CS Mount Adapter
I 10528	Megapixel lens 2/3", C-Mount, manual fix focal 25 mm, F 1.4, incl. C/CS Mount Adapter
I 10529	Megapixel lens 2/3", C-Mount, manual fix focal 50 mm, F 1.8, incl. C/CS Mount Adapter



CAMERA ACCESSORIES

Accessories ACTi cameras on request

Accessories TOSHIBA Dome

Article-no.	Description
I10450	Dome weather housing
I10460	Wall mount for dome weather housing
I10470	Connection adapter incl. Heater
I10471	Camera power supply unit 12VDC for installation weather housing
I10461	Corner mountadapter, only in combination with wall mount adapter
I10462	Pole mount adapter, only in combination with wall mount adapter
I10463	Ceiling mount adapter for weather housing

Camera housings

Article-no.	Description
I12601	Outdoor housing HEB32, 230 VAC, 320 mm, incl. sunshield and heater, Aluminium RAL 9002
I12608	Indoor housing HEB32D0A, 320 mm, without sunshield and without heater, aluminium RAL 9002
I10303	Wall bracket WBJ incl. ball joint for HEB32 and HEB32D0A, aluminium RAL 9002
I10307	Ceiling mount adapter WCM5A incl. Ball joint for HEB32 and HEB32D0A, aluminium RAL 9002
I10304	Pole mount adapter WSFPA for wall bracket WBJ, aluminium RAL 9002
I12602	Power Supply OHEPS01B for HEB32 and HEB32D0A. Input: 100-240VAC, output 12VDC, 1 A
I10300	Wallbracket mini, incl. Ball joint for indoor use, aluminium RAL 9002

more special housings on request

Network accessories

Article-no.	Description
I12852	PoE power supply, for power over network cameras via network acc. IEEE 802.3af, 230VAC.
I12855	PoE adapter, for power supply of network cameras via network with 5 resp. 12VDC. Attention: needs PoE power supply or PoE power switch.
I12864	PoE power switch, 8Port unmanaged 10/100 Ethernet Switch 4 PoE Ports
I12865	PoE power switch, 24Port PoE managed, 10/100 Switch, 2x GBit uplink
I12866	Router, VPN Gateway, Dynamic VPN gateway for up to 100 sites



USER REPORT



The central monitoring room is equipped with seven 42" flat screens and also seven 17" monitors..



Project „Al Ain Mall“, United Arab Emirates

artec business partner HARCO CO. acquired an order from Group Seven Security Equipment LLC to implement a video surveillance installation in the Al Ain Mall close to Dubai. This installation exist of seven MULTIEYE NET recorders, seven Video Center II monitoring stations and all together 200 IP cameras, including 72 speed dome cameras.

Each 32 channel MULTIEYE NET recorder includes a four TB data storage to store the data of 30 days. The cameras to be installed were A-MTHK cameras and domes, which were delivered from the ordering company. Special camera profiles had to be created and implemented into the software by artec for this project because the camera brand is not commonly used in Europe.

A 42" flat screen TV is connected to each MULTIEYE Net recorder. The Video Center II runs on local PC's with a 17" monitor to show live pictures and to give authorized personal the possibility to watch the recorded streams.

Beginning of November 2008 an artec technologies technician supervised and supported the installation of the system and trained the operators as well. On 6th of November commission took place and the system was officially handed over to the operating company.

Resume:

The installation in the Al Ain Mall was a mile stone for artec in this region. artec realized together with its partners a very complex IP network video surveillance system which sets very high performance requirements on our MULTIEYE NET recorder, especially through the large number of simultaneous client requests. To guarantee the performance on one side and leave buffer on the other side, artec did a special setup for the whole system which considered all the specific needs of the network cameras, MULTIEYE recorders and the VideoCenter II monitoring stations. The direct stream technology for storage and remote access of video streams (developed by artec technologies ag) came to play successfully again.

[illegible]This image shows a full page of graph paper. The grid consists of small squares formed by dashed horizontal and vertical lines. There are 20 columns and 30 rows of these squares, creating a uniform pattern across the entire page. The lines are light gray and spaced evenly apart.

MULTIEYE Sales



GENERAL TERMS AND CONDITIONS

All orders for goods accepted by artec technologies inc. are accepted subject to the following conditions which shall form part and govern the contract of sale. Acceptance of goods shall be deemed to be acceptance of these conditions of sale. Any term sought to be imposed by a Purchaser either in a document or otherwise that conflicts with or adds to these conditions is not accepted. No agent or representative of artec technologies inc. has authority to vary these conditions unless accepted in writing. These conditions do not affect your statutory rights

1. Payment and Price

- (a) artec technologies inc. reserves the right to vary the quoted price for the goods in accordance with market conditions at the date of actual supply and the Purchaser be given the choice of accepting the new price or cancelling the sale, pricelists do not constitute an offer.
- (b) All invoices are due for payment on the date shown on the invoice. Payment is to be made in sterling unless otherwise agreed in writing by artec technologies inc.
- (c) All overdue accounts will be charged on a daily basis, commercial interest at 8% above the base rate of 'Deutsche Bank' prevailing at the time.

2. Availability and Delivery of Goods

- (a) artec technologies inc. will use its best endeavors to comply with the date given for delivery which is an estimate only and is not to be the essence of the contract.
- (b) If owing to non-availability of the goods or other causes beyond artec technologies inc. control, artec technologies inc. should be unable to effect delivery they shall be at liberty to rescind the contract or part thereof by giving notice to the Purchaser.
- (c) The method of delivery will be at the sole discretion of artec technologies inc.

3. Property and Risk

- (a) For so long as any amounts remain owing from the Purchaser to artec technologies inc. (whether immediately due or not) title to the property of the goods shall remain with artec technologies inc. and ownership will not pass to the Purchaser until payment has been made in full.
- (b) In the event of the Purchaser reselling the goods, if artec technologies inc. have not received all amounts owing to them, the Purchaser shall account to artec technologies inc. for the proceeds of any such sale and meanwhile hold all proceeds of such sale of such goods upon trust of artec technologies inc. until payment of such amounts has been made in full.

4. Design Variation

- (a) Whilst artec technologies inc. makes every effort to ensure that goods supplied correspond to in every respect with the sample, specification or description, provided as the case may be, artec technologies inc. can not be held responsible for the minor variations in specification, colour or other design features, and no such minor variation shall entitle the Purchaser to rescind the contract or shall be the subject of any claim against the artec technologies inc. by the Purchaser.

5. Claims

- (a) No liability for any claim for damage or non-functionality shall be accepted unless the Purchaser notifies artec technologies inc. in writing within a reasonable period of delivery; 48 hours should normally be this period. This period may be extended at the sole discretion of artec technologies inc. where the manufacturer's replacement exceeds this deadline (See 9).
- (b) No liability for any claim for missing items such as manuals etc. shall be accepted unless the Purchaser notifies artec technologies inc. in writing within a reasonable period, normally 48 hours of delivery (See 9).
- (c) No liability for any claim will be accepted in the case of goods differing in quantity or descriptions from the particulars given on the delivery note unless the Purchaser notifies artec technologies inc. in writing normally within 48 hours of delivery and the onus is on the Purchaser to prove any shortage (See 9).
- (d) In the case of active third party on-site maintenance contracts, the

Purchaser accepts an obligation to use the services of the contracted third party to resolve the claims under clause 5(a).

(e) In the case of manufacturers who operate direct product support and returns procedures, the Purchaser accepts an obligation to process their claim directly through the manufacturer.

(f) No warranty is extended to consumable items, blank media or generic mice.

6. Guarantee

Excluding goods covered under clauses 5(e) and 5(f), all goods are warranted free from manufacturing defect for a period of 12 Months from the date of invoice, unless otherwise stated at the time of purchase. Goods failing within this period will be exchanged, repaired or credited at the sole discretion of artec technologies inc. except where such failure can be attributed to reasonable wear and tear or user error or misuse, providing the goods are returned subject to the conditions outlined in Para 7. Excluding goods covered under clauses 5(e) and 5(f), or unless otherwise stated at the time of purchase, all goods are warranted on a return to base basis. The Purchaser shall be responsible for all carriage, telephone, postal and incidental charges incurred during the guarantee period.

7. Returned Goods

- (a) artec technologies inc. will not accept goods for credit or repair unless such return has been authorised by the returns department, and the goods are received in stock condition, with original packaging. artec technologies inc. retain the right at its sole discretion whether to accept the return of goods or whether to rectify the goods or whether to issue a credit note in respect thereof. artec technologies inc. reserve the right not to issue credit for goods returned after 30 days from the date of the original invoice and where such credit is granted the credited amount shall not exceed the current market value or the invoiced value, whichever is the lower. artec technologies inc. reserves the right to charge a restocking fee of up to 25% on goods returned for credit which are not in stock condition or that have been ordered in error by the Purchaser.
- (b) All returned goods must be received by artec technologies inc. premises within the warranty period, irrespective of when any returns authorisation may have been given. The Purchaser shall unless otherwise stated be responsible for the cost of outward and return carriage and insurance of all goods returned. The onus of proof of safe delivery shall rest with the Purchaser.
- (c) All items returned to artec technologies inc. by pre-arrangement and found to contain no fault will be subject to a 25% restocking charge, providing the goods are in original stock condition. Any downward variation of this restocking charge shall be at the sole discretion of artec technologies inc.
- (d) No credit shall be allowed for goods until they have been received complete.

8. Consequential Loss

The extent of artec technologies inc. liability to the Purchaser for any default or breach whatsoever and howsoever arising shall in no case exceed the invoice value of the goods and artec technologies inc. shall in no circumstances whatsoever be liable to the Purchaser in respect of any loss or damage whether suffered by the Purchaser or any customer of the Purchaser and whether direct, indirect, consequential or however else arising.

9. Law

- (a) If any part of these terms and conditions shall be found to be unlawful it shall not affect the validity or enforceability of the remainder of the conditions.
- (b) This contract is and shall be deemed to have been made in Germany and shall in all respects be governed by German Law.



Your MULTIEYE-Partner:

Muehlenstrasse 15-18
49356 Diepholz
Germany

Tel. +49 5441/5995-0

Fax +49 5441/5995-70

Support Hotline:
Domestic calls to 0900 1278320*
*€1.35 / min. from the DTAG network
(mobile phone prices vary)

Foreign: +49 1805-278321**
** €1.35 / min. in addition to the fees of your
local national network provider

www.artec.de | www.multieye.de
info@artec.de | sales@artec.de

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