

IP



Catalogue for IP products 2011

Specifications and product information for installers, system integrators
and retailers of video surveillance systems.

www.eneo-security.com



About eneo

eneo is the specialist in video surveillance and the partner for professional installers and dealers. With a comprehensive portfolio of products and service features, we are able to support you reliably and competently from installation to maintenance with our range of products.

eneo has been an established brand for closed circuit television for over ten years and is only available to professional installers and dealers. Our product portfolio is characterised by its extensive variety, outstanding price-performance ratio and certified quality. But eneo has far more to offer than just a comprehensive product range and attractive prices. Service features, supporting you in the best possible way with our range of products or in your questions regarding installation and start-up, as well as an expert team for maintenance, repair and manufacturing make eneo a brand worth using.

PRE AND POST-SALE ADVICE

Our product experts will provide you with comprehensive advice in your choice of suitable products and also after you have made your selection, in the event that you have any questions concerning the installation or start-up. We offer the option of Buy and Try for certain eneo products, so you can test the respective product as you please for up to 30 days in its place of use. If the product is not appropriate, you can return it without having to provide any explanation as to why. For further information please visit: www.eneo-security.com/en/buy_and_try

PRODUCT MODIFICATIONS – TAILORED TO YOUR NEEDS

We make everyday work easier for you with our services for product modifications and customised production. If everything is already correctly wired and the back focal distance is set, you just have to concentrate on installing the actual system. This not only saves time, but also money. Our range of services extends from part and complete assembly with enclosed installations to protect against the weather and customised models up to the production of small runs within the agreed time. For further information please visit: www.eneo-security.com/assembly

MAINTENANCE AND REPAIR - EXCELLENTLY EQUIPPED TECHNICAL SERVICE

We have everything necessary to reliably service or repair your equipment: the latest state of the art ESD compatible workstations, test signals in all the current signal formats, equipment installed externally for "real life" tests, separate intranet to check the network components. If you do not want

eneo – your partner in video surveillance

eneo pays off for you. A versatile product range, attractive prices and comprehensive service features make eneo the partner that professional installers and dealers in video surveillance can rely on.



to wait until the repair work is completed, you can use our exchange service with certain products for a temporary replacement whilst your equipment is being repaired. This service is free of charge during the warranty period. Beyond that our affordable flat rate service fee guarantees planning reliability even during repairs. Thus you know beforehand how much it will cost to repair your camera or recorder. For further information please visit: www.eneo-security.com/technical_service

ASSURED QUALITY – CERTIFIED IN ACCORDANCE WITH EN ISO 9001:2008

With us you get certified quality. We are not only certified in accordance with EN ISO 9001:2008, but we also assure the high quality of our products with our extensive tests and incoming goods inspections. In order to increase the comparability of the tests, all workstations are uniformly equipped. So product tests are always conducted under absolutely identical conditions. Deviations in the product quality are thus easier to discern.



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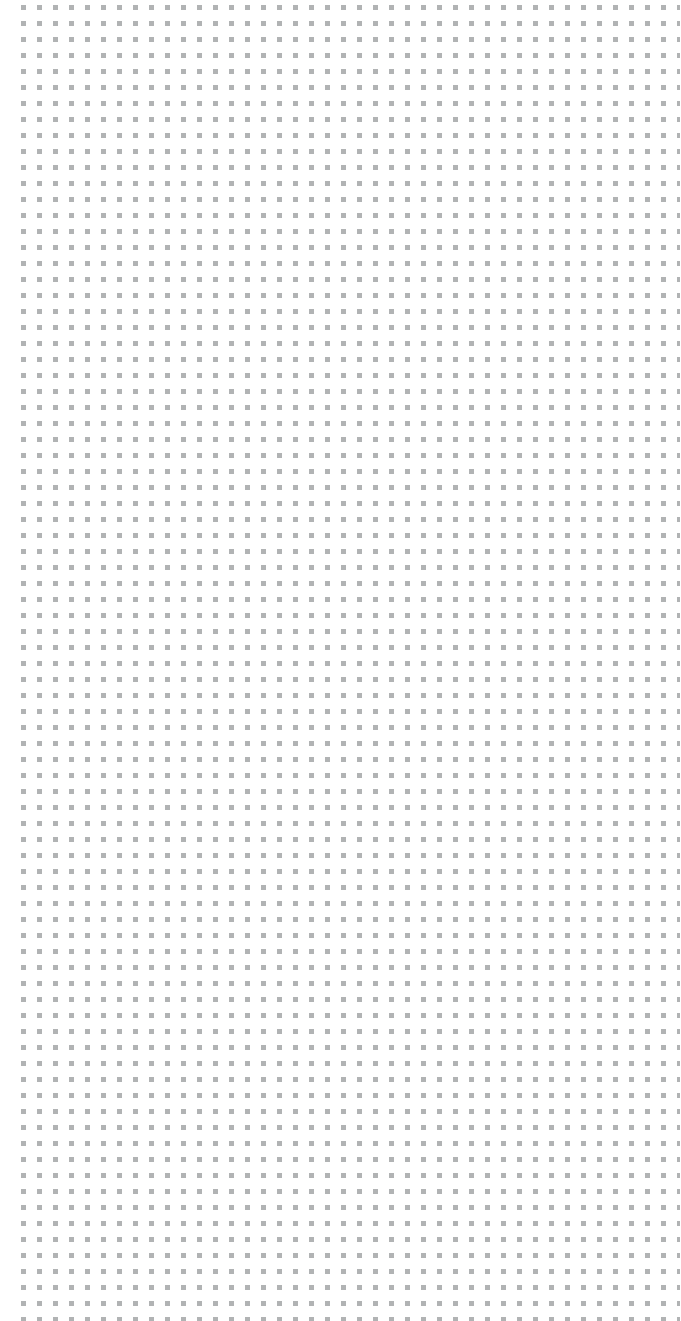
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6 IP Management Software

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Zelaris – Next Generation Video Management

Management, control and recording of all video signals in a single user-friendly interface.

You want to manage, control and record video signals in a single, intelligent, well-organised system for video surveillance? Then the Zelaris software solution from eneo is your solution. Compatible with any brand of IP camera or video server, Zelaris supplies all video signals on a fully modernised screen with intuitive operation. Whoever has worked with Windows programs will also find it easy to operate Zelaris.

Its numerous functions include motion detection for every input, automatic camera pan and tilt (PTZ), search for movements in recordings, integration of graphical site maps and much more. And the optional OPC Server is available should you want to network Zelaris with a higher-level building management system. This allows you to really bring your entire system onto one screen.

ONVIF INTERFACE

Zelaris is the first ever software to realise an interface to the new open standard for network video products – ONVIF. This allows immediate software integration for all products that support this standard regardless of manufacturer and without having to adapt software beforehand. eneo therefore offers the first software solution for management of video sources that is really independent of manufacturers

and products. This dramatically increases flexibility in assembling network-based video surveillance systems.

270 INTERFACES

In addition to ONVIF, eneo Zelaris has over 270 single interfaces to more than 70 IP video manufacturers making it one of the most flexible solutions in the digital video systems market. Many manufacturers send us their latest models before their market launch so that we can integrate them seamlessly. The entire functionality of nearly every video source is incorporated. And naturally, no special licensing is required for the different video sources.

OPC INTERFACES

OPC auxiliary modules link eneo Zelaris to current security and building management systems. Mixed-type functions such as video-surveillance interaction with intercom or lighting systems are therefore directly available.

GEO DATA

GEO data can be incorporated in Zelaris to simplify surveillance over large areas. The data are specified as geographical longitude and latitude coordinates during system setup and are then available over



system interfaces such as OPC or the SiLink protocol. eneo Zelaris also provides a free Google Maps Client that shows the positions of video sources in the maps and satellite imagery and it can also be used for switching.

AUTOMATION

The complex tasks carried out by management demand numerous functionalities that can rarely be covered by fixed processes defined in the software. Zelaris caters for this by providing a comprehensive script language that can solve practically every task imaginable in a customer's project. Even extensive sequences of commands can be executed by the script, either manually or event-controlled. This language is structured in simple commands that can easily be learnt and applied also by non-IT specialists.

EXPORT OF VIDEO SEQUENCES

The numerous formats and technologies used in digital video technology make it nearly impossible to supply replay software for each and every exported video sequence. This is why Zelaris exports the sequences in a standard format with the maximum quality possibly for playing directly on nearly every computer without needing a special application.

BACKUP OPERATION

Automatic backup is provided as a standard function in Zelaris especially for use in high-availability video surveillance systems. Every server connection can be assigned a backup source that is automatically switched to with nearly no interruption in the client video stream. Furthermore, Zelaris provides a simple backup method for the entire application. No operating system functions are changed on computers during installation of eneo Zelaris. All program components are kept within only one folder structure. This produces the advantage that it is extremely easy to backup the entire application merely by copying the program folder onto a backup medium.

SABOTAGE MONITORING OF VIDEO SOURCES

Dirt, signal dropouts, vandalism or deliberate manipulation in preparation for criminal activities can only be detected with difficulty by extensive video systems. eneo Zelaris provides a number of sensor systems for automatic and manual condition-monitoring of video images. In addition to malfunction monitoring, analyses for dazzling and covering cameras as well as sabotage monitoring with reference picture comparison and manual post-control are available. The sabotage monitoring conforms to the requirements of financial institutes for cyclic revision and is used, for

instance, by the Commerzbank in Frankfurt for centralised monitoring of digital video systems in its branch offices.

PROVEN IN NUMEROUS APPLICATIONS

Zelaris has already often proven its value in major and complex projects, for example the Commerzbank where video surveillance systems at 250 branch offices are now connected to a central control centre.

EASY EXPANDABILITY

Zelaris easily adapts itself to meet your requirements and is simple to expand should requirements change. For instance, when you buy a basic package you always receive four licences to connect up to four video sources. Should you want to connect further video sources at a later date, you can simply buy a further basic package.

FREE SOFTWARE UPDATES

eneo assures guaranteed future system reliability for Zelaris with updates for bug fixing, for functional upgrades as well as for changes in the operating system version. Licence holders are entitled to updates without time limit and free of charge. This means for users, that their one-off purchase of the software gives them a solution that is always at the latest state of development.

1 Camera directory tree

The tree structure allows you to quickly and intuitively find video sources such as cameras, encoders and DVRs.

2 Active window

The currently active window is highlighted in colour for immediate identification.

3 Screen display mode

Fast switching between the different split display modes.



4 Options menu

Fast access to all functions and options (presets, guard tours, etc...).

5 Event search window

User-friendly search for events and scenes along with the associated video sequences.

6 PTZ control

Fast and reliable camera control in the X/Y axes and zoom, as well as retrieval of predefined positions.

7 Record/Replay control





Self-explanatory buttons for controlling record and replay of video sequences.

8 Timeline






Graphical and time display of events with different colours for alarm priority.

9 System configuration

Setting of all system parameters in well-organised submenus.

	ZELARIS BASIC 76101	ZELARIS SERVER 76102	ZELARIS CLIENT 76103	ZELARIS CONTROL 76104
				
Licence	Full version	Full version	Full version	Full version
Description	Video Management Software, ONVIF, Single User, for 4 Cameras, expandable	Video Management Software, ONVIF, Server/Client, for 4 Cameras, expandable	Video Management Software, Client for one Workstation, ONVIF	Video Management Software, Master Control, for 1024 Channels, ONVIF
Application	single user solution, small to medium-sized systems	small to medium-sized systems, large systems, client/server architecture	small to medium-sized systems, large systems, client/server architecture	large systems, client/server architecture, Master Control
Operation system	Windows 2003, Windows XP, Windows Vista, Windows 7	Windows 2003, Windows XP, Windows Vista, Windows 2008, Windows 7	Windows 2003, Windows XP, Windows Vista, Windows 2008, Windows 7	Windows 2003, Windows XP, Windows Vista, Windows 2008, Windows 7
Licensing type	per channel	per channel	per client	per client
Languages (client)	German, English, French, Italian, Spanish, Portuguese, Czech, Polish	German, English, French, Italian, Spanish, Portuguese, Czech, Polish	German, English, French, Italian, Spanish, Portuguese, Czech, Polish	German, English, French, Italian, Spanish, Portuguese, Polish
Alarm management	eMail, FTP	eMail, OPC-Server, OPC-Client, scripting language, FTP	eMail, OPC-Server, OPC-Client, scripting language, FTP	OPC-Server, OPC-Client, FTP
Alarm management	yes	yes	yes	yes
Site maps	yes	yes	yes	yes
Multi monitor operation	yes	yes	yes	yes
PTZ support	yes	yes	yes	yes
Recording format	MJPEG	MJPEG, MPEG4, H.264	n/a	n/a
Playback format	MJPEG, MJPEG	MJPEG, MPEG4, with Zelaris Decoder, H.264, with Zelaris Decoder	MJPEG, MPEG4, with Zelaris Decoder, H.264, with Zelaris Decoder	MJPEG, MPEG4, with Zelaris Decoder, H.264, with Zelaris Decoder
Recording settings	choosable per channel	choosable per channel	choosable per channel	choosable per channel
Recording functions	time triggered, permanent, motion detector, contact, OPC	time triggered, permanent, motion detector, contact, OPC	time triggered, permanent, motion detector, contact, OPC	time triggered, permanent, motion detector, contact, OPC
Supported video sources	network camera, digital video recorder, network encoder, analogue camera	network camera, digital video recorder, network encoder, analogue camera	network camera, digital video recorder, network encoder, analogue camera	network camera, digital video recorder, network encoder, analogue camera
Managable video sources max.	4, 64 (optional)	4, 64 (optional)	64	16384
Remote access	no	yes	yes	yes
OPC connection	no	yes	yes	yes
Analysis mode	live, archive	live, archive	live, archive	live, archive
Analysis functions	motion detection, obstruction detection	motion detection, obstruction detection	motion detection, obstruction detection	motion detection, obstruction detection
ONVIF	version 1.01	version 1.01	version 1.01	version 1.01
Comments	Extension with Zelaris BAS EXT possible (see accessories), product upgrades will be found in chapter Accessories	Extension with Zelaris SER EXT possible (see Accessories), product upgrades will be found in chapter Accessories	Only in combination with Zelaris SERVER, product upgrades will be found in chapter Accessories	Only in combination with Zelaris SERVER, product upgrades will be found in chapter Accessories

S-PRO V.2 76022	ZELARIS ANALYZE 76112	ZELARIS BAS EXT 76105	ZELARIS CON EXT 76107	ZELARIS DECODER 76108	ZELARIS LPR 76113	ZELARIS OPC AL 76109	ZELARIS OPC PX 76111	ZELARIS SER EXT 76106
								
Multi-button Jog & Shuttle Multimedia Controller	Object Analysis, Extension Module for ZELARIS, License per Channel 1-4	Extension Licence, for ZELARIS BASIC, additional 4 Cameras, max. 64, ONVIF	Extension Licence, for ZELARIS SERVER, additional 1024 Channels, ONVIF	Decoder Licence, MPEG-4/H.264, for ZELARIS CLIENT, per Workstation	NEW Licence Plate Recognition, Extension Module for ZELARIS, Licence per Channel	OPC Server, for Connecting ZELARIS to Central Alarm Stations	OPC Server, for Phoenix Contact Alarm Module FL IL24BK-B-PAC	Extension Licence, for ZELARIS SERVER, additional 4 Cameras, max. 64, ONVIF

	ACC CONTROL C 76012	ACC CONTROL S 76011	ACC_CONTROL PDA 76024	ACC_CONTROL SMO 76023	ACC_CONTROL VW 76027
					
Licence	Full version	Full version	Full version	Option	Option
Description	Client Software for ACC_CONTROL S	Surveillance Software for Network Cameras from eneo, Axis	PDA Client Option for ACC_CONTROL S	Site Map Option for ACC_CONTROL S	Alarm Playback Option for ACC_CONTROL S
Licensing type	per channel	per client	per client	per client	per client
Support of mobile units	PDA	PDA	PDA	no	no
Alarm management	eMail, OPC-Server, FTP	eMail, OPC-Server, FTP	OPC-Server, FTP	OPC-Server, FTP	OPC-Server, FTP
Alarm management	yes	yes	yes	yes	yes
Site maps	optional	optional	no	no	no
PTZ support	yes	yes	yes	yes	yes
Recording functions	-	alarm	alarm	-	-
Supported network suppliers	Axis, eneo	Axis, eneo	Axis, eneo, JVC, Mobotix, Panasonic, Sony	Axis, eneo, JVC, Mobotix, Panasonic, Sony	Axis, eneo, JVC, Mobotix, Panasonic, Sony
Control units (external)	mouse, keyboard	mouse, keyboard	mouse, keyboard	mouse, jog shuttle, keyboard	mouse, keyboard

For free: GL-Manager, Nimra, Numina, Finitra

IP products from eneo are always shipped with a software solution with an intuitive user interface.

Our IP Cameras, IP Domes and IP Recorders are always shipped with a software solution with an intuitive user interface for recording and playback of video sources. Further functions include PTZ control, export of recorded material, archiving and search in

recordings. They therefore provide exactly those functions that fully satisfy the majority of applications. Our freeware solutions are ideal primarily for the series for which they were developed. Freeware is a computer software program that is free and does

not require payment of fees for its use. This is opposed to shareware that requires payment after a specified period when the software is still to be used. The freeware from eneo includes GL-Manager, Nimra, Numina and Finitra.

ENE0 FREWARE SOLUTIONS

GL-Manager, as the name says, is ideal for all GL Series products, i.e. for the GLC and GXC IP Cameras, the GLD and GXD IP Domes as well as the GLS Servers. Nimra and Numina were developed for the N Series, for the NLC and NXC IP Cameras, NLD and NXD IP Domes as well as the NLS Servers. So far, so good, but why are there then two freeware versions for the N Series? What is the difference between Nimra and Numina? Numina is a client/server solution for up to 64 video sources (maximum of 32 recommended). Nimra, like GL-Manager, is a single workstation solution for up to 16 video sources, but it can also operate as a Windows client for the Numina server. Finitra is a single workstation solution for products from the new F Series: the FNR-4004/500 and FNR-4016/500 IP Recorders, the FLC-1301, FXC-1302 and FXC-1302W Mini IP CMOS Cameras, the FXC-1201M Boxed IP Camera, the FXD-1001/IR and FXD-1002/IR IP Fixed Domes as well as the FLD-1101 and FXD-1102 Mini Domes.



GL-MANAGER
91538



NIMRA
93170



NUMINA
93171



FINITRA
93172



NEW

NEW

NEW

Software type	Basic viewer and recorder for up to 16 eneo GL-series cameras and servers	Basic viewer and recorder for up to 16 eneo N-series cameras and servers	Management software for up to 64 N-series cameras and servers	Basic viewer and recorder for up to 64 eneo F-series cameras and servers
Licence	Freeware as a bundle with eneo hardware or via download after registration	Freeware as a bundle with eneo hardware or via download after registration	Freeware as a bundle with eneo hardware or via download after registration	Freeware as a bundle with eneo hardware or via download after registration
Application	single user solution	single user solution, Windows client for the Numina server	client/server architecture	single user solution
Managable video sources max.	16	16	64, 32 (recommended)	64
Compression standard	MJPEG, MPEG-4	H.264, MPEG-4, MJPEG	H.264, MPEG-4, MJPEG	H.264, MPEG-4
Recording functions	time triggered, permanent, motion detector, contact	event triggered, time triggered, permanent, motion detector, contact	time triggered, event triggered, permanent, motion detector, contact	event triggered, time triggered, permanent, motion detector, contact
PTZ support	yes	yes	yes	yes
Multi monitor operation	no	yes	yes	yes
Site maps	no	yes	yes	yes
Backup	no	no	yes	no
Control units (external)	mouse, keyboard	keyboard, mouse, joystick	keyboard, mouse	mouse, keyboard
Analysis mode	n/a	no	no	no
Obstruction detection	no	no	no	no
Operation system	Windows XP, Windows Vista, Windows 7	Windows XP, Windows 7 (coming soon)	Windows XP, Windows 7	Windows XP, Windows Vista, Windows 7 (coming soon)
Languages (client)	German, English, French	German, English, French, Italian, Spanish, Japanese, Russian	English (additional languages coming soon)	German, English (additional languages coming soon)

14	IP Cameras
25	IP Domes
29	IP Servers
30	IP Recorders



Comprehensive IP Range

The new F Series: IP Recorders, IP Cameras, IP Domes with ONVIF compatibility and bundled with a software solution.

IP recorders, IP cameras, IP domes – with a total of ten products the new F Series from eneo offers a comprehensive range for IP-based video surveillance. The most important first of all: most of the F Series products support the ONVIF standard so that they also work problem-free with products from other manufacturers. And: of course a software solution is bundled with F Series products – “Finitra” so that you can manage, operate and record from up to 64 channels.

IP CAMERAS

You can choose from four different models to meet your requirements: classic boxed cameras or mini versions for discrete surveillance of indoor areas.

The FLC-1301, FXC-1302 and FXC-1302W Mini IP CMOS Cameras are, as the word “mini” suggests, fitted in an extremely compact housing (110x70x33mm) that cuts a good figure in all situations and simultaneously offers

high functionality. The cameras support two-way audio communication as they come with an integrated microphone and speaker. This means an area can not only be placed under surveillance, it can also be audio monitored and direct voice communication is possible when required. The FLC-1301 features a VGA resolution of 640x480 pixels. At a rate of 60 frames per second the picture is displayed in real time. The light sensitivity is 0.1 Lux (at F1.2 colour). The FXC-1302 and FXC-1302W have a 2-megapixel resolution of 1600x1200 pixels. The rate lies at 15 frames per second at full resolution and 30 frames per second at 1280x720 pixels. The light sensitivity is 0.5 Lux (at F1.2 colour). The FXC-1302W can be integrated into the network over WLAN when a wireless connection is required.

The FXC-1201M Boxed IP Camera is a model featuring 2 megapixels (1600x1200 pixels) and, just like the mini

IP cameras, gives the options of H.264 and MPEG-4 compression. At full resolution it transmits five frames per second, at 1280x720 pixels 12.5 frames, and at the PAL resolution of 704x576 pixels 25 frames per second. The light sensitivity is 0.5 Lux (at F1.2 colour). It comes with one audio input and output and one alarm input and output as well as electronic day & night operation.

Both the mini versions as well as the FXC-1201M feature simultaneous image data transmission over two different video streams, in which the second video stream has been designed for picture display on smartphones. An SD card slot (FXC-1201M) and a mini SD card slot (FLC-1301, FXC-1302 and FXC-1302W) are available for internal storage so that video imagery is not lost and evidence is secured even when the network is down. The PoE function (Power-over-Ethernet) can be utilised for the power supply. This allows power to be supplied over the same cable used

for data transmission into the network. Additional cabling is unnecessary and installation costs reduced. The integrated motion detector increases surveillance

reliability. Furthermore, both models have ePTZ for executing pan/tilt and zoom functions digitally (i.e. without moving, mechanical parts).



IP DOMES

The F Series has four different dome models waiting for you: two fixed domes with full day & night functionality and two extremely compact mini-domes for discrete surveillance solutions.

The FXD-1001/IR and FXD-1002/IR IP Fixed Domes are day & night models with a retractable infrared cut filter and integrated infrared illumination. The FXD-1001/IR features a resolution of 1280x960 pixels. At this resolution a frame rate of 12.5 frames per second is achieved and 25 frames per second at 1280x720 pixels. The FXD-1002/IR has a 2-megaixel resolution of 1600x1200 pixels which achieves a frame rate of 12.5 frames per second. 25 frames per second are available at 1280x720 pixels. Just like the FXC-1201M, they come with one alarm input and output and one audio input and output.



IP MINI DOMES

Their dimensions of 100x97.5x46.5mm allow nearly invisible ceiling installation for the mini domes, which predestines them for discrete surveillance solutions. The FLD-1101 features a VGA resolution of 640x480 pixels. At a rate of 30 frames per second the picture is displayed in real time. The light sensitivity is 0.1 Lux (at F1.2 colour). The FXD-1102 has a 2-megapixel resolution of 1600x1200 pixels. The rate lies at 15 frames per second at full resolution and 30 frames per second at 1280x720 pixels. The light sensitivity is 0.5 Lux (at F1.2 colour).

Numerous features that also apply to the cameras in the F Series have already been described so that at this point, to keep boredom to a minimum, only a short list is given: dual video streams, H.264 compression, Power-over-Ethernet, integrated motion detec-

tor. So what, apart from the dome shape, are the differences to the camera models? The first point to be made is vandalism protection: the IP fixed domes as well as the IP mini domes have effective protection against vibration and shock – with IK10 the domes have the highest protection classification on the IK shock resistance scale and can resist shocks up to 20 joules without any problems. Operation at sites with a risk of manipulation or deliberate damage is therefore problem-free. This also applies for outside areas as the domes are protected compliant with IP66 and therefore have effective weather protection. Installation could not be simpler as the dome 3-axes adjustment feature accurately brings them into the required position.

SOFTWARE FINITRA

The F Series therefore offers many new IP products

with numerous functions, all of which want to be integrated in a single system to give user-friendly management and operation. This is where the bundled Finitra software solution. Up to 64 video channels can be managed, recorded and operated with Finitra regardless of whether an F Series IP camera, IP dome or IP recorder is connected. Recordings up to a resolution of 2 megapixels per channel are supported.

Display on the monitor is real time, different split screen settings can be selected for viewing: 1/4/6/9/10/13/16/25/36/48/64. Intelligent search functions in the recordings, motion for instance, flexible recording settings options (time schedule, permanent, alarm or motion triggered) and numerous other functions are what make Finitra a comprehensive solution for IP-based video surveillance.



ONVIF Conformance: eneo Megapixel IP Cameras

Megapixel network cameras and dome cameras with H.264 compression, ROI (Region of Interest) and four multiple video streams.

Megapixel, H.264 compression, ONVIF conformance – these three terms by themselves show that the latest eneo network cameras are state-of-the-art. And this is with a cost-effectiveness unique in the sector. But cameras in the NXC and NXD Series have far more to offer. Let's look at this point-by-point: The NXC covers network cameras, the NXD Series fixed domes. Both series have a choice of four versions: with one or two megapixels, and each with and without a removable IR cut filter. In addition to MJPEG, all models offer the efficient H.264 compression that gives high picture quality with low bandwidth requirements. The resolution, frame rate and bit rate can be individually configured for up to four multiple video streams. The resolution of the 1 megapixel models lies at 1280x720 pixels, that of 2 megapixel models at 1600x1200 pixels. Of course, a megapixel resolution is not necessary for all applications. Requirements are constantly increasing though, and whenever persons or objects are to be clearly identified a resolution is required that goes beyond that of an analogue camera at 704x576 pixels. Example: when merely the movement is to be monitored in a supermarket, PAL resolution is sufficient. However, if the faces are to be clearly identifiable, eneo cameras are the better choice. The 1/3" Progressive Scan CMOS Sensor in particular also clearly reproduces quickly moving objects and persons.

ONVIF CONFORMANCE: USE IN MULTI-VENDOR SYSTEMS

Cameras and domes in the NXC and NXD Series support ONVIF standard that guarantees products from different manufacturers can exchange information so they can therefore be installed along with each other in a multi-vendor system. The following functions are currently supported: device identification and management, media configuration, IP configuration, event handling, real-time display, PTZ control, security setting and video analysis.

ROI (REGION OF INTEREST): RELEVANT REGIONS IN CLOSE VIEW

The ROI (Region of Interest) function allows particularly important regions to be designated. The corresponding signals are then transmitted at a high frame rate, resolution, bit rate and picture quality in the primary stream. Region sizes are individually configurable. Therefore, for instance, a camera can capture the complete point of sale in a supermarket and transmit it by MJPEG stream. Simultaneously though, the cash register itself can be defined as a region of interest so that the transactions made there are displayed on a different monitor in higher signal quality over a H.264 stream. This means that the high resolution and picture quality of an eneo camera allows it to replace two cameras that would otherwise









have to be used to monitor the larger zone. In combination with the intelligent motion detector, even large areas can be monitored. Additionally, the digital PTZ function allows a close eye to be kept on relevant imagery areas without having to physically move the camera. This is achieved by merely clicking on the relevant region in the screen area and the camera image pans to the intended target.









EASY AND FLEXIBLE INSTALLATION









NXD Series fixed domes can be wall as well as ceiling mounted and their vandalism-proof housing with IP66 protection rating makes them the ideal choice for

outside areas. They come with an integral varifocal lens with a focal length of 3-9mm and a light sensitivity of 1.3 Lux at F1.2 (measured with a 50% video signal). The two series offer recording security with optional backup on SD card. This local recording is automatically activated when a movement is detected or an alarm triggered. This means recordings for an event are not lost even in a power failure. Power is supplied via PoE (Power-over-Ethernet) or an external power unit to give maximum installation flexibility. Additionally, the Easy Focus function also contributes towards putting the system into operation simply and user-friendly.




	FXC-1201/V50W 92742	FXC-1201/V8W 92739	FXC-1201M 92715	FXC-1302 92713	FXC-1302/W 92714	NXC-1302M 93167	NXC-1302M/V50W 92729	NXC-1302M/V8W 92728
								
	ONVIF NEW	ONVIF NEW	ONVIF NEW	ONVIF NEW	ONVIF NEW	ONVIF	ONVIF NEW	ONVIF NEW
System	day&night	day&night	day&night	day&night	day&night	day&night	day&night	day&night
Imager	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS
Resolution (Pixels)	1600 x 1200	1600 x 1200	1600 x 1200	1600 x 1200	1600 x 1200	1600 x 1200	1600 x 1200	1600 x 1200
Light sensitivity	0,5 Lux	0,5 Lux	0,5 Lux	0,5 Lux	0,5 Lux	1,3 Lux	1,3 Lux	1,3 Lux
IR cut filter	OLPF (Overlay Low Pass Filter)	OLPF (Overlay Low Pass Filter)	OLPF (Overlay Low Pass Filter)	OLPF (Overlay Low Pass Filter)	OLPF (Overlay Low Pass Filter)	switchable	switchable	switchable
Digital noise reduction	no	no	no	no	no	no	no	no
Backlight compensation	no	no	no	no	no	no	no	no
Wide Dynamic Range (WDR)	no	no	no	no	no	no	no	no
Low speed shutter	yes	yes	no	no	no	yes	yes	yes
Activity detection	yes	yes	yes	yes	yes	yes	yes	yes
Lens	varifocal 5-50 mm	varifocal 3-8 mm	CS mount/Lens not included	CS/C mount/Lens not included	CS/C mount/Lens not included	CS mount/Lens not included	varifocal 5-50 mm	varifocal 3-8 mm
Horizontal angle of view	53,8-5,5 °	92,5-35,4 °	n/a	n/a	n/a	n/a	53,8-5,5 °	92,5-35,4 °
Compression standard	H.264, MPEG-4	H.264, MPEG-4	H.264, MPEG-4	H.264, MPEG-4, MJPEG	H.264, MPEG-4, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Image transm. rate max.	30 fps	30 fps	30 fps	30 fps	30 fps	25 fps	25 fps	25 fps
Stream types	H.264, MPEG-4 multiple	H.264, MPEG-4 multiple	H.264, MPEG-4 multiple	H.264, MPEG-4 multiple	H.264, MPEG-4 multiple	H.264, MJPEG multiple	H.264, MJPEG multiple	H.264, MJPEG multiple
Audio support	yes	yes	yes	yes	yes	yes	yes	yes
Internal storage	SDHC card	SDHC card	SDHC card	Micro SD card	Micro SD card	SD card	SD card	SD card
ONVIF	coming soon	coming soon	coming soon	coming soon	coming soon	version 1.01	version 1.01	version 1.01
Temperature range (operation)	-10°C ~ +60°C	-10°C ~ +60°C	-10°C ~ +60°C	-10°C ~ +60°C	-10°C ~ +60°C	-10°C ~ +50°C	-10°C ~ +50°C	-10°C ~ +50°C
PTZ support	yes	yes	yes	yes	yes	yes	yes	yes
Illumination	no	no	no	no	no	no	no	no
Serial interfaces	RS-485	RS-485	RS-485	no	no	RS-485	RS-485	RS-485
Alarm Inputs/Outputs	1/1	1/1	1/1	-/-	-/-	1/1	1/1	1/1
Supply voltage	24VAC, 12VDC, PoE	24VAC, 12VDC, PoE	24VAC, 12VDC, PoE	12VDC, PoE	12VDC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE
Protection rating	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SDK	available	available	available	available	available	available	available	available
Comments	Including wall mount and lens	Including wall mount and lens			Including WiFi	ROI (Region of Interest) max. 3, Easy focus	Including wall mount and lens, ROI (Region of Interest) max. 3, Easy focus	Including wall mount and lens, ROI (Region of Interest) max. 3, Easy focus



	NXC-1402M 93163	NXC-1402M/V50W 92725	NXC-1402M/V8W 92724	GXC-1605M 92706	GXC-1605M/V50W 92738	GXC-1605M/V8W 92737	GXC-1606M 92707	GXC-1604M 92583
								
	ONVIF	ONVIF NEW	ONVIF NEW	ONVIF NEW	ONVIF NEW	ONVIF NEW	ONVIF NEW	ONVIF NEW
System	colour	colour	colour	day&night	day&night	day&night	day&night	day&night
Imager	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS
Resolution (Pixels)	1600 x 1200	1600 x 1200	1600 x 1200	1280 x 1024	1280 x 1024	1280 x 1024	1280 x 1024	1280 x 960
Light sensitivity	1,3 Lux	1,3 Lux	1,3 Lux	0,2 Lux	0,2 Lux	0,2 Lux	0,2 Lux	0,15 Lux
IR cut filter	standard	standard	standard	switchable	switchable	switchable	switchable	switchable
Digital noise reduction	no	no	no	yes	yes	yes	yes	no
Backlight compensation	no	no	no	BLC	BLC	BLC	BLC	BLC
Wide Dynamic Range (WDR)	no	no	no	yes	yes	yes	yes	yes
Low speed shutter	yes	yes	yes	yes	yes	yes	yes	yes
Activity detection	yes	yes	yes	yes	yes	yes	yes	yes
Lens	CS mount/Lens not included	varifocal 5-50 mm	varifocal 3-8 mm	CS mount/Lens not included	varifocal 5-50 mm	varifocal 3-8 mm	varifocal 3,3-12 mm	CS mount/Lens not included
Horizontal angle of view	n/a	53,8-5,5°	92,5-35,4°	n/a	53,8-5,5°	92,5-35,4°	72-22,6°	n/a
Compression standard	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MPEG-4, MJPEG	H.264, MPEG-4, MJPEG	H.264, MPEG-4, MJPEG	H.264, MPEG-4, MJPEG	MJPEG, MPEG-4
Image transm. rate max.	25 fps	25 fps	25 fps	25 fps	25 fps	25 fps	25 fps	25 fps
Stream types	H.264, MJPEG multiple	H.264, MJPEG multiple	H.264, MJPEG multiple	H.264, MPEG-4, MJPEG multiple	H.264, MPEG-4, MJPEG multiple	H.264, MPEG-4, MJPEG multiple	H.264, MPEG-4, MJPEG multiple	MPEG-4, MJPEG multiple
Audio support	yes	yes	yes	yes	yes	yes	yes	yes
Internal storage	no	no	no	SD card	SD card	SD card	SD card	SD card
ONVIF	version 1.01	version 1.01	version 1.01	version 1.01	version 1.01	version 1.01	version 1.01	version 1.01
Temperature range (operation)	-10°C ~ +50°C	-10°C ~ +50°C	-10°C ~ +50°C	0°C ~ +50°C	0°C ~ +50°C	0°C ~ +50°C	-10°C ~ +50°C	0°C ~ +50°C
PTZ support	yes	yes	yes	yes	yes	yes	yes	yes
Illumination	no	no	no	no	no	no	infrared	no
Serial interfaces	RS-485	RS-485	RS-485	RS-485	RS-485	RS-485	RS-485	RS-485
Alarm Inputs/Outputs	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Supply voltage	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE	12VDC, PoE	12VDC, 24VAC, PoE
Protection rating	n/a	n/a	n/a	n/a	n/a	n/a	IP66	n/a
SDK	available	available	available	available	available	available	available	available
Comments	ROI (Region of Interest) max. 3, Easy focus	Including wall mount and lens, ROI (Region of Interest) max. 3, Easy focus	Including wall mount and lens, ROI (Region of Interest) max. 3, Easy focus		Including wall mount and lens	Including wall mount and lens	Including wall mount, lens and recording software	

	GXC-1604M/V50W 92732	GXC-1604M/V8W 92731	NXC-1301M 93166	NXC-1301M/V50W 92727	NXC-1301M/V8W 92726	NXC-1401M 93162	NXC-1401M/V50W 92723	NXC-1401M/V8W 92722
								
	ONVIF NEW	ONVIF NEW	ONVIF	ONVIF NEW	ONVIF NEW	ONVIF	ONVIF NEW	ONVIF NEW
System	day&night	day&night	day&night	day&night	day&night	colour	colour	colour
Imager	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS
Resolution (Pixels)	1280 x 960	1280 x 960	1280 x 720	1280 x 720	1280 x 720	1280 x 720	1280 x 720	1280 x 720
Light sensitivity	0,15 Lux	0,15 Lux	1,3 Lux	1,3 Lux	1,3 Lux	1,3 Lux	1,3 Lux	1,3 Lux
IR cut filter	switchable	switchable	switchable	switchable	switchable	standard	standard	standard
Digital noise reduction	no	no	no	no	no	no	no	no
Backlight compensation	BLC	BLC	no	no	no	no	no	no
Wide Dynamic Range (WDR)	yes	yes	no	no	no	no	no	no
Low speed shutter	yes	yes	yes	yes	yes	yes	yes	yes
Activity detection	yes	yes	yes	yes	yes	yes	yes	yes
Lens	varifocal 5-50 mm	varifocal 3-8 mm	CS mount/Lens not included	varifocal 5-50 mm	varifocal 3-8 mm	CS mount/Lens not included	varifocal 5-50 mm	varifocal 3-8 mm
Horizontal angle of view	53,8-5,5°	92,5-35,4°	n/a	53,8-5,5°	92,5-35,4°	n/a	53,8-5,5°	92,5-35,4°
Compression standard	MJPEG, MPEG-4	MJPEG, MPEG-4	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Image transm. rate max.	25 fps	25 fps	25 fps	25 fps	25 fps	25 fps	25 fps	25 fps
Stream types	MPEG-4, MJPEG multiple	MPEG-4, MJPEG multiple	H.264, MJPEG multiple	H.264, MJPEG multiple	H.264, MJPEG multiple	H.264, MJPEG multiple	H.264, MJPEG multiple	H.264, MJPEG multiple
Audio support	yes	yes	yes	yes	yes	yes	yes	yes
Internal storage	SD card	SD card	SD card	SD card	SD card	no	no	no
ONVIF	version 1.01	version 1.01	version 1.01	version 1.01	version 1.01	version 1.01	version 1.01	version 1.01
Temperature range (operation)	0°C ~ +50°C	0°C ~ +50°C	-10°C ~ +50°C	-10°C ~ +50°C	-10°C ~ +50°C	-10°C ~ +50°C	-10°C ~ +50°C	-10°C ~ +50°C
PTZ support	yes	yes	yes	yes	yes	yes	yes	yes
Illumination	no	no	no	no	no	no	no	no
Serial interfaces	RS-485	RS-485	RS-485	RS-485	RS-485	RS-485	RS-485	RS-485
Alarm Inputs/Outputs	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Supply voltage	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE
Protection rating	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SDK	available	available	available	available	available	available	available	available
Comments	Including wall mount and lens	Including wall mount and lens	ROI (Region of Interest) max. 3, Easy focus	Including wall mount and lens, ROI (Region of Interest) max. 3, Easy focus	Including wall mount and lens, ROI (Region of Interest) max. 3, Easy focus	ROI (Region of Interest) max. 3, Easy focus	Including wall mount and lens, ROI (Region of Interest) max. 3, Easy focus	Including wall mount and lens, ROI (Region of Interest) max. 3, Easy focus

	GLC-1701/IR 96092	GLC-1702 96093	GLC-1601 91575	GLC-1601/V12.5W 92736	GLC-1601/V8W 92735	NLC-1401 93160	NLC-1401/V12.5W 92721	NLC-1401/V8W 92719
				NEW	NEW	ONVIF	ONVIF	ONVIF
System	day&night	day&night	day&night	day&night	day&night	day&night	day&night	day&night
Imager	1/3" CCD	1/3" CCD	1/3" CCD	1/3" CCD	1/3" CCD	1/3" CCD	1/3" CCD	1/3" CCD
Resolution (Pixels)	720 x 576	720 x 576	704 x 576	704 x 576	704 x 576	704 x 576	704 x 576	704 x 576
Light sensitivity	0,2 Lux	0,2 Lux	1,2 Lux	1,2 Lux	1,2 Lux	0,1 Lux	0,1 Lux	0,1 Lux
IR cut filter	switchable	switchable	switchable	switchable	switchable	switchable	switchable	switchable
Digital noise reduction	no	no	no	no	no	yes	yes	yes
Backlight compensation	BLC	BLC	BLC	BLC	BLC	BLC	BLC	BLC
Wide Dynamic Range (WDR)	no	no	no	no	no	yes	yes	yes
Low speed shutter	no	yes	no	no	no	yes	yes	yes
Activity detection	yes	yes	yes	yes	yes	yes	yes	yes
Lens	varifocal 3,8-9,5 mm	varifocal 3,8-9,5 mm	CS mount/Lens not included	varifocal 4,5-12,5 mm	varifocal 3-8 mm	CS mount/Lens not included	varifocal 4,5-12,5 mm	CS mount varifocal 3-8 mm
Horizontal angle of view	74,2-30 °	74,2-30 °	n/a	83,7-30,1 °	92,5-35,4 °	n/a	83,7-30,1 °	92,5-35,4 °
Compression standard	MJPEG, MPEG-4	MJPEG, MPEG-4	MJPEG, MPEG-4	MJPEG, MPEG-4	MJPEG, MPEG-4	H.264, MJPEG, MPEG-4	H.264, MPEG-4, MJPEG	H.264, MJPEG, MPEG-4
Image transm. rate max.	25 fps	25 fps	25 fps	25 fps	25 fps	25 fps	25 fps	25 fps
Stream types	MPEG-4, MJPEG alternating	MPEG-4, MJPEG alternating	MPEG-4, MJPEG alternating	MPEG-4, MJPEG alternating	MPEG-4, MJPEG alternating	Standard, ROI (Region of Interest) max. 3	Standard, ROI (Region of Interest) max. 3	Standard, ROI (Region of Interest) max. 3
Audio support	no	no	yes	yes	yes	yes	yes	yes
Internal storage	no	no	SD card	SD card	SD card	no	no	no
ONVIF	no	no	no	no	no	version 1.01	version 1.01	version 1.01
Temperature range (operation)	-20°C ~ +50°C	-20°C ~ +50°C	0°C ~ +50°C	0°C ~ +50°C	0°C ~ +50°C	0°C ~ +45°C	0°C ~ +45°C	0°C ~ +45°C
PTZ support	no	no	yes	yes	yes	yes	yes	yes
Illumination	infrared	no	no	no	no	no	no	no
Serial interfaces	no	no	RS-485	RS-485	RS-485	RS-485	RS-485	RS-485
Alarm Inputs/Outputs	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Supply voltage	12VDC	12VDC	12VDC, PoE	12VDC, PoE	12VDC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE
Protection rating	IP67	IP67	n/a	n/a	n/a	n/a	n/a	n/a
SDK	no	no	no	no	no	available	available	available
Comments	Illumination range: 15m			Including wall mount and lens	Including wall mount and lens	ROI (Region of Interest) max. 3, Easy focus	Including wall mount and lens, ROI (Region of Interest) max. 3, Easy focus	Including wall mount and lens, ROI (Region of Interest) max. 3, Easy focus

	FLC-1301 92712	GLC-1603 92582	GLC-1603/V12.5W 92734	GLC-1603/V8W 92733
	 ONVIF	 ONVIF	 ONVIF	 ONVIF
		NEW	NEW	NEW
System	day&night	day&night	day&night	day&night
Imager	1/3" CMOS	1/4" CMOS	1/4" CMOS	1/4" CMOS
Resolution (Pixels)	640 x 480	640 x 480	640 x 480	640 x 480
Light sensitivity	0,1 Lux	0,3 Lux	0,3 Lux	0,3 Lux
IR cut filter	OLPF (Overlay Low Pass Filter)	switchable	switchable	switchable
Digital noise reduction	no	no	no	no
Backlight compensation	no	BLC	BLC	BLC
Wide Dynamic Range (WDR)	no	no	no	no
Low speed shutter	no	no	no	no
Activity detection	yes	yes	yes	yes
Lens	CS/C mount/Lens not included	CS mount/Lens not included	varifocal 4,5-12,5 mm	varifocal 3-8 mm
Horizontal angle of view	n/a	n/a	83,7-30,1 °	92,5-35,4 °
Compression standard	H.264, MPEG-4	MJPEG, MPEG-4	MJPEG, MPEG-4	MJPEG, MPEG-4
Image transm. rate max.	30 fps	25 fps	25 fps	25 fps
Stream types	H.264, MPEG-4 multiple	MPEG-4, MJPEG alternating	MPEG-4, MJPEG alternating	MPEG-4, MJPEG alternating
Audio support	yes	yes	yes	yes
Internal storage	Micro SD card	SD card	SD card	SD card
ONVIF	coming soon	version 1.01	version 1.01	version 1.01
Temperature range (operation)	-10°C ~ +60°C	0°C ~ +50°C	0°C ~ +50°C	0°C ~ +50°C
PTZ support	yes	yes	yes	yes
Illumination	no	no	no	no
Serial interfaces	no	RS-485	RS-485	RS-485
Alarm Inputs/Outputs	-/-	1/1	1/1	1/1
Supply voltage	12VDC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE
Protection rating	n/a	n/a	n/a	n/a
SDK	no	available	available	available
Comments			Including wall mount and lens	Including wall mount and lens

HOUSINGS FOR IP CAMERAS	VHM/ECLIP-W 79722
	 NEW
Housing material	aluminium
Colour	RAL9016
Protection rating	IP66
Integrated wall mount	no
Clear Shield	yes
Window heater	yes, 12~30V/9watts (PTC)
Sunshield	yes
Hidden cable management	optional
Usable length	330 mm
Comments	Blower-operated circulation system

HOUSINGS FOR IP CAMERAS	VTL-300/WW-POE 79706	VTL-300/WW-POEB 79705
		
Housing material	aluminium	aluminium
Colour	RAL9002	RAL9002
Protection rating	IP66	IP54
Integrated wall mount	yes	yes
Clear Shield	no	no
Window heater	yes, 12V / 7W (PTC)	yes, 12V / 7W (PTC)
Sunshield	yes	yes
Hidden cable management	yes	yes
Usable length	240 mm	240 mm
Comments	Splitter	Splitter, blower

Flexible Installation

Megapixel Network Dome with ONVIF compatibility for easy integration in IP video surveillance systems.

Flexible integration is provided by the new GXD-1510M/IR Network Dome even for existing IP surveillance solutions: compliance with the ONVIF standard ensures it can exchange information with products from other manufacturers, making it the ideal choice for installation in multivendor systems. The durable polycarbonate housing is vandalism-resistant with IP66 protection and furthermore guarantees reliability for outdoor use and in locations at risk from camera manipulation, destruction or other operational impairments, for instance in public transport systems, schools, prisons or retail outlets.








At a resolution of 1280x960 pixels the GXD-1510M/IR delivers an image transmission rate of 25 fps. The light sensitivity at 50% video signal is 0.5 Lux (colour), the integral varifocal lens features a focusing range of 3.3-12mm. High-contrast pictures even in difficult light conditions, such as in entrance areas with backlight, are generated by the Wide Dynamic Range function that automatically selects optically illuminated image sections from different exposure phases






and then combines them into an overall picture. The integrated switchable IR cut filter also ensures night-time video imagery is clear. And there is no need for additional illumination as the dome comes with 18 integrated 850nm LEDs giving an illumination range of approximately 20 metres.

Additional functions include privacy zones, 2x to 10x digital zoom, integrated motion detector as well as Power over Ethernet allowing power to be supplied over the same network cable used for data transmission thus making additional cabling unnecessary. Further security is provided by the recording option on SD card: video imagery is automatically stored on the card when an alarm is triggered so that evidence is secured even when the network is down.




The shipping package includes GL Manager – a software solution for management, playback and recording of up to 16 video sources with a feature set that covers the majority of application requirements.



	FXD-1002/IR 92709	FXD-1102 92717	NXD-1302M 93169	NXD-1402M 93165	FXD-1001/IR 92711	GXD-1510M/IR 92579	NXD-1301M 93168	NXD-1401M 93164
								
	ONVIF NEW	ONVIF NEW	ONVIF	ONVIF	ONVIF NEW	ONVIF NEW	ONVIF	ONVIF
System	day&night	day&night	day&night	colour	day&night	day&night	day&night	colour
Imager	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CCD	1/3" CMOS	1/3" CMOS	1/3" CMOS
Resolution (Pixels)	1600 x 1200	1600 x 1200	1600 x 1200	1600 x 1200	1280 x 960	1280 x 960	1280 x 720	1280 x 720
Light sensitivity	0,5 Lux	0,5 Lux	1,3 Lux	1,3 Lux	0,1 Lux	0,5 Lux	1,3 Lux	1,3 Lux
IR cut filter	switchable	OLPF (Overlay Low Pass Filter)	switchable	standard	switchable	switchable	switchable	standard
Digital noise reduction	no	no	no	no	no	no	no	no
Backlight compensation	no	no	no	no	no	no	no	no
Wide Dynamic Range (WDR)	no	no	no	no	no	yes	no	no
Low speed shutter	yes	yes	yes	yes	yes	yes	yes	yes
Activity detection	yes	yes	yes	yes	yes	yes	yes	yes
Lens	varifocal 2,7-9 mm	fixed focal length 4 mm	varifocal 3-9 mm	varifocal 3-9 mm	varifocal 2,7-9 mm	varifocal 3,3-12 mm	varifocal 3-9 mm	varifocal 3-9 mm
Horizontal angle of view	89-25 °	62 °	77,4-29,8 °	77,4-29,8 °	89-25 °	72-22,6 °	77,4-29,8 °	77,4-29,8 °
Compression standard	H.264, MPEG-4	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MPEG-4	MJPEG, MPEG-4	H.264, MJPEG	H.264, MJPEG
Image transm. rate max.	30 fps	30 fps	25 fps	25 fps	30 fps	25 fps	25 fps	25 fps
Stream types	H.264, MPEG-4 multiple	H.264, MJPEG multiple	H.264, MJPEG multiple	H.264, MJPEG multiple	H.264, MPEG-4 multiple	MJPEG, MJPEG multiple	H.264, MJPEG multiple	H.264, MJPEG multiple
Audio support	yes	yes	yes	yes	yes	yes	yes	yes
Internal storage	SDHC card	no	Micro SD card	no	SDHC card	SD card	Micro SD card	no
ONVIF	coming soon	coming soon	version 1.01	version 1.01	coming soon	version 1.01	version 1.01	version 1.01
Temperature range (operation)	-10°C ~ +60°C	-10°C ~ +60°C	-10°C ~ +50°C	-10°C ~ +50°C	-10°C ~ +60°C	-10°C ~ +50°C	-10°C ~ +50°C	-10°C ~ +50°C
PTZ support	yes	yes	no	no	yes	no	no	no
Illumination	infrared	no	no	no	infrared	infrared	no	no
Serial interfaces	RS-485	no	no	no	no	RS-485	no	no
Alarm Inputs/Outputs	1/1	-/-	1/1	1/1	1/1	1/1	1/1	1/1
Supply voltage	PoE, 24VAC, 12VDC	12VDC, PoE	12VDC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE	12VDC, 24VAC, PoE
Vandalism resistant	yes	yes	yes	yes	yes	yes	yes	yes
Protection rating	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66
SDK	available	available	available	available	available	no	available	available
Comments			ROI (Region of Interest) max. 3, Easy focus	ROI (Region of Interest) max. 3, Easy focus		Illumination range: 20m	ROI (Region of Interest) max. 3, Easy focus	ROI (Region of Interest) max. 3, Easy focus

	NTD-6101/18 93151	GLD-1401 91576	GLD-1501/IR 92392	NLD-1401 93161	FLD-1101 92716
				 ONVIF	 ONVIF NEW
System	day&night	colour	day&night	day&night	day&night
Imager	1/4" CCD	1/3" CCD	1/3" CCD	1/3" CCD	1/4" CMOS
Resolution (Pixels)	720 x 576	704 x 576	704 x 576	704 x 576	640 x 480
Light sensitivity	0,5 Lux	0,4 Lux	0,5 Lux	0,35 Lux	0,1 Lux
IR cut filter	switchable	standard	switchable	switchable	OLPF (Overlay Low Pass Filter)
Digital noise reduction	no	no	no	yes	no
Backlight compensation	BLC	no	BLC	BLC	no
Wide Dynamic Range (WDR)	no	no	no	yes	no
Low speed shutter	yes	no	no	yes	yes
Activity detection	yes	yes	yes	yes	yes
Lens	18x zoom 4,1-73,8 mm	fixed focal length 3,6 mm	varifocal 3,3-12 mm	varifocal 2,8-12 mm	fixed focal length 4 mm
Horizontal angle of view	48-2,8 °	52 °	22,6-72 °	81,2-22,6 °	71 °
Compression standard	MPEG-4	MJPEG, MPEG-4	MJPEG, MPEG-4	H.264, MJPEG, MPEG-4	H.264, MPEG-4
Image transm. rate max.	25 fps	25 fps	25 fps	25 fps	30 fps
Stream types	MPEG-4	MPEG-4, MJPEG alternating	MPEG-4, MJPEG alternating	H.264, MPEG-4, MJPEG multiple	H.264, MPEG-4 multiple
Audio support	yes	no	yes	yes	no
Internal storage	no	no	no	no	no
ONVIF	no	no	no	version 1.01	coming soon
Temperature range (operation)	0°C ~ +50°C	0°C ~ +50°C	0°C ~ +50°C	-10°C ~ +50°C	-10°C ~ +60°C
PTZ support	yes	no	no	no	yes
Illumination	no	no	infrared	no	no
Serial interfaces	RS-485	no	RS-485	no	no
Alarm Inputs/Outputs	1/1	1/1	1/1	1/1	-/-
Supply voltage	12VDC	12VDC	12VDC, 24VAC	12VDC, 24VAC, PoE	12VDC, PoE
Vandalism resistant	no	yes	yes	yes	yes
Protection rating	n/a	IP54	n/a	IP66	IP66
SDK	no	no	no	available	available
Comments			Illumination range: 20m	ROI (Region of Interest) max. 3, Easy focus	

EDC-IDFSW 74154	EDC-IPC-2/24V 74135	EDC-IPS-2/24V 74134	EDC-OPC-2/24V 74130	EDC-OPS-2/24V 74136	GLD/CMB-1 92521	GLD/WMB-1 92517	KBD-NSC-100 74746	NTD-OPX/IPX-CC1 74144	NTDF-AKS1 74145
									
Flush Mount Dome Housing, White Trimming Smoked Bubble 6.8"	Pendant Mount Indoor Dome Housing with Clear Bubble 6.5", 24VAC	Pendant Mount Indoor Dome Housing with Tinted Bubble 6.5", 24VAC	Pendant Mount Outdoor Dome Housing, Sun Shield, Clear Bubble 6.5", 24VAC	Pendant Mount Outdoor Dome Housing with Sunshield, Tinted Bubble 6.5", 24VAC	Pendant Mount Bracket for GLD-1501/IR	Wall Mount for GLD-1501/IR	Network System Controller with 3-Axis Joystick and Jog Shuttle, 5VDC	Connection cable for NTD-6101/xx Network Domes in In/Outdoor Housing	Power & Connection Box with Mounting Bracket for In/Outdoor, 230V-12VDC/24VAC

VDOME/FM1 92591	VDOME/PM1 92588	VDOME/SM1 92589	VDOME/WB4 92587
			
NEW	NEW	NEW	NEW
Flush Mount Kit for GXD-1510M/IR	Ceiling Pendant Bracket for GXD-1510M/IR	Ceiling Mount Kit for GXD-1510M/IR	Wall Mount Kit for GXD-1510M/IR



	GLS-2101 91573	GLS-2202H 92527	GLS-2301H 92551	GLS-2302H 92708	NLS-1401 93104	GLS-2104 91555
				 ONVIF NEW	 ONVIF	
Video inputs	1	1	1	1	1	4
Alarm inputs	yes	yes	yes	yes	yes	yes
Audio support	yes	yes	yes	yes	yes	yes
Activity detection	yes	yes	yes	yes	yes	yes
Resolution max.	720 x 576	720 x 576	720 x 576	720 x 576	720 x 576	704 x 272
Compression standard	MJPEG, MPEG-4	MJPEG, H.264	MJPEG, H.264	H.264, MPEG-4, MJPEG	H.264, MJPEG, MPEG-4	MJPEG
Image transmission rate max.	25 fps	25 fps	25 fps	25 fps	25 fps	25 fps
Internal storage	SD card, SDHC card	SD card	SD card, SDHC card	SD card	no	SD card
PTZ support	yes	yes	yes	yes	yes	yes
Serial interfaces	RS-485	RS-485	RS-485	no	RS-485	RS-485
Password protection	yes	yes	yes	yes	yes	yes
ONVIF	no	no	no	version 1.01	version 1.01	no
Power over Ethernet	yes	yes	yes	yes	yes	no
Supply voltage	12VDC, PoE	12VDC, PoE	12VDC, 24VAC, PoE	12VDC, PoE	12VDC, 24VAC, PoE	12VDC
19" Rack mountable	no	no	no	no	no	no
Management Software Support	Netavis (limited), Aimetis - Symphony (limited), GL-Manager	Zelaris, Netavis (limited), Aimetis - Symphony (limited), GL-Manager	Zelaris, Netavis (limited), Aimetis - Symphony (limited), GL-Manager	GL-Manager	NT-Manager, Nimra, Numina	Netavis (limited), Aimetis - Symphony (limited), GL-Manager
ONVIF	no	no	no	version 1.01	version 1.01	no

Network recording

IP recorders in the F Series: H.264 compression, two video streams and 4 or 16 channels.

The user-friendly IP recorders in the F Series – the FNR-4004/500 and FNR-4016/500 – make it truly easy to record over a network.

Video imagery is stored using either the efficient H.264 compression or MPEG-4. The maximum refresh rate per channel is 25 frames per second. The resolution, frame rate, bit rate, picture quality etc. can be set separately for each video channel and configured optimally to the site conditions. This therefore allows the best possible setting for, for instance, surveillance over a large area with many details (railway station platforms, public areas, etc.) so that details are clearly recognisable with digital zooming into the picture as required. On the other hand, a lower picture quality, resolution, etc. can be set to reduce network load and memory requirements when surveillance merely has to detect movement in the monitored area. This is also supported by dual video streams: this function allows simultaneous transmission of video imagery from one channel over two video streams that can also be configured –to match the end device for instance (monitor or smartphone). The memory requirement can be reduced even further by individually configuring recording for each channel: it can be set manually, according to a time schedule, or for an alarm or movement.

The FNR-4016/500 has 16 channels, the FNR-4004/500 four. Though the number of possible channels

reduces according to the resolution of the connected cameras: the FNR-4016 16 has 16 available channels for the standard resolution, eight channels for 1.3-megapixel cameras and four channels when 2-megapixel cameras are used. The FNR-4004 can process video data from four standard IP cameras or from two IP cameras with a resolution of 720p. Up to eight SATA hard disks can be installed in the FNR-4016 housing to achieve very large storage capacities. The FNR-4016 has 16 alarm inputs and eight alarm outputs, the FNR-4004 has four alarm inputs and one alarm output.

Further functions include the digital zoom to allow zooming in on relevant details at the click of a mouse for live pictures or during playback, two USB ports for user-friendly data export, integrated motion detector

for each channel, extensive options for user management, PTZ control of connected pan/tilt systems (RS-485), pre- and post-alarm recording and privacy masking, that masks out image areas not to be covered by surveillance, such as windows in a residential building.

So much for the common features – but what, in addition to the different channel number, are the differences? The most important difference lies in support to different manufacturers: whilst the FNR-4004/500 is ideal purely for eneo products (F Series, N and G Series currently under development), the FNR-4016/500 also supports products from Axis, Bosch, Panasonic, Sanyo and Sony, so that extra flexibility is provided for product selection during system planning and installation as well as upgrades.



FNR-4004/500
93035

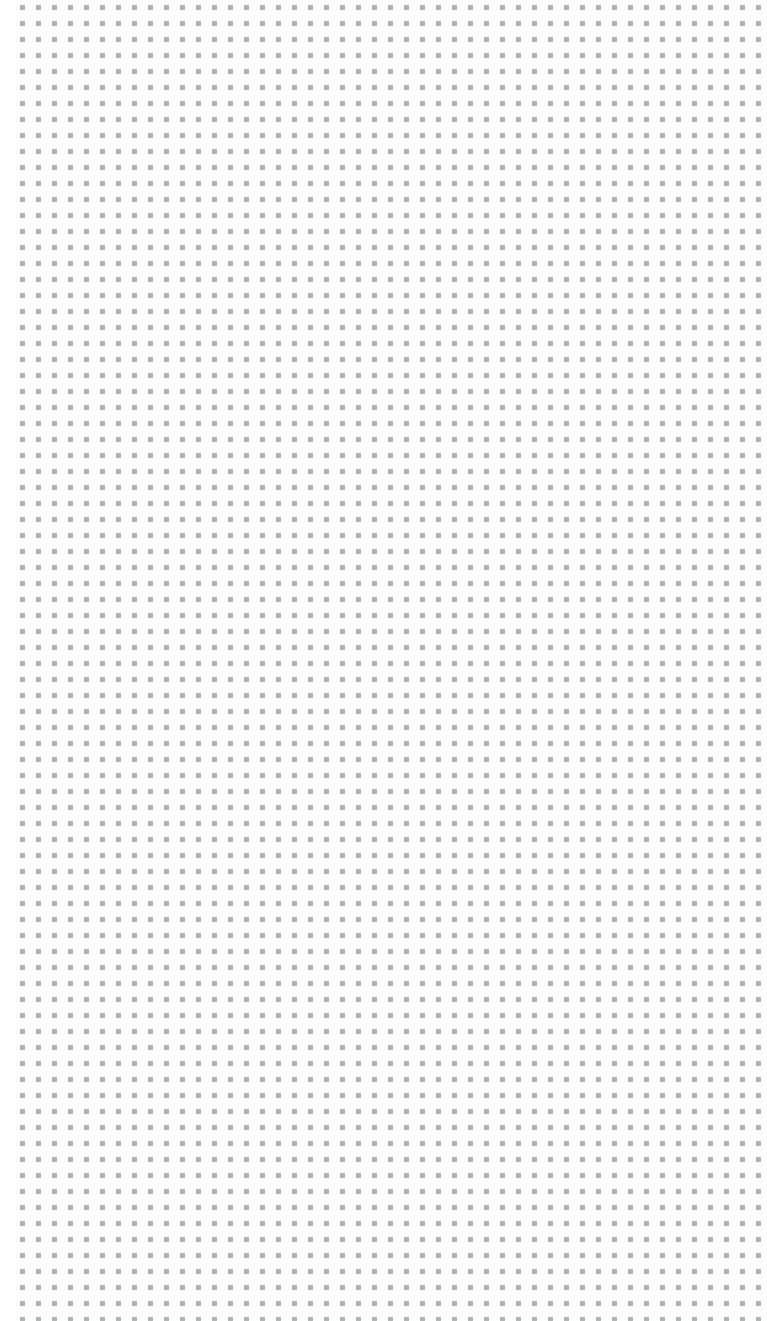
FNR-4016/500
93037



NEW

NEW

IP channels	4	16
Compression standard	H.264	H.264, MPEG-4
Max. recording resolution	1280 x 720	1280 x 720
Recording rate	100 fps	400 fps
Image quality control	1280x720 max.	1280x720 max.
Recording	alarm, contact, movement, timer, permanent	permanent, contact, movement, timer, alarm, event
HHD (integral)/(max.)	500 GB/2 TB	500 GB/16 TB
Operation mode	Triplex	Triplex
Intergrated writer	no	no
Remote access	remote software	remote software
Serial interfaces	RS-485	RS-485
Monitor outputs	VGA, 1Vp-p, (C)VBS, 75ohms, BNC	-
Network	10/100 Base-Tx, RJ45	10/100/1000 Base-Tx, RJ45
Network protocols	PPPoE, DHCP, DNS, DDNS, NTP, SADP	TCP/IP, PPPoE, DHCP, DNS, DDNS, NTP, SADP, SMTP, NFS, SNMP
Alarm inputs/output	4/1	16/4
Control units (external)	remote control, mouse	remote control, mouse
ONVIF	no	no
Supported network suppliers	eneo F-series	eneo F-series, Sony, Axis, Bosch, Sanyo



FAQs

FAQs on eneo products and the corresponding answers from our technical support team.

IP VIDEO

*What camera housing do you recommend for ceiling mounting the **GLC-1401**?*

Conventional housings for boxed cameras can generally be used for the GLC-1401 Network Camera. Please note that the provided power supply unit must be used with this camera (5V DC).

*What is the default IP address of the **GLC-1601** Network Camera?*

The default IP address of the GLC-1601 is 192.168.1.168, netmask 255.255.255.0

*How many users can simultaneously access the IP cameras and IP domes in the **NTC and NTD series**?*

10 users can simultaneously access an eneo NTC or NTD network camera.

IP VIDEOMANAGEMENT

*Is it possible to limit the disk space with **NIMRA**?*

NIMRA supports limiting disk space usage. At System Setup -> System2 you can specify the file path for recordings. You have the option here of setting a fixed size. In the "Overwrite" mode the recorded data are overwritten when the capacity is fully used.

Which software program is ideal for a door control system operated by PC?

ACC_CONTROL is the ideal program for operating a video and voice door control system. The cameras/servers transmit video, audio and control data via Ethernet. When the door bell button is pressed, which must be connected to the alarm input contact, the PC automatically displays the video image as a pop-up. An audio "button" in the software activates the microphone integrated in the connected components. An "Action" button in the software operates the door opener over relay contacts. This solution requires:

- Camera and user PC with audio support (loudspeaker, microphone)
- An intercom station with loudspeaker, microphone and optional door bell button (or motion detector).

*Is full screen display possible with **NIMRA** in a dual-monitor setup?*

NIMRA does not support multi-monitor operation.

Does eneo provide a software program for long-term documentation of construction sites?

We recommend you use the eneo Long Term Viewer & Recording Software (76049 BFÜ) for this application. The program has the capability of requesting camera imagery at previously defined time intervals and

saving it on a storage medium (e.g. PC hard disk). A 21-day test version can be downloaded free of charge from our website. All cameras and video servers that support sending of single pictures (JPG) in response to a CGI command can be used as a video source.

*Is **ACC_CONTROL** compatible with Windows 7?*

The ACC_CONTROL Management Software is compatible with Windows 7.

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