



AI Meets Advanced Video Capabilities

The new products in the eneo IN series redefine security

- AI functions at a glance
- 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.



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SMART SECURITY

AI functions for proactive security and more employee comfort



Licence Plate Recognition (LPR), Object Classification 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



eneo IN series



Product number	234751	240083	236317	238642	236668	238647
Product	INP-75A0033MIA	INP-75A0033MIB	INT-85F0003MOA	INB-58F0002MOPA	INM-78M2812MOA	IND-58F0028MTLA
Sensor	1/2.7" OmniVision	1/2.7" OmniVision	256x192 thermal, IP66, PoE, 12V	AI, WDR, PoE, 12V, IP67	1/1.8" progressive Scan, CMOS	1/1.8" Sony sensor IMX678, CMOS
Resolution standard	5 Megapixels	5 Megapixels	5 megapixel (optical)	8 megapixel	32 Megapixel (4x8MP)	8 megapixel
Image resolution max.	2592x1944	2592x1944	2592x1944 pixels (optical) 256x192 pixels (thermal)	3840x2160	4x 3840x2160	3840x2160
System	True Day&Night	True Day&Night	True Day&Night	24h color	Electronic Day&Night	–
Image transmission rate max.	30	30	30	30	30	30
Sensitivity	0.003 lux at F1.6	0.003 lux at F1.6	0.003 Lux @ F1.6 AGC on	0.007 lux at F1.0	0.006 lux at F1.2	0.0005 Lux @ F1.0
Analysis functions	Intrusion, Line detection, Object classification (person / vehicle), Object left, removed, trip wire detection with counting and direction detection, Crowd detection, Queue management, Heatmapping, audio detection, face recognition, Face detection	Intrusion, Line detection, Object classification (person / vehicle), Object left, removed, trip wire detection with counting and direction detection, Crowd detection, Queue management, Heatmapping, audio detection, face recognition, Face detection	Optical Passage counting (CC), Intrusion (PID), Vehicle (VD), Fire detector, Face detection (FD), Heat Map (HM), Line crossing (LCD), Human (PD), Crowd (CD), Rare sounds (RSD), Temperature exception alarm, Queues (QD), Left behind and removed objects (SOD)	Passage counting (CC), Intrusion (PID), Heat Map (HM), Line crossing (LCD), Human / Vehicle object classification (PD&VD), rare noises (RSD)	Passage counting (CC), Intrusion (PID), Face detection (FD), Heat Map (HM), License plate recognition (LPR), Line crossing (LCD), Crowd (CD), Human / Vehicle object classification (PD&VD), Queues (QD), Left-and removed objects (SOD)	Presence (FA), Passage counting (CC), Intrusion (PID), Facial attributes (AD), Face detection (FD), Face recognition (FR), Heat Map (HM), License plate detection (LPD), License plate recognition (LPR), Line crossing (LCD), Crowd (CD), Human / Vehicle object classification (PD&VD), Rare sounds (RSD), Queues (QD), Left-and removed objects (SOD)
Wide Dynamic Range (WDR)	WDR 120dB	WDR 120dB	D-WDR	WDR	WDR 120dB	WDR 120dB
Lens type	4.3-142 mm, 33 x AFZ motorized	4.3-142 mm, 33 x AFZ motorized	Fixed focal length 3.2 mm (thermal), 3.6 mm (optical)	Fixed focal length 2.0mm	2.8-8mm, varifocal (motorized)	2.8mm fixed focal length
Illumination	10x LED 850nm	10x LED 850nm	Infrared, White light	Infrared, White light	8x Dual Illuminator, Infrared, White light	2x White light LED, White light
Illumination range	approx. 150m	approx. 150m	approx. 15m, approx. 30m, Infrared, White light	approx. 15m, approx. 25m, Infrared, White light	approx. 25m White light, approx. 35m IR	approx. 25m
Ethernet interface	10Base-T, 100Base-TX	10Base-T, 100Base-TX	10Base-T, 100Base-TX	10Base-T, 100Base-TX	1000Base-T, 100Base-TX, 10Base-T	100Base-TX, 10Base-T
Alarm inputs	–	–	1	–	Yes	–
Alarm outputs	–	–	1	–	Yes	–
Audio	1/1 line input and output, 2 way audio	1/1 line input and output, 2 way audio	–	–	Yes	2 way audio, built-in speaker, built-in microphone
Internal Storage	microSDHC card, microSDXC card	microSDHC card, microSDXC card	256GB, microSDHC card	256GB, microSDHC card	256GB, microSD card, microSDHC card, microSDXC card	microSDHC card, microSDXC card
ONVIF	ONVIF Profiles G, Profiles S and Profiles T	ONVIF Profiles G, Profiles S and Profiles T	ONVIF Profile G, Profile S, Profile T	ONVIF Profile G, Profile S, Profile T	ONVIF Profiles G, Profiles S and Profiles T	ONVIF Profiles G, Profiles S and Profiles T
Protective rating	IP66	IP66	IP66	IP67	IP67	IP67
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)	-35°C ~ +60°C, @ humidity 90% or less (non-condensing)	-30°C ~ +55°C, @ humidity 95% or less (non-condensing)	-30°C ~ +55°C, @ humidity 95% or less (non-condensing)
Colour	RAL9003, Pantone P 179-1, black	RAL9003, Pantone P 179-1, black	RAL9003, Pantone P 179-1	RAL9003, Pantone P 179-1	Pantone P 179-1, RAL9003	Pantone P 179-1, RAL9003
Supply voltage	12VDC, PoE	12VDC, PoE	12VDC, PoE	12VDC, PoE	12VDC, 24VAC, PoE++	12VDC, PoE
Remarks	NDA compliance under Section 889, Part A	NDA compliance under Section 889, Part A	NDA compliance under Section 889, Part A	NDA compliance under Section 889, Part A	NDA compliance under Section 889, Part A	NDA compliance under Section 889, Part A

NEWCOMERS



INT-8SF0003M0A
Hybrid camera with optical
and thermal imaging sensor



INM-78M2812M0A
360° Multi-sensor camera
with four 4K lenses



IND-58F0028MTLA
Turret camera for excellent Low
Light performance



INB-58F0002M0PA
Panoramic camera for
monitoring large areas

IP Bullet Cameras



Product number	235341	234993	233865	233901	235342	236661
Product	INB-52M2812MOA	INB-55M2713MOA	INB-58M2713MOA	INB-65M2812MFA	INB-68M2812MFA	INB-75M0550MOA
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	NDAA 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.	NDAA 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.	NDAA 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.	NDAA 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.	NDAA 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.	NDAA 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-78M0550MOA
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-54M2812MOA	INP-58M2812MOA	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	236666	236667
Product	IND-32F0016P0A	IND-42M2808M0A	IND-45F0022M0A	IND-55M2812MTA	IND-58M2812MTA
Sensor	1 2/3" OmniVision	1 2/8" Sony STARVIS, Sensor IMX307	1 2/7" SmartSens, SC500AI	1 2/7" SmartSens, SC500AI	1 2/8" Sony STARVIS, Sensor IMX415
Resolution standard	12 megapixels	HD 1080p	5 megapixels	5 megapixels	8 megapixels
Image resolution max.	4000x3000	1920x1080	2880x1620	2880x1620	3840x2160
Image transmission rate	15	60	30	30	30
System	True Day&Night	True Day&Night	True Day&Night	24h Colour	24h Colour
Sensitivity	0,01 Lux @ F1,6	0,002 Lux @ F1,2	0,002 Lux @ F1,6	0,002 Lux @ F1,0	0,007 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	2,8~12mm, Varifocal (motorized)	2,8~12mm, Varifocal (motorized)
Illumination	Infrared	Infrared	Infrared	Infrared, whitelight	Infrared, whitelight
Illumination range	Approx. 10m	Approx. 20m	Approx. 20m	Approx. 30m IR, Approx. 25m whitelight	Approx. 25m, Approx. 20m 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	1	1
Alarm output	1	1	No	1	1
Audio	Built in speaker & microphone	1/1 Line input and output,	Built in 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	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	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)
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	12VDC, 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.



233819	235253	235255	235254	235256
IND-62M2812MOA	IND-65M2713MOA	IND-65M2812MFA	IND-68M2713MOA	IND-68M2812MFA
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
HD 1080p	5 megapixels	5 megapixels	8 megapixels	8 megapixels
1920x1080	2592x1944	2880x1620	3840x2160	3840x2160
60	30	30	30	30
True Day&Night	True Day&Night	24h Colour	True Day&Night	24h Colour
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)
D-WDR	WDR 120dB	WDR 120dB	WDR 120dB	WDR 120dB
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	Infrared	Infrared, whitelight	Infrared	Infrared, 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
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,
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
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)
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
NDAA 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.	NDAA 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.	NDAA 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.	NDAA 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.	NDAA 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	10 TB	40 TB	288 TB
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
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 transfer 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.



FREE MANAGEMENT SOFTWARE



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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



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Google Play



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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





NEW APPLICATIONS FOR VIDEO SECURITY TECHNOLOGY

Live at the ultra run – with eneo

Ultra running is extremely challenging, even for hardened runners. That is why it is becoming increasingly popular. And more and more often, such superlative competitions are documented on video or streamed live on the Internet. One example is the privately organised ultra marathon Wehrheimer Backyard Ultra (WEHBU), which took place for the fourth time in June this year.

A total of 65 runners, both male and female, pushed themselves to their performance limits: a round of 6.706 kilometres (4.167 miles) has to be completed every hour on the hour, so that in 24 hours exactly the distance of a 100-mile run is covered. The race is run on a knock-out basis – the race continues until only one runner remains.

This year, the WEHBU was streamed live on a video platform for the first time. Not by means of a camcorder, but with a high-performance eneo IP surveillance camera, the INB-65M2812MFA from the eneo IN series. This model's CMOS sensor generates images with resolutions of up to five megapixels and, like all IN cameras, the INB-65M2812MFA features numerous AI-based video analysis functions.



Video surveillance cameras are particularly well suited for use at such events because they are designed for continuous operation and deliver high-resolution, detailed images even in challenging visibility and weather conditions. The INB-65M2812MFA used at WEHBU generates high-resolution colour images around the clock thanks to its excellent light sensitivity and integrated white light illumination, while the WDR image optimisation function ensures clearly recognisable images even in changing light conditions. And thanks to the motorised varifocal lens with flexible focal length, the field of view can be adjusted quickly and accurately. It is not least these technical features of the eneo camera that made it possible for viewers from all over the world to see the entire WEHBU start and finish area on their home screens in a video stream, while the high, detailed image resolution enhanced the impression of being there live.

Benjamin Fuchs, organiser of WEHBU, drew a positive conclusion: "We will definitely rely on eneo camera solutions again for the next edition of WEHBU in May 2025 and are already planning to place an extra camera on the track."

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The table data in this brochure correspond to the technical status as of 20/9/2024. Subject to change without notice.