



Video Security Becomes More Intelligent and More Effective with the eneo IN Series

- Overview of AI Functions
- Cameras, Recorders, Software

MORE SECURITY, MORE OPTIONS, MORE TURNOVER

Most people spontaneously associate video security with theft and vandalism prevention, maybe the preservation of evidence too. This is not wrong, but modern video security technology can do much more. Artificial intelligence enables automatic object classification and pattern recognition of unprecedented precision, raising the performance of video analysis to a new level. The latest generation of IP cameras has innovative AI functions for proactive security solutions that counteract threats in advance and noticeably relieve the burden on security personnel. AI cameras also provide retailers with valuable information about customer traffic and behaviour. This knowledge can be used to optimise processes, improve the service and shopping experience and increase turnover. The eneo IN series offers all this at a convincing price-performance ratio. See for yourself.

CONTENTS

One Solution, Four Winners.....	3
Smart Security	4
Retail Intelligence	5
IP Bullet Cameras	6
IP PTZ Cameras	7
IP Dome Cameras.....	8
NVR / Storage Extension	10
Hybrid Recorders	11
Project Report	12-14
Management Software.....	15

ONE SOLUTION, FOUR WINNERS

The integrated AI-based video analysis functions of the eneo IN series increase security and open up numerous new possibilities which can benefit specialist installers, operators, security managers and end customers alike.



SPECIALIST INSTALLERS BENEFIT FROM

- New business openings
- Tested product quality
- Support with personal contacts
- Clear sales channels and prices

THE BURDEN ON SECURITY PERSONNEL IS RELIEVED BY

- Low false alarm rates
- Automated alarm responses
- Efficient incident research

OPERATORS (E.G. RETAIL, EVENT BRANCH) GET

- Effective video surveillance
- Smart Security functions for proactive security
- Pandemic protection functions
- Retail Intelligence functions for optimising service and sales
- AI analytics on the edge

CUSTOMER SATISFACTION IS INCREASED BY

- High service quality
- Shorter waiting times
- Intensive shopping experiences



SMART SECURITY

AI functions for proactive security and more employee comfort



Licence Plate Recognition (LPR), Object Classification (OC)

Human & Vehicle Detection (PD&VD): Automatic licence plate recognition enables video-based access control. Likewise, licence plates can be recorded (LPD), while with the AI-based classification of people and vehicles parking violations or entering danger zones can be prevented.



Rare Sound Detection (RSD): The bidirectional audio function of an eneo AI camera is extended by an audio analysis function which picks up unusual noises such as shots, babies crying and dogs barking.



Face Detection (FD), Face Recognition (FR), Attribute Detection (AD), Crowd Density Detection (CD): Video analysis for the capture, recognition and classification of human faces enables, among other things, fast and efficient event research and evidence preservation. The recognition of facial attributes supports pandemic protection measures, while the CD function can be used for both pandemic protection and early detection of crowds.



Stationary Object Detection (SOD), Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD): The SOD function detects objects left in or removed from a defined area. Perimeter intrusion detection (PID) creates a virtual perimeter in the monitored area. When line crossing detection (LCD) is activated, crossing a virtual border line will trigger an alarm.

RETAIL INTELLIGENCE

AI functions for enhanced service quality and increased turnover



The **heat map function (HM)** visualises customer traffic in the monitored area with an intuitive colour scheme. Customer hotspots and areas where there are only a few people on the sales floor can be identified at a glance. With the help of the heat maps, store managers can place products and advertising selectively, optimise walkways and help to improve the shopping experience.



Queue Detection (QD): Intelligent queue management can help to increase customer satisfaction. As soon as a queue in the monitored area exceeds a defined length or waiting time, a message is issued requesting more personnel in the zone concerned e.g. in the checkout area, at the service counter or in reception.



Cross Counting (CC): With the aid of this AI function, the number of people in a room or building as well as the number of people entering or leaving it can be determined precisely. The algorithm counts persons or objects that cross a defined line in a defined direction.

Click here to see AI functions in action on YouTube



IP Bullet Cameras



Product number	235341	234993	233865	233901	235342	236661
Product	INB-52M2812M0A	INB-55M2713M0A	INB-58M2713M0A	INB-65M2812MFA	INB-68M2812MFA	INB-75M0550M0A
Sensor	1/2,8" Sony STARVIS, Sensor IMX307	1/2,7" OmniVision , OS05A20	1/2,8" Sony STARVIS, Sensor IMX415	1/2,7" SmartSens, SC500AI	1/2,8" Sony STARVIS, Sensor IMX415	1/2,7" OmniVision , OS05A20
Resolution standard	HD 1080p	5 megapixels	8 megapixels	5 megapixels	8 megapixels	5 megapixels
Image resolution max.	1920x1080	2592x1944	3840x2160	2880x1620 @ H.265	3840x2160	2592x1944
System	True Day&Night	True Day&Night	True Day&Night	24h Colour	24h Colour	True Day&Night
Image transmission rate	60	30	30	30	30	30
Sensitivity	0,002 Lux @ F1,6	0,003 @ F1,6	0,009 Lux @ F1,6	0,002 Lux @ F1,0	0,002 Lux @ F1,0	0,003 Lux @ F1,6
Analysis functions	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)
Wide Dynamic Range (WDR)	D-WDR	WDR 120dB	WDR 120dB	WDR 120dB	WDR 120dB	WDR 120dB
Lens type	2,8~12mm, Varifocal (motorized)	2,7~13,5mm, Varifocal (motorized)	2,7~13,5mm, Varifocal (motorized)	2,8~12mm, Varifocal (motorized)	2,8~12mm, Varifocal (motorized)	5~50mm, Varifocal (motorized)
Illumination	Infrared	Infrared	Infrared	Infrared, whitelight	Infrared, whitelight	Infrared
Illumination range	Approx. 45m	Approx. 45m	Approx. 30m	Approx. 35m IR, Approx. 30m whitelight	Approx. 35m IR, Approx. 30m whitelight	Approx. 80m
Ethernet interface	10Base-T, 100Base-TX	10Base-T, 100Base-TX	10Base-T, 100Base-TX	10Base-T, 100Base-TX	10Base-T, 100Base-TX	10Base-T, 100Base-TX
Alarm input	1	1	1	1	1	1
Alarm output	1	1	1	1	1	1
Audio	1/1 Line input and output	1/1 Line input and output	1/1 Line input and output	1/1 Line input and output	1/1 Line input and output	1/1 Line input and output
Internal storage	MicroSDHC-Card, microSDXC-Card, 256GB	MicroSDHC-Card, microSDXC-Card, 256GB	MicroSDHC-Card, microSDXC-Card, 256GB	MicroSDHC-Card, microSDXC-Card, 256GB	MicroSDHC-Card, microSDXC-Card, 256GB	MicroSDHC-Card, microSDXC-Card, 256GB
ONVIF	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T
Protection rating	IP67	IP67	IP67	IP67	IP67	IP67
Operating temperature	-35°~+55°, @ Humidity 90% or less (non-condensing)	-35°~+55°, @ Humidity 90% or less (non-condensing)	-35°~+55°, @ Humidity 90% or less (non-condensing)	-35°~+55°, @ Humidity 90% or less (non-condensing)	-35°~+55°, @ Humidity 90% or less (non-condensing)	-35°~+55°, @ Humidity 90% or less (non-condensing)
Colour	RAL9003, Pantone P 179-1	RAL9003, Pantone P 179-2	RAL9003, Pantone P 179-3	RAL9003, Pantone P 179-4	RAL9003, Pantone P 179-5	RAL9003, Pantone P 179-6
Supply voltage	12VDC, PoE	12VDC, PoE	12VDC, PoE	12VDC, PoE	12VDC, PoE	12VDC, PoE
Remarks	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.



IP PTZ Cameras



236662
INB-78M0550M0A
1/2,8" Sony STARVIS, Sensor IMX415
8 megapixels
3840x2160
True Day&Night
30
0,009 Lux @ F1,6
Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)
WDR 120dB
5~50mm, Varifocal (motorized)
Infrared
Approx. 80m
10Base-T, 100Base-TX
1
1
1/1 Line input and output
MicroSDHC-Card, microSDXC-Card, 256GB
ONVIF Profile G, ONVIF Profile S, ONVIF Profile T
IP67
-35°~+55°, @ Humidity 90% or less (non-condensing)
RAL9003, Pantone P 179-7
12VDC, PoE
NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.

Product number	236326	234752	236322	234751
Product	INP-54M2812M0A	INP-58M2812M0A	INP-72A0018MIA	INP-75A0033MIA
Sensor	1 1/8" SmartSens, SC4210	1 2/7" SmartSens, SC8238	1 2/7" SmartSens, SC200AI	1 2/7" OmniVision, OS05A20
Resolution standard	4 megapixels	8 megapixels	HD 1080p	5 megapixels
Image resolution max.	2560x1440	3840x2160 (16:9)	1920x1080	2592x1944
Image transmission rate	True Day&Night	True Day&Night	True Day&Night	True Day&Night
System	30	25	30	30
Sensitivity	0,001 Lux @ F1,6	0,009 Lux @ F1,6	0,0003 Lux @ F1,6	0,003 Lux @ F1,6
Analysis functions	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)
Wide Dynamic Range (WDR)	WDR 120dB	D-WDR	WDR 120dB	WDR 120dB
Lens type	2,8~12mm, Varifocal (motorized)	2,8~12mm, Varifocal (motorized)	5~90mm, Auto Focus Zoom	4,3~144mm, Auto Focus Zoom
Illumination	Infrared, whitelight	4x High Power LED 850nm	No	10x LED 850nm
Illumination range	Approx.20m	Approx. 30m	k.a.	Approx. 150m
Speed (manual)	50°/sek.	45°/sek.	80°/sek.	200°/sek.
Speed (present)	50°/sek.	45°/sek.	120°/sek.	200°/sek.
Alarm output	350°	355°	360°	360°
Tilt range	0 ~ -80°	0° ~ 90°	0 ~ -90°	-10° ~ +90° (Auto Flip)
Patterns	No	No	4 Tours	4 Tours
Presets	255 Presets	255 Presets	250 Presets	250 Presets
Home position	No	No	Yes	Yes
Tours	No	No	1 Tour	1 Tour
Audio	Built in speaker & microphone	Built in speaker & microphone	1/1 Line input and output	1/1 Line input and output
Internal storage	MicroSDHC-Card, microSDXC-Card, 256GB	MicroSDHC-Card, microSDXC-Card, 256GB	MicroSDHC-Card, microSDXC-Card, 256GB	MicroSDHC-Card, microSDXC-Card, 256GB
External connectors	RJ-45, 12VDC input (DC jack), connection cable Approx.45cm, Micro SD card slot 256 GB	RJ-45, 12VDC input (DC jack), connection cable Approx.45cm, Micro SD card slot 256 GB	RJ-45, 12VDC input (DC jack),audio in/out, alarm in/out, connection cable Approx.45cm, Micro SD card slot 256 GB	RJ-45, 12VDC input (DC jack),audio in/out, alarm in/out connection cable Approx.45cm, Micro SD card slot 256 GB
ONVIF	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T
Protection rating	IP66, IK10	IP66	IP66	IP66
Operating temperature	-30°C ~ +60°C, @ Humidity 90% or less (Non-condensing)	-30°C ~ +60°C, @ Humidity 90% or less (Non-condensing)	-30°C ~ +60°C, @ Humidity 90% or less (Non-condensing)	-30°C ~ +60°C, @ Humidity 90% or less (Non-condensing)
Colour	RAL9003, Pantone P 179-1	RAL9003, Pantone P 179-1, black	RAL9003, Pantone P 179-1, schwarz	RAL9003, Pantone P 179-1, schwarz
Supply voltage	12VDC, PoE	12VDC, PoE	12VDC, PoE+	12VDC, PoE+
Power consumption	15W	13W	22W	25,5W
Remarks	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.

IP Dome Cameras

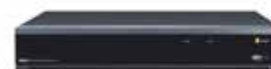


Product number	236318	233796	236320	233902	236666
Product	IND-32F0016P0A	IND-42M2808M0A	IND-45F0022M0A	IND-45F0028M0A	IND-55M2812MTA
Sensor	1 2/3" OmniVision	1 2/8" Sony STARVIS, Sensor IMX307	1 2/7" SmartSens, SC500AI	1 2/7" SmartSens, SC500AI	1 2/7" SmartSens, SC500AI
Resolution standard	12 megapixels	HD 1080p	5 megapixels	5 megapixels	5 megapixels
Image resolution max.	4000x3000	1920x1080	2880x1620	2880x1620	2880x1620
Image transmission rate	15	60	30	30	30
System	True Day&Night	True Day&Night	True Day&Night	True Day&Night	24h Colour
Sensitivity	0,01 Lux @ F1,6	0,002 Lux @ F1,2	0,002 Lux @ F1,6	0,004 Lux @ F1,6	0,002 Lux @ F1,0
Analysis functions	No	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)
Wide Dynamic Range (WDR)	D-WDR	D-WDR	WDR 120dB	WDR 120dB	WDR 120dB
Lens type	1,6mm, Fixed Lens	2,8~8mm, Varifocal (motorized)	2,2mm, Fixed Lens	2,8mm, Fixed Lens	2,8~12mm, Varifocal (motorized)
Illumination	Infrared	Infrared	Infrared	Infrared	Infrared, whitelight
Illumination range	Approx. 10m	Approx. 20m	Approx. 20m	Approx. 20m	Approx. 30m IR, Approx. 25m whitelight
Ethernet interface	10Base-T, 100Base-TX	10Base-T, 100Base-TX	10Base-T, 100Base-TX	10Base-T, 100Base-TX	10Base-T, 100Base-TX
Alarm input	1	1	No	No	1
Alarm output	1	1	No	No	1
Audio	Built in speaker & microphone	1/1 Line input and output,	Built in microphone	Built in microphone	1/1 Line input and output,
Internal storage	MicroSDHC-Card, microSDXC-Card, 256GB	MicroSDHC-Card, microSDXC-Card, 256GB	MicroSDHC-Card, microSDXC-Card, 256GB	MicroSDHC-Card, microSDXC-Card, 256GB	MicroSDHC-Card, microSDXC-Card, 256GB
ONVIF	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T
Protection rating	IP66	IP66	IP66	IP66	IP67
Operating temperature	-35°~+55°, @ Humidity 90% or less (non-condensing)	-35°~+55°, @ Humidity 90% or less (non-condensing)	-35°~+55°, @ Humidity 90% or less (non-condensing)	-35°~+55°, @ Humidity 90% or less (non-condensing)	-35°~+55°, @ Humidity 90% or less (non-condensing)
Colour	RAL9003, Pantone P 179-1	RAL9003, Pantone P 179-1	RAL9003, Pantone P 179-1	RAL9003, Pantone P 179-1	RAL9003, Pantone P 179-1
Supply voltage	12VDC, PoE	12VDC, PoE	PoE	PoE	12VDC, PoE
Remarks	NDA compliance under Section 889, Part A.	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.



236667	233819	235253	235255	235254	235256
IND-58M2812MTA	IND-62M2812MOA	IND-65M2713MOA	IND-65M2812MFA	IND-68M2713MOA	IND-68M2812MFA
1 2/8" Sony STARVIS, Sensor IMX415	1 2/8" Sony STARVIS, Sensor IMX307	1 2/7" OmniVision , OS05A20	1 2/7" SmartSens, SC500AI	1 2/8" Sony STARVIS, Sensor IMX415	1 2/8" Sony STARVIS, Sensor IMX415
8 megapixels	HD 1080p	5 megapixels	5 megapixels	8 megapixels	8 megapixels
3840x2160	1920x1080	2592x1944	2880x1620	3840x2160	3840x2160
30	60	30	30	30	30
24h Colour	True Day&Night	True Day&Night	24h Colour	True Day&Night	24h Colour
0,007 Lux @ F1,0	0,002 Lux @ F1,6	0,003 Lux @ F1,6	0,002 Lux @ F1,0	0,009 Lux @ F1,6	0,002 Lux @ F1,0
Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)	Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD), Cross Counting (CC), Human & Vehicle Detection (PD&VD), Heat Map (HM), Face Detection (FD), Face Recognition (FR), Crowd Density Detection (CD), Queue Length Detection (QD), License Plate Detection (LPD), License Plate Recognition (LPR), Rare Sound Detection (RSD), Face Attendance (FA), Attribute Detection (AD), Stationary Object Detection (SOD)
WDR 120dB	D-WDR	WDR 120dB	WDR 120dB	WDR 120dB	WDR 120dB
2,8~12mm, Varifocal (motorized)	2,8~12mm, Varifocal (motorized)	2,7~13,5mm, Varifocal (motorized)	2,8~12mm, Varifocal (motorized)	2,7~13,5mm, Varifocal (motorized)	2,8~12mm, Varifocal (motorized)
Infrared, whitelight	Infrared	Infrared	Infrared, whitelight	Infrared	Infrared, whitelight
Approx. 25m, Approx. 20m whitelight	Approx. 30m	Approx. 30m	Approx. 30m IR , Approx. 25m whitelight	Approx. 30m	Approx. 30m IR , Approx. 25m whitelight
10Base-T, 100Base-TX	10Base-T, 100Base-TX	10Base-T, 100Base-TX	10Base-T, 100Base-TX	10Base-T, 100Base-TX	10Base-T, 100Base-TX
1	1	1	1	1	1
1	1	1	1	1	1
1/1 Line input and output,	1/1 Line input and output,	1/1 Line input and output,	1/1 Line input and output,	1/1 Line input and output,	1/1 Line input and output,
MicroSDHC-Card, microSDXC-Card, 256GB	MicroSDHC-Card, microSDXC-Card, 256GB	MicroSDHC-Card, microSDXC-Card, 256GB	MicroSDHC-Card, microSDXC-Card, 256GB	MicroSDHC-Card, microSDXC-Card, 256GB	MicroSDHC-Card, microSDXC-Card, 256GB
ONVIF Profile G, ONVIF Profile S, ONVIF Profile T	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T	ONVIF Profile G, ONVIF Profile S, ONVIF Profile T
IP67	IP67	IP67	IP67	IP67	IP67
-35°~+55°, @ Humidity 90% or less (non-condensing)	-35°~+55°, @ Humidity 90% or less (non-condensing)	-35°~+55°, @ Humidity 90% or less (non-condensing)	-35°~+55°, @ Humidity 90% or less (non-condensing)	-35°~+55°, @ Humidity 90% or less (non-condensing)	-35°~+55°, @ Humidity 90% or less (non-condensing)
RAL9003, Pantone P 179-1	RAL9003, Pantone P 179-1	RAL9003, Pantone P 179-1	RAL9003, Pantone P 179-1	RAL9003, Pantone P 179-1	RAL9003, Pantone P 179-1
12VDC, PoE	12VDC, PoE	12VDC, PoE	12VDC, PoE	12VDC, PoE	12VDC, PoE
NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.	NDA compliance under Section 889, Part A. The face detection and license plate recognition functions are only available with an inserted SD card or in conjunction with a recorder from the eneo IN series.

NVR



Product number	233904	234749	234750	238664
Product	INR-18N040005A	INR-18N080005A	INR-18N320005A	INR-58N64005
IP channels	4	8	32	64
Recording resolution max.	3840x2160	3840x2160	3840x2160	4000x3000
Recording	Permanent, movement, event, manual, AI	Permanent, movement, event, manual, AI	Permanent, movement, event, manual, AI	Permanent, movement, event, manual, AI
Live display	30fps @ 3840x2160, 48fps @ 2592x1944, 60fps @ 2592x1520, 120fps @ 1920x1080	45fps @ 3840x2160, 72fps @ 2592x1944, 90fps @ 2592x1520, 180fps @ 1920x1080	60fps @ 3840x2160, 90fps @ 2592x1944, 120fps @ 2592x1520, 240fps @ 1920x1080	240fps @ 3840x2160, 480fps @ 2592x1520, 960fps @ 1920x1080
Playback	30fps @ 3840x2160, 48fps @ 2592x1944, 60fps @ 2592x1520, 120fps @ 1920x1080	45fps @ 3840x2160, 72fps @ 2592x1944, 90fps @ 2592x1520, 180fps @ 1920x1080	60fps @ 3840x2160, 90fps @ 2592x1944, 120fps @ 2592x1520, 240fps @ 1920x1080	240fps @ 3840x2160, 480fps @ 2592x1520, 960fps @ 1920x1080
Network	WAN 1x 10/100/1000 Base-T RJ45, 4x PoE RJ45 10/100 Base-T WAN	WAN 1x 10/100/1000 Base-T RJ45, 8x PoE RJ45 10/100 Base-T WAN	WAN 1x 10/100/1000 Base-T RJ45, 16x PoE RJ45 10/100 Base-T WAN	WAN 2x 10/100/1000 Base-T RJ45
Data transfer rate outgoing Mbps	64	128	128	640
Data transfer rate incoming Mbps	50	128	256	640
Data transfer max. Mbps	114	256	284	1280
Analysis functions	Depending on connected IP camera	Depending on connected IP camera	Depending on connected IP camera	Depending on connected IP camera
Motion detector	Integrated motion detector	Integrated motion detector	Integrated motion detector	Integrated motion detector
HDD slots	1x SATA	1x SATA	4x SATA	16x SATA, RAID0, RAID1, RAID5, RAID6, RAID10
Max. internal HDD capacity	10 TB	10TB	40TB	288TB
External storage	1x eSATA, 1x NetHDD (SMB,NFS), Google Drive 2 channels, Dropbox 2 channel	1x eSATA, 1x NetHDD (SMB,NFS), Google Drive 2 channels, Dropbox 2 channels	1x eSATA, 1x NetHDD (SMB,NFS), Google Drive 2 channels, Dropbox 2 channels	1x eSATA, 1x NetHDD (SMB,NFS), Google Drive 2 channels, Dropbox 2 channels
Monitor outputs	1x HDMI, 1x VGA	1x HDMI, 1x VGA	1x HDMI, 1x VGA	4x HDMI, 1x VGA
Alarm inputs	4	8	16	16
Alarm outputs	1	1	1	4
Alarm triggers	Hard disk error, image loss, motion, contact, AI	Hard disk error, image loss, motion, contact, AI	Hard disk error, image loss, motion, contact, AI	Hard disk error, image loss, motion, contact, AI
Audio output	1	1	1	1
Audio input	1x Line input	1x Line input	1x Line input	1x Line input
Fan	No	No	No	Yes
ONVIF	ONVIF Profile S	ONVIF Profile S	ONVIF Profile S	ONVIF Profile S
Power over ethernet	IEEE 802.3af, IEEE 802.3at	IEEE 802.3af, IEEE 802.3at	IEEE 802.3af, IEEE 802.3at	No
PoE budget (total)	45	59	220	No
Supply voltage	48VDC (power supply 100~240VAC, 50/60Hz scope of supply)	48VDC (power supply 100~240VAC, 50/60Hz scope of supply)	100-230VAC, 50/60Hz	100-230VAC, 50/60Hz
Power consumption	5 W, without HDD	6W, without HDD	12W, without HDD	8W, without HDD
Remote access	eneo INsight, eneo INsight mobile, Remote Software, iOS, Android, WEB Browser	eneo INsight, eneo INsight mobile, Remote Software, iOS, Android, WEB Browser	eneo INsight, eneo INsight mobile, Remote Software, iOS, Android, WEB Browser	eneo INsight, eneo INsight mobile, Remote Software, iOS, Android, WEB Browser

eSATA memory expansion



Product number	234995
Product	INR-eSATA
Features	HDD box for memory expansion by max. 4 HDD. Max. 8TB pro HDD, without HDD

Hybrid Recorders



Product number	233903	234748
Product	MNR-18N04000A	MNR-18N16000A
Channels total	6	24
Video inputs	4	16
IP channels	2 (6 IP only)	8 (24 IP only)
Resolution recording max.	3840x2160	3840x2160
Max. recording rate	120fps@1920x1080	480fps@1920x1080
Recording speed	28 fps @ 3840x2160, 48 fps @ 2560x1920, 60 fps @ 2560x1440, 120 fps @ 1920x1080	160 fps @ 3840x2160, 240 fps @ 2592x1944, 320 fps @ 2592x1520, 480fps@1920x1080
Live image	28fps @ 3840x2160, 48fps @ 2592x1944, 60fps @ 2592x1520, 120fps @ 1920x1080	160fps @ 3840x2160, 240fps @ 2592x1520, 320fps @ 2592x1520, 480fps @ 1920x1080
Playback speed	28 fps @ 3840x2160, 48 fps @ 2560x1920, 60 fps @ 2560x1440, 120 fps @ 1920x1080	160fps @3840x2160, 240fps @2592x1944, 320fps @2592x1520, 480fps @1920x1080
Recording	Permanent, manual, motion, AI, event	Permanent, motion, event, manual, AI
Video inputs	4 x BNC socket, automatic resolution and signal detection	16 x BNC socket, automatic resolution and signal detection
Signal format	IP @ 8MP, HD-TVI @ 8MP, Composite (FBAS), AHD @ 8MP	HD-TVI @ 8MP, Composite (FBAS), AHD @ 8MP, IP @ 8MP
Network connection	10/100Base-TX RJ45	100/1000Base-TX RJ45
Data transfer rate outgoing Mbps	36	192
Data transfer rate incoming Mbps	12	64
Data tranfer rate max. Mbps	48	256
Analysis functions	The recorder provides the following analysis functions for analog cameras: obstruction detection, intrusion, line detection, object classification (person / vehicle)	The recorder provides the following analysis functions for analog cameras: obstruction detection, intrusion, line detection, object classification (person / vehicle)
Motion detector	Integrated motion detection, freely definable fields	Integrated motion detection, freely definable fields
Number of HDD slots	1x SATA	2x SATA
Hard disk capacity (max. internal)	10 TB	20 TB
External storage	1x eSATA, 1x NetHDD (SMB,NFS), Google Drive 2 channels, Dropbox 2 channels	1x NetHDD (SMB,NFS), Google Drive 2 channels, Dropbox 2 channels
Main video outputs	HDMI (4K), VGA	HDMI (4K), VGA
Spotmonitor	Composite (FBAS)	Composite (FBAS)
Alarm inputs	4	16
Alarm outputs	1	1
Alarm trigger	Hard disk error, image loss, motion, contact, AI	Hard disk error, image loss, motion, contact, AI
Audio inputs	4 x RCA	16 x RCA
Audio output	1 x RCA	1 x RCA
ONVIF	ONVIF Profile S	ONVIF Profile S
Supply voltage	12 VDC	12 VDC
Power consumption	4.7 W, without hard disk	20 W, without hard disk
Remote access	eneo INsight, eneo INsight mobile, Microsoft Internet Explorer, Remote software	eneo INsight, eneo INsight mobile, Microsoft Internet Explorer, Remote software
Features	Channels can be assigned with IP or different HD / SD signal formats (mixed operation possible)	Channels can be assigned with IP or different HD / SD signal formats (mixed operation possible)

INSTALLATION ACCESSORIES

Video security professionals and operators know how useful the eneo installation accessories are. Meanwhile, the range of accessories for our cameras has developed a sizeable bandwidth. After all, the demand is great and, as with our other product groups, the diverse practical suggestions and specific desires of our customers are continuously incorporated into our product development. The result is solid and cost-effective solutions for time-saving indoor and outdoor installations.

The range extends from wall brackets to pole mounting adapters and robust junction boxes which have proven themselves in countless projects.

In the product section of the eneo website, you will find an overview of compatible accessories for each camera.

Wall bracket



Pole assembly



On-wall/on-ceiling



Double housing

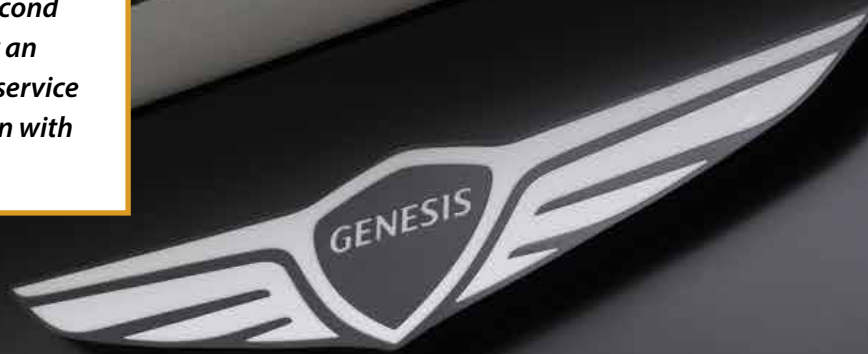


This QR code directs you to the eneo website



Genesis Studio Frankfurt: Stylish security

In 2021, the South Korean premium automobile brand Genesis celebrated its launch in the European market. After Munich, the second Genesis Studio will open in Frankfurt in December 2022. Here, visitors will experience with all their senses a fascinating combination of high-tech and customer centricity that is second to none. Security for the exclusive showroom is provided by an eneo IN system, commissioned and installed and placed in service by the Stuttgart-based systems firm mevis.tv, in cooperation with Digicom informationstechnologie.



Tamer Vural (Digicom), Guido Becker (Genesis), Carsten Pittelkow (Genesis) and Thomas Ograbek (Videor) on site



The flat domes blend perfectly with the surroundings

At Genesis, form and content harmonise at the highest level. This applies equally to the luxury limousines and SUVs of the South Korean premium brand and to the customer and service experience. In keeping with the Korean tradition, which coined the term *son-nim* for this, the customer is seen not so much as a car buyer but rather as a guest who is given full attention and appreciation. And this extends beyond the purchase of the car. Consequently, there are no classic salespeople at Genesis, because customer care here is in the competent hands of personal assistants, individual contacts who are there to help customers with any questions they may have about their Genesis. At any time, for five full years. And with no ifs, ands, or buts about it. For example, if a service, maintenance or repair is due, the personal assistant will pick up the vehicle from the customer and arrange for a replacement car. Those who want to experience the unparalleled service mentality of Genesis without obligation can have the model of their choice brought to their home for a test drive. Or they can visit the new Genesis Studio in the heart of Frankfurt to experience automotive design and service that sets new standards in an ambience of understated elegance.

DISCREET VIDEO SECURITY

What visitors to the studio, which is located between Hauptwache and Eschenheimer Tor, will certainly not notice, on the other hand, is the eneo system which works discretely in the background to ensure the safety of visitors, employees and displayed vehicles. The Stuttgart-based systems firm mevis.tv and Digi-com informationstechnologie from Göppingen are responsible for the installation and entry into service. Both companies can look back on years of cooperation and have already carried out many demanding projects. Tamer Vural from Digicom cites several reasons why the eneo solution was awarded the contract for this project: "We recommended the eneo IN cameras to our customer because they are ideal for discreet video security solutions, especially the compact flat dome. These cameras have the advantage of being very powerful and are scarcely noticeable.



The app makes fine-tuning easier for Videor consultant Max Walzer

And the custom matte black finish we commissioned from VIDEOR allows them to blend organically into the studio design. Another advantage is the ability to conveniently control the system via eneo INsight mobile using a smartphone or tablet. We think a lean system that works without a PC client and monitor is a perfect match for the studio's purist design. Another argument in favour of eneo and VIDEOR was the excellent experience we have always had with the pre-configuration service. It makes working much easier when the hard disks are already installed and the cameras integrated, i.e. when tested, ready-to-assemble system components are delivered to the customer. Especially, of course, when a tight schedule has to be met."

MORE THAN VIDEO SECURITY

A total of five eneo IN cameras are in use at the Frankfurt Genesis Studio. Four IND-45F0028M0 flat domes provide an overview of the exhibition area, delivering high-resolution, detailed video images with resolutions of up to 5 megapixelss. Image optimisation features such as BLC, HLC, WDR and 3D-DNR ensure that the cameras consistently capture high-quality images even under changing lighting conditions. As if that were not enough, the cameras are equipped with numerous innovative AI video

analytics functions for proactive video security solutions that can help security managers detect critical situations as they arise and avert potential threats. In addition to this, there are retail intelligence features, such as people counting, queue management and heat maps, providing important data on activity on the sales floor, which can contribute to a greater understanding of customer behaviour.

The rear exit of the studio is overlooked by an IND-42M2808M0A type mini-dome. Equipped with a Sony STARVIS CMOS sensor and a motorised varifocal lens, this camera generates video streams in full HD. The system is configured in a way that allows users to activate AI-based transition counting at any time. People entering and exiting the studio via the main entrance and rear exit are then counted. Store managers know at all times how many people are in the studio.

LEAN, POWERFUL, USER-FRIENDLY

The imagery of the video cameras is recorded and managed using a network recorder from the eneo IN series, which has



The NVR is located in the studio's server room

been equipped with two 4 TB hard disks and fully supports the cameras' AI video analytics functions. The maximum resolution is 8 megapixelss on all IP channels. Users can select various playback modes for video viewing, ranging from full screen to 16-channel split screen. However, as mentioned above, system management is not done via the NVR or a client PC, but by means of the eneo INsight mobile app, which is installed on a



eneo INsight mobile offers a complete overview, anytime and anywhere

smartphone or tablet with just a few clicks. The app gives store managers a comprehensive overview of the studio around the clock, including push notifications in case of an alarm event. In addition, eneo INsight supports mobile full-screen and split-screen views in live and playback mode, as well as communication and interaction options with people in the cameras' field of view, e.g. via bidirectional audio transmission or manual activation of acoustic and visual alarms, provided these functions are supported on the camera side. As with the client version eneo INsight, users also have extensive AI event search options. Here, the numerous filter functions ensure efficient and user-friendly system management.

SMOOTH COMMISSIONING PROCESS

The system was put into service in mid-November, a few days before the soft opening of the Genesis Studio. Energetically supported by VIDEOR consultant Max Walzer, project manager Sascha Kremp from mevis.tv and Tamer Vural from Digicom informationstechnologie put the finishing touches to the system on site before turning it over to Genesis Studio Manager Carsten Pittelkow and Senior Personal Assistant Guido Becker. In addition to the fast, professional system deployment, the performance and user-friendliness of the eneo solution itself ensured a good working atmosphere and a high level of satisfaction. And when the Genesis Studios in Basel and Geneva open soon, eneo IN solutions will discreetly provide security in the background as well. ■



A Mini dome overlooks the back exit



Special colour ex factory? No problem!



LICENSE-FREE MANAGEMENT SOFTWARE



Windows
macOS



- Live display and research (local, NVR, DVR, SD card)
- Flexible search for AI incidents
- Remote configuration of all integrated IN products
- Management of AI databases
- Export of recordings
- Flexible map views with PIP function (live camera images)
- Clearly arranged incident bar



Google Play



App Store





- Live display and research (local, NVR, DVR, SD card) Extensive search options (AI incidents, timeline)
- Remote configuration of the connected devices
- Full screen and multi-screen display
- Management of views
- Control of zoom and PTZ cameras
- Bidirectional audio connection to devices
- Activation of deterrents
- Manual activation of white light
- Control of output contacts
- PUSH notifications for incidents
- Local recording of sequences and still images with sharing option



eneo is a brand of
VIDEOR E. Hartig GmbH
Carl-Zeiss-Straße 8
D-63322 Rödermark
Germany

Telefon +49 6074 - 888 - 0
Telefax +49 6074 - 888 - 100
E-Mail info@eneo-security.com
Web www.eneo-security.com

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The table data in this brochure correspond to the technical status as of 1/9/2023. Subject to change without notice.