MULTIEYE®

HD Video Surveillance Systems

Solutions for

▶ **Industry-specific video security**

▶ **Video surveillance in line with**
   data protection requirements

▶ **License plate recognition**

▶ **Perimeter protection with video analysis**

▶ **People and object count and analysis**

▶ **Quality management**

▶ **Marketing analysis**

artec technologies

Dear Business Partner,

With their MULTIEYE products, artec technologies AG has been a synonym for groundbreaking innovation in video surveillance for more than 15 years. By introducing the first PC-based DVR kits in 2000, the first hybrid video recorder in 2002 and the MULTIEYE-NET software for the support of megapixel cameras in 2003, we set the standards very early.

Our customers, their versatile projects and their different demands have always been the main focus of all our efforts. Next to a wide range of MULTIEYE products in combination with selected accessories, our portfolio also contains individual advice as well as first class project planning, support and on-site service.

We permanently strive to meet and exceed the daily requirements and are looking forward to providing you with our products, our system solutions and our fund of experience today and tomorrow.

Yours sincerely, Thomas Hoffmann and Ingo Hoffmann
Managing Directors and Executive Board of artec technologies AG

About artec

artec technologies AG was founded as artec GmbH in Diepholz (Germany) in 1996. During the first years, mainly alarm systems were delivered and installed. Since 1998, artec has been developing the artec product and system solutions under the brand names MULTIEYE® und XENTAURIX® for both the video security and the broadcast & media industry. The early spotting of market trends lead to continuous growth. The installer and trading business turned into a high technology company having sold over 23,000 MULTIEYE® and XENTAURIX® systems worldwide so far.

Useful information:

▶ Facilities in Diepholz/Bremen
▶ Stock market launch in 2006, stock symbol A6T, WKN 520958
▶ 23 employees (in 2016)
▶ Executive Board: Thomas Hoffmann, Ingo Hoffmann
▶ Nature and purpose of the business: development and manufacturing of products and system solutions for transmission, recording and playback of video, TV and metadata via networks and the internet
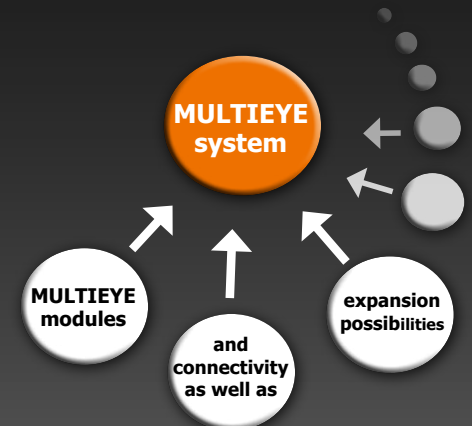
MULTIEYE PRODUCT AND SYSTEM SOLUTIONS

MULTIEYE HD video surveillance systems in various areas of application

Our MULTIEYE HD video surveillance systems are used for a wide range of applications, not only for the surveillance of retail shops, shopping centres, gas stations, city centres, parking lots, parking decks, airports, train stations, manufacturing plants and factory premises, museums, banks and, distribution centers, but also as video information system for the count and analysis of people, objects and dwell times, for quality management as well as for environment and traffic monitoring.
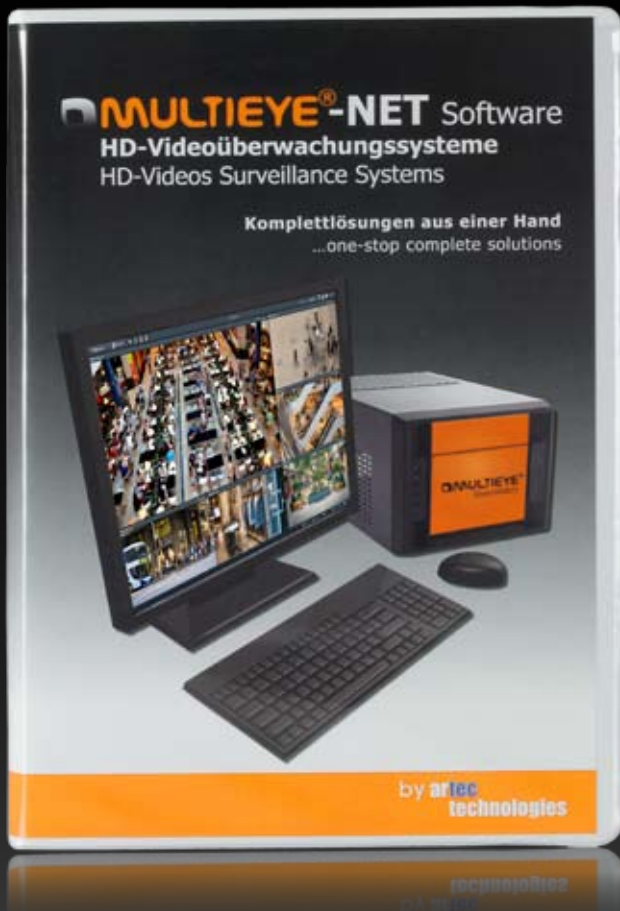
Our MULTIEYE recorders and management software can be combined with numerous software modules, e. g. for video surveillance in compliance with data protection require-ments, license plate recognition, for gathering data from cash registers, scanners, SPS controls and temperature sensors. Thanks to the open software architecture, numerous systems such as access control and facility management systems can be connected and integrated. Combined with our accessories, the MULTIEYE systems are customizable and can easily be updated. They offer both added value and a high degree of investment protection.

Thanks to the easy licensing concept and the almost unli-mited scalability, MULTIEYE system solutions can manage installations with 2 to 1000+ cameras, requiring just one software for the entire MULTIEYE product family. For our customers, this means substantial savings as regard to training, installation and after sales service.

MULTIEYE
system

MULTIEYE
modules

and
connectivity
as well as

expansion
possibilities

We set a high value on the simple and well-structured operation of our products and provide our customers with the utmost service and support. MULTIEYE products can be updated and modernized anytime and guarantee for a high degree of investment protection.
By providing online updates and upgrades, we make sure that you always dispose of the latest version of your product.

MULTIEYE-NET SOFTWARE

The **MULTIEYE-NET software is an innovative and multifunctional software which can easily be modernized and customized due to its modular architecture. The software is standard in all our video recorders, but is also available as software kit for developing highly professional, PC-based network video recorders (NVR) with 2 to 32 channels. Independent from the number of channels, MULTIEYE-NET offers numerous features, including live monitoring, recording, playback, analysis and remote monitoring. Supporting IP cameras and video servers from different manufacturers, the software is independent of any brands.**

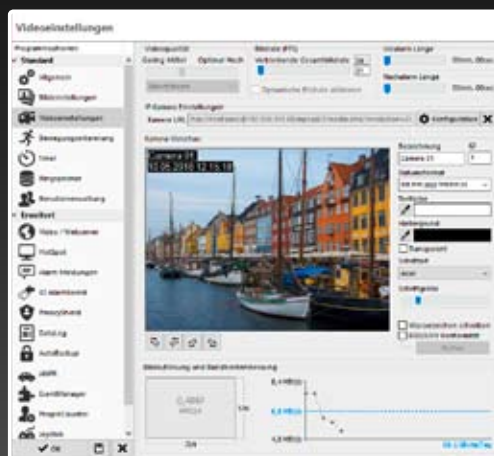**The software is based on many technologies developed by artec technologies such as**

▸ **Ultra-fast search in recorded video data by MD indexing procedure**
▸ **Fast and hassle-free camera integration with auto-detection of camera IP addresses within the network**
▸ **InstantReplay (optional)**
▸ **DirectStream technology allows for image data processing rates of up to 2.500MPixel/s* and up to 960 fps per recorder**
▸ **Support of more than 1200 of the most common IP cameras / video servers from more than 110 manufacturers**
▸ **Multilingual: available in 13 languages**
▸ **"UVV Kassen" compliant thanks to pre- and post-alarm as well as suspicious alarm storage function**
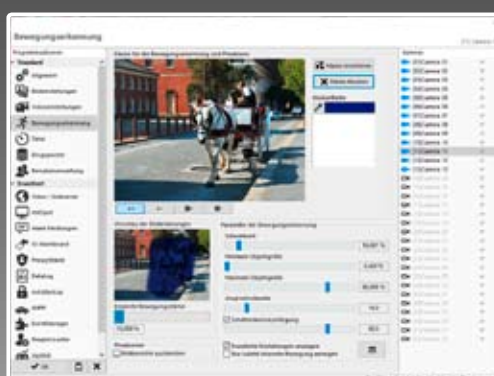
Selection of Highlights

Easy to operate

Thanks to the simple, mouse-operated drag & drop functionality, the MULTIEYE-NET software is very easy to use. The user-friendly and well-structured user interface allows for individual user settings such as the definition of personal multiscreens.
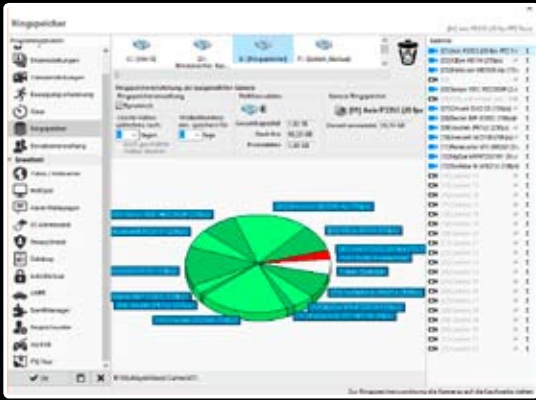

Expandability

The manual or automatic activation of both additional IP video channels and software modules is made possible through our flexible licensing model. By utilizing the optional MULTIEYE VideoCenter III software / station, projects with 1000+ cameras can be realized.

Integrated object-oriented motion detection

With the integrated motion detection in MULTIEYE false alerts are prevented. All incoming video signals are examined by intelligent video analysis for moving objects in the image. Additionally the user can set parameters like the min. and max. size limit of the objects to be detected. The configured image area search during playback provides the desired result in a few seconds.

Multifunctional storage management

With MULTIEYE-NET, users choose between dynamic and static storage management.
In dynamic recording mode, the video data are automatically allocated on the hard disk(s). For static recording, an individual storage capacity is set for each video source. MULTIEYE-NET supports the operation of up to 24 hard disks / partitions or network drives and manages up to 192 TB per server.
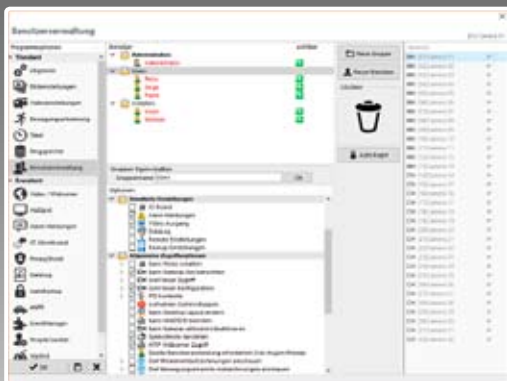

MULTIEYE app for iPhones and iPads

Remote monitoring

Remote monitoring for live display, playback and analysis is effected via LAN, WAN, Internet or telephone line. MULTIEYE-NET offers our customers a choice of license-free remote functions:

▸ LiveViewer with alarm pop-up display which can be positioned freely on one or multiple screens
▸ Multiscreen function for remote view and configuration of a recorder
▸ Standard browser without ActiveX
▸ Apps: iPhone / iPad and Android smartphones/ tablets
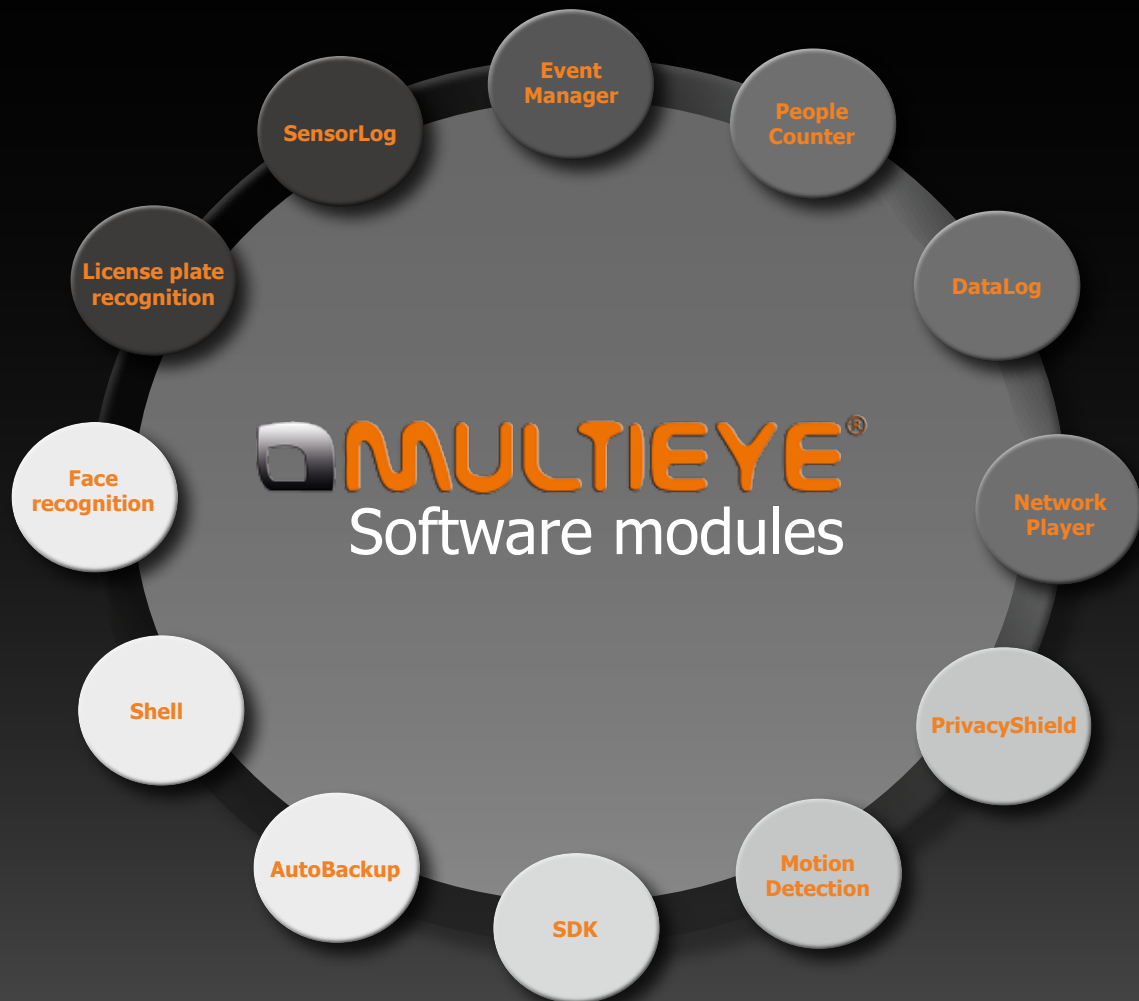▸ NetworkPlayer for simultaneous playback, video analysis and image / video export – one license included

User management

MULTIEYE-NET provides group-oriented user management. Both users and user groups may be defined with different user rights down to camera level. An integrated dual-control principle prevents the risk of unauthorized use.

MULTIEYE SOFTWARE MODULES

Our software modules enable the realization of customized systems for various applications.

MULTIEYE® Software modules

- Event Manager
- People Counter
- SensorLog
- DataLog
- License plate recognition
- Network Player
- Face recognition
- PrivacyShield
- Shell
- Motion Detection
- AutoBackup
- SDK

Overview: software modules

License plate recognition
Gate: for the recognition of license plates and the analysis of a "black & white list" for the control of incoming and outgoing vehicles.

Traffic: for recognizing and analyzing license plates including search function and event alarm. Suitable for the surveillance of moving traffic as well as for access control of vehicles.

PeopleCounter
Software module for counting people/objects with analysis. Up to 10 counting zones can be defined.

PrivacyShield
For video surveillance in compliance with data protection requirements.

Face recognition
Detection of multiple faces and database enquiry for recognition of known individuals.

DataLog
Software module for the capture, display and storage of data from third party systems like cash registers, scanners, SPS and access control.

Shell
Prevents unauthorized use of Windows and MULTIEYE file directories.

AutoBackup
For automatic storage of videos.

SensorLog
To use external sensors such as event messages or video analysis by cameras.

EventManager
For logical operation of complex functions.

Video analysis
MULTIEYE processes the video analytics built into the cameras/encoders.

SDK
Our SDK enables third party providers to integrate MULTIEYE into their applications.

MULTIEYE Videocenter III

MULTIEYE VideoCenter III (VC III) is a central video monitoring and multiview system. Based on floor plans, it can be utilized for live and playback view of video cameras, visualization of events and log documentation as well as for remote configuration and control of any number of recorders. VideoCenter III can be used as primary control unit, offers an intuitive user interface and can communicate simultaneously with up to 32 MULTIEYE recorders, i. e. 1,024 cameras, depending on the model. VC III is available in two designs - BUSINESS or ENTERPRISE - with different features, both as software version and as complete VideoCenter III monitoring station at a very competitive price.
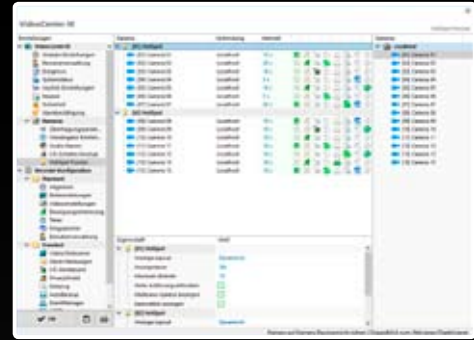
Selection of features

- **Simple and intuitive user interface**
- **Central administration of all connected MULTIEYE recorders on one platform**
- **Supports up to 8 monitors with total max. 256 monitor windows**
- **Automatic alarm image feed**
- **Server / client recompression ensures the query of recorded video data with optimized bandwidth**
- **Display and operation of switch inputs and outputs**

- **Playback with standard player featuring MD index display, NetworkPlayer, InstantReplay (optional, integrated solution only)**
- **Integration of up to 4 web browsers – e. g. third party applications – in monitor windows**
- **PTZ and digital zoom control via pop-up window, keyboard or joystick**
- **User management**
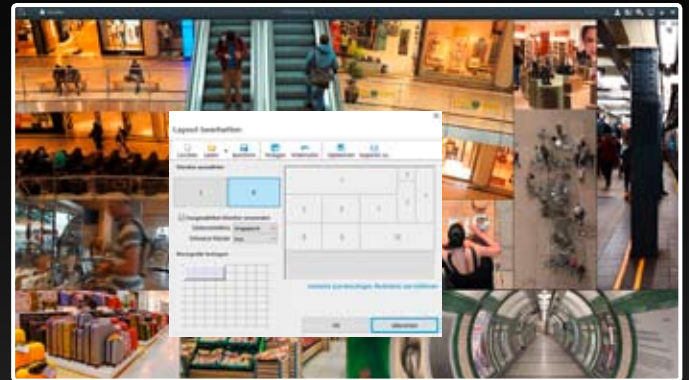- **Event display with logfile and event log documentation**

HotSpot function

Display via two independent HotSpot displays. Manual, event-controlled switching, integrated alarm image sequence display as 4/8/16 multiscreen.

Freely scalable multiscreens

Can be stored individually and user-dependent, e.g. narrow corridor views (e.g. in 8:3, 12:3, 4:6 or 4:9 format) can be configured for the display of supermarket aisles and filling pumps at gas stations, for realistic hallway displays as well as for long facades or roads.

Support of modern control elements

Reduces the mouse-operated multi-monitor operation effort. Simple camera selection for full-screen or alarm image display. Camera preset programming and recall by simple numerical entry.
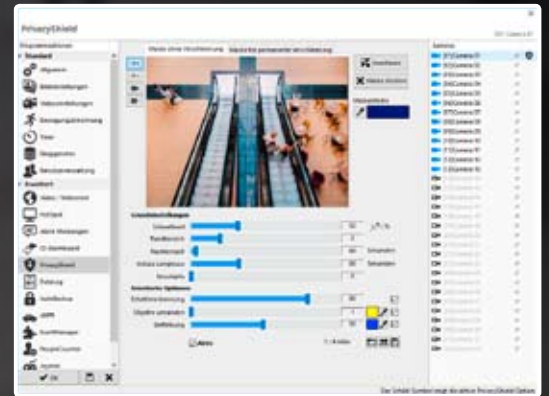

i VideoCenter III is available both as complete monitoring station with 2-8 monitor outputs and as pure software version.

In focus:

PrivacyShield for video security in line with data protection requirements

At workplaces as well as in public places and streets: MULTIEYE PrivacyShield offers secure privacy protection. MULTIEYE PrivacyShield is characterized by a special filter in live view which blurs moving people/ vehicles, guaranteeing privacy protection at all times while keeping actions identifiable. Both object size and sensitivity can be set individually for each camera via several parameters. Video is recorded as unfiltered version. Access to the recordings is subject to multiple safeguards.

Without MULTIEYE PrivacyShield　　　　**With MULTIEYE PrivacyShield**

✓ **Videos are recorded in the unfiltered version. Access to the recordings is multi-secured.**

MULTIEYE VIDEO RECORDERS

Due to their high functionality and performance, the **MULTIEYE** recorders are suitable for all kinds of demanding video surveillance applications in commercial and industrial areas. Thanks to the modular, scalable design, they are easy to modernize and offer a high degree of investment protection.

Our network and hybrid video recorders can process image data rates of up to 2400 MPixel/s* and are most suitable for applications utilizing megapixel cameras. The **MULTIEYE-NET** software supports more than 1200 of the most common network cameras from more than 110 manufacturers and allows for an ultra-fast and easy integration. MULTIEYE video recorders are available both with industrial 19" rack architecture including lockable front and as compact device.

Even the basic recorders offer video monitoring and alarm management. Multiple users can access the live and recorded data with PCs, notebooks, iPhone / iPad and tablet PCs through different networks / bandwidths at the same time. Large systems can be realized utilizing several recorders in connection with VideoCenter III.

Combining a number of recorders into a large system unit with VideoCenter III

Before shipping, all recorders manufactured by us are subject to intensive testing.

MULTIEYE network video recorders

With the hybrid recorder in the 19 " housing up to 32 analog and IP cameras can be recorded and transmitted simultaneously. The activated 10 channels (8 analog and two IP camera inputs) of the basic model can be upgraded to 32 channels (up to 16 analog and up to 24 IP channels) through software license activation at any time. In case more than 16 analog inputs are needed, the recorder can be extended at the factory by installing an additional video card for up to 32 analog inputs. With an image processing rate of 1.200/300MPixel/s* and storage capacities up to 24 TB, the recorder is designed for professional applications.

MULTIEYE-NET NVR II

The new MULTIEYE-NET NVR II 19 "network video recorder has a height of 88 mm (2U) and a depth of 457 mm. The housing conforms to industry standards and is therefore extremely robust. For the recording of the video data there are two drive bays for removable hard disks available. Operating system as well as the MULTIEYE software are installed onto an integrated SSD hard drive. Access to recorder controls and drives is protected by lockable doors. In the standard version the video recorder offers four monitor outputs and two network connections. Depending on the concrete model the MULTIEYE-NET NVR II video recorder can handle up to 2,400/600 MPixel/s * on image data and process image repetition rates with up to 960fps.

The recorder is available in versions with 8/16 or 16/32 channels. In the basic equipment 8 or 16 channels are enabled, which can be unlocked through software licenses up to 32 channels at any time. Hard disks from 1 to 8 TB, optimized for the high demands of 24/7 video recordings, are available for video data storage.

MULTIEYE GreenWatch video recorder

Available as both network and hybrid version with 8 or 16 channels, the MULTIEYE GreenWatch video recorders are the ideal choice for demanding surveillance tasks in smaller installations. Featuring ease of use, functionality and efficiency, the video recorders can process image data rates of up to 1,200/300 MPixel/s*. Long-term recordings can be realized with the integrated 1 or 2 TB video hard disks (optional up to 4 TB). Thanks to two independent monitor outputs, the GreenWatch video recorder can be used for dual monitoring.

MULTIEYE ME10 network and hybrid video recorder

The fanless designed mobile video recorder ME10 is one of the smallest and most powerful mini recorder. Through the Intel i7 CPU this can handle image data rates up to 1.600/400MPixel/s. The recorder is available as HVR (hybrid version) with up to 8 analog and 2 IP video inputs or as pure NVR with up to 10 IP video inputs. The ME10 is the ideal product for sophisticated surveillance tasks in the mobile environment of video surveillance.

In the spotlight:
MULTIEYE 3 MultiPlayer

MultiPlayer from MULTIEYE Version 3.0

The new MultiPlayer as part of MULTIEYE in version 3 has been completely redeveloped and offers many more functions. It is now characterized by its clear and simple interface design combined with many technical refinements, not lacking any feature of its predecessor.

Among the highlights of the new player:

▶ **synchronous playback of up to 9 player windows**
▶ **filtering of videos to be played by movement strength (min/max filter)**
▶ **image area search**
▶ **triggered recording**
▶ **and DataLog events**

NEW: MULTIEYE Face | high performance face detection system

MULTIEYE face is designed for detection and recognition of individual faces in live mode with up to four high-definition IP video cameras and a frame rate up to 120 fps. A variety of faces can be analysed simultaneous as it is necessary in high-traffic environments like airports, border crossing-points, train or subway and bus stations, terminals, shopping malls, stadiums or for major events. MULTIEYE Face is also used as a component for access control systems and other safety equipment. It can be used as offline face detection system for analysing up to 10 different video files at the same time. MULTIEYE Face is available as a notebook, desktop or in 19" version.

In combination with our MULTIEYE recorders and VideoCenter III detected and recognized faces will be stored associated with related metadata, event messages as well as alarm images will be visualized and delivered. The MULTIEYE EventManager automatically controls PTZ cameras, barriers, locks etc. within your MULTIEYE installation.

MULTIEYE Face

MULTIEYE THIRD-PARTY ACCESSORIES

We offer a number of accessories for creating a wide range of custom MULTIEYE video- and monitoring systems from small to large systems. These accessories are all MULTIEYE certified, which means that these third-party products can easily be integrated into our product and system solutions.

RIVA®

RIVA provides powerful, universally applicable IP cameras and encoders for both interior and exterior applications. RIVA box, cube, dome, PTZ dome, thermal and bullet cameras are impressive units with exceptional image quality. All units are equipped with the easy-to-configure VCA video analysis at the low price of a standard product.

MYEYE

Under our own brand MYEYE we offer a well-priced plug & play IP-based video surveillance product line for cameras and optimised accessories. The cameras offer exceptional image quality and sensitivity to light.

Axis®

Axis is the world's leading manufacturer of professional IP video cameras and video encoders, which are based on innovative, open technology platform. Through the variety of products, cameras and encoders can be used specific to an application.

Neovo

AG Neovo offers versatile monitors, especially for video surveillance applications. The portfolio includes displays up to 55". These are well known for their patented NeoV™ Optical Glass, the robust metal cabinets, an Anti-Burn-In™ feature, and their highly variable signal input opportunities.

EFB Elektronik

The EFB Electronics GmbH is one of the leading manufacturers and system providers for network and security technology and industrial system solutions. With MULTIEYE artec technologies uses EFB products like IP cameras, encoders and network equipment of their own brand INFRALAN and also Brickom products which are distributed by EFB too.

MULTIEYE

HD Video Surveillance Systems

MULTIEYE technical service

We offer a wide variety of services:

▶ **Service and support packages for MULTIEYE products**
▶ **Warranty extensions for MULTIEYE products**
▶ **Support of on-site installation start-up by certified technicians**
▶ **Factory pre-configuration of recorders and cameras**
▶ **Trainings / workshops / seminars**
▶ **Special developments**

For any technical question, please contact our support team:
support@multieye.de

✳ The image data processing rate is
expressed in MPixel/s. The stated
values refer to the processing of H.264
streams with 2 i-frames/s,
sufficient HDD write rate and Gbit LAN
implied, without monitor operation.
Other values apply for the processing of
different codecs such as
MPEG-4, MJPEG, transcoding of streams,
recorder monitor operation and
remote access.

... with the future built in