

# PRODUCT CATALOG

## IP VIDEO SURVEILLANCE

**NOVUS®**



NOVUS IP

**THERMO  
VISION**

**MOTOR  
ZOOM**

**FISHEYE**



**VCA  
ANALYSIS**

**STARLIGHT**

**H.265**

**ipGO**



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# IP BRIEF DESCRIPTION

## ABILITY TO RECOGNIZE SMALL SCENES DETAILS

The greatest advantage of IP surveillance television is the excellent image quality. The signal is sent in digital form. Standardized protocols are used for communication between cameras and recorders, which ensures universal compatibility of devices available on the market. Thanks to wide range of IP cameras, it is possible to choose the resolution most suitable to the needs of the investor and the type of installation.

Currently, the NOVUS offer includes models with a resolution up to 12 Mpx, but work is underway to implement cameras with even higher resolutions.

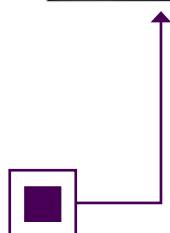


## COMPATIBILITY WITH NMS SOFTWARE

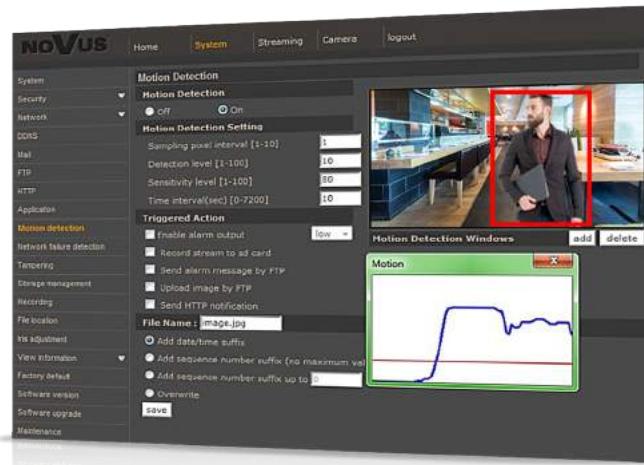


## CONFIGURATION OF THE DISPERSED IP SYSTEM

Server units can be configured remotely by clients units without direct access the system.



# NOVUS IP

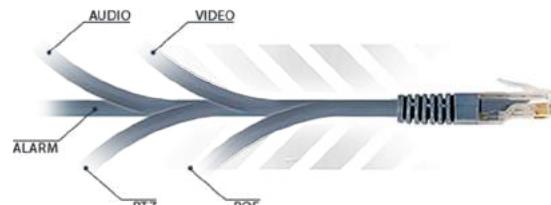


## EASY ACCESS TO CAMERA MENU AND USER-FRIENDLY INTERFACE

A huge advantage of IP cameras is an easy access to the device using the connection via web browser. In addition, many camera functions can be configured directly from the recorder.

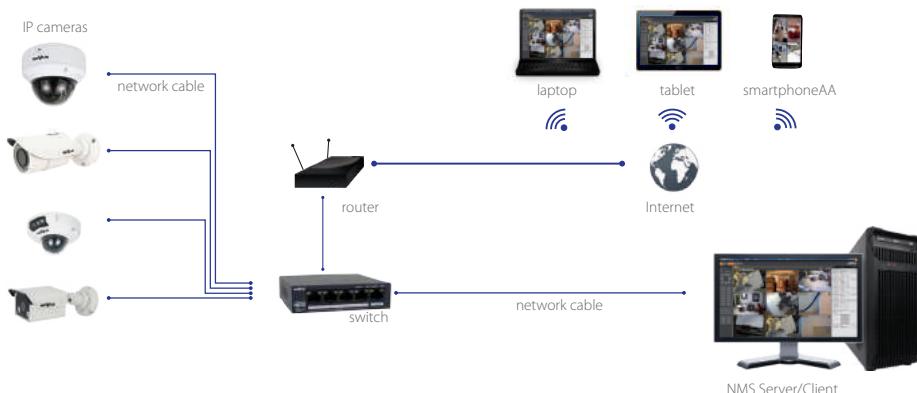
## SIMPLICITY OF INSTALLATION

In the vast majority of IP cameras, power supply can be implemented normally (via 12 VDC power supplies or 230/24 VAC transformers), as well as using PoE (Power over Ethernet) supply standard. PoE enables signal and power supply transmission to the camera via one twisted-pair cable. This reduces costs of system building – there are less wires in use, and there's no need to use any additional power supplies. The extra advantage is reducing the unaesthetic wiring – it is possible to install monitoring system in furnished interiors without cutting walls.



## MONITORING AND MANAGEMENT FOR SINGLE OR DISPERSED NETWORKS OF OBJECTS

Thanks to the development of 3G networks and mobile devices, access to streams from cameras in live and playback mode can be realized using mobile devices from any location. Remote access via a web browser to the entire system and each camera allows for full system configuration.



# 1.3 Mpx IP CAMERAS



**1.3**  
Mpx

**30**  
fps

	<b>NVIP-1DN3031V/IR-1P</b>	<b>NVIP-1DN3034V/IR-1P</b>	<b>NVIP-1DN3030H/IR-1P</b>	<b>NVIP-1DN5001H/IRH-1P</b>
<b>Image</b>				
Image Sensor	1.3 Mpx, CMOS sensor, 1/3", APTINA	1.3 Mpx, CMOS sensor, 1/3", APTINA	1.3 Mpx, CMOS sensor, 1/3", APTINA	1.3 Mpx, CMOS sensor, 1/3", APTINA
Number of Effective Pixels	1280 (H) x 960 (V)	1280 (H) x 960 (V)	1280 (H) x 960 (V)	1280 (H) x 960 (V)
Min. Illumination	0.02 lx/F1.8 - color mode 0 lx (IR ON) - b&w mode	0.01 lx/F1.4 - color mode 0 lx (IR ON) - b&w mode	0.02 lx/F1.8 - color mode 0 lx (IR ON) - b&w mode	0.67 lx/F2.2 - color mode 0.034 lx/F2.2 - color mode (DSS) 0 lx (IR ON) - b&w mode
Wide Dynamic Range (WDR)	yes	yes	yes	-
Digital Noise Reduction (DNR)	3D	3D	3D	3D
Defog Function (F-DNR)	yes	yes	yes	-
Digital Slow Shutter (DSS)	-	-	-	up to 1/5 s
<b>Lens</b>				
Lens Type	standard, f=3.6 mm/F1.8	varifocal, f=2.8 ~ 12 mm/F1.4	standard, f=2.8 mm/F1.8	standard, f=3.6 mm/F2.2
Day/Night				
Switching Type	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter
Switching Mode	auto, manual, time	auto, manual, time	auto, manual, time	auto, manual, time
<b>Network</b>				
Stream Resolution	1280 x 960, 1280 x 720 (HD), 640 x 480 (VGA), 320 x 240 (QVGA)	1280 x 960, 1280 x 720 (HD), 720 x 576 (D1), 352 x 288 (CIF)	1280 x 960, 1280 x 720 (HD), 640 x 480 (VGA), 320 x 240 (QVGA)	1280 x 960, 1280 x 720 (HD), 720 x 576 (D1), 640 x 480 (VGA), 640 x 360, 352 x 288 (CIF), 320 x 240 (QVGA)
Frame Rate	30 fps for 1280 x 960 and lower resolutions	30 fps for 1280 x 960 and lower resolutions	30 fps for 1280 x 960 and lower resolutions	30 fps for each resolution
Multistreaming Mode	3 streams	3 streams	3 streams	2 streams
Video/Audio Compression	H.264+/G.711	H.264+/G.711	H.264+/G.711	H.264, MJPEG/-
Number of Simultaneous Connections	max. 4	max. 4	max. 4	max. 10
Bandwidth	9 Mb/s in total	9 Mb/s in total	9 Mb/s in total	3.5 Mb/s in total
ONVIF Protocol Support	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.2)
Compatible Software	NMS	NMS	NMS	NMS
<b>Other functions</b>				
Privacy Zones	4	4	4	5
Motion Detection	yes	yes	yes	yes
System Reaction to Alarm Events	e-mail with attachment, saving file on FTP server	e-mail with attachment, saving file on FTP server	e-mail with attachment, saving file on FTP server	e-mail with attachment, saving file on FTP server, saving file on NAS server
<b>IR LED</b>				
LED Number	24	30	36	2
Range	20 m	30 m	20 m	15 m
<b>Interfaces</b>				
Audio Input/Output	1 x Jack (3.5 mm)/-	1 x Jack (3.5 mm)/-	1 x Jack (3.5 mm)/-	-
<b>Installation parameters</b>				
Enclosure	IK10 impact rating aluminium, white, white poly-carbonate bubble	aluminium vandalproof, white	aluminium, white, fully cable manged wall mount bracket in-set included	aluminium, white, fully cable manged wall mount bracket in-set included
Power Supply	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC
Operating Temperature	-30°C ~ 50°C	-30°C ~ 50°C	-30°C ~ 50°C	-40°C ~ 55°C
Degree of Protection	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)
Built-in heater/fan	-	-	-	yes/no
Dimensions (mm)	116 (Φ) x 91 (H)	130 (Φ) x 109 (H)	with bracket: 87 (Φ) x 219 (L)	with bracket: 70 (W) x 63 (H) x 169 (L)

## 2 Mpx IP CAMERAS



**2**  
Mpx      **30**  
fps

	NVIP-2DN3038D/IR-1P	NVIP-2DN2006V/IR-1P	NVIP-2DN3031V/IR-1P-II	NVIP-2DN3032AV/IR-1P
<b>VCA ANALYSIS</b>				
<b>IK10</b>			<b>IK10</b>	<b>IK10</b>
<b>Image</b>				
Image Sensor	2 Mpx, CMOS sensor, 1/2.7", APTINA	2 Mpx, CMOS sensor, 1/2.8", SONY Exmor R STARVIS	2.0 Mpx, CMOS sensor, 1/2.7", APTINA	2 Mpx, CMOS sensor, 1/2.7", APTINA
Number of Effective Pixels	1920 (H) x 1080 (V)	1945 (H) x 1097 (V)	1920 (H) x 1080 (V)	1920 (H) x 1080 (V)
Min. Illumination	0.07 lx/F1.4 - color mode 0 lx (IR ON) - b&w mode	0.01 lx/F1.2 - color mode 0 lx (IR ON) - b&w mode	0.12 lx/F1.85 - color mode 0 lx (IR ON) - b&w mode	0.07 lx/F1.4 - color mode 0 lx (IR ON) - b&w mode
Wide Dynamic Range (WDR)	yes (double scan sensor), 120dB	yes (double scan sensor), 120dB	yes, 120dB	yes (double scan sensor), 120dB
Digital Noise Reduction (DNR)	3D	2D, 3D	3D	3D
Defog Function (F-DNR)	yes	yes	yes	yes
Highlight Compensation (HLC)	yes	-	yes	yes
Digital Slow Shutter (DSS)	-	do 1/5 s	-	-
<b>Lens</b>				
Lens Type	varifocal, f=2.8 ~ 12 mm/F1.4	motor-zoom, f=2.8 ~ 12 mm/F1.3	standard, f=2.8 mm/F1.85	motor-zoom, f=2.8 ~ 12 mm/F1.4
Day/Night				
Switching Type	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter
Switching Mode	auto, manual, time	auto, manual	auto, manual, time	auto, manual, time
<b>Network</b>				
Stream Resolution	1920 x 1080 (Full HD), 1280 x 720 (HD), 640 x 480 (VGA), 320 x 240 (QVGA)	1920 x 1080 (Full HD), 1280 x 960, 1280 x 720 (HD), 640 x 480 (VGA), 320 x 240 (QVGA)	1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 480 x 270, 352 x 288 (CIF)	1920 x 1080 (Full HD), 1280 x 720 (HD), 640 x 480 (VGA), 320 x 240 (QVGA)
Frame Rate	30 fps for 1920 x 1080 (Full HD) and lower resolutions	30 fps for each resolution	30 fps for 1920 x 1080 (Full HD) and lower resolutions	30 fps for 1920 x 1080 (Full HD) and lower resolutions
Multistreaming Mode	3 streams	3 streams	3 streams	3 streams
Video/Audio Compression	H.264, H.265, MJPEG/G.711	H.264, H.265/G.711, G.726, ADPCM	H.264, H.264+, H.265, MJPEG/G.711	H.264, H.265, MJPEG/G.711
Number of Simultaneous Connections	max. 4	max. 10	max. 4	max. 4
Bandwidth	9 Mb/s in total	8 Mb/s in total	8 Mb/s in total	9 Mb/s in total
ONVIF Protocol Support	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.6)	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.3)
Compatible Software	NMS	NMS	NMS	NMS
<b>Other functions</b>				
Privacy Zones	4	4	4	4
Motion Detection	yes	yes	yes	yes
Video Content Analysis (VCA)	tamper, line cross, zone entrance	tamper, abandoned object, object disappearance, line cross, zone entrance	tamper, line cross, zone entrance	tamper, line cross, zone entrance
System Reaction to Alarm Events	e-mail with attachment, saving file on FTP server, saving file on SD card, alarm output activation	e-mail with attachment, alarm output activation	e-mail with attachment, saving file on FTP server, saving file on SD card	e-mail with attachment, saving file on FTP server, saving file on SD card, alarm output activation
<b>IR LED</b>				
LED Number	30	40	16	30
Range	30 m	40 m	20 m	30 m
<b>Interfaces</b>				
Audio Input/Output	1 x Jack (3.5 mm)/1 x Jack (3.5 mm) built-in microphone,	1 x RCA/1 x RCA	1 x Jack (3.5 mm)/-	1 x Jack (3.5 mm)/1 x Jack (3.5 mm)
Alarm Input/Output	1 (NO/NC)/1 relay type	1 (NO/NC)/1 relay type	-	1 (NO/NC)/1 relay type
Memory card slot	microSD - capacity up to 128GB	-	microSD - capacity up to 128GB	microSD - capacity up to 128GB
<b>Installation parameters</b>				
Enclosure	plastic, white	aluminium vandalproof, white	IK10 impact rating aluminium, white poly-carbonate bubble	IK10 impact rating aluminium, white poly-carbonate bubble
Power Supply	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC
Operating Temperature	-20°C ~ 50°C	-35°C ~ 60°C	-20°C ~ 50°C	-20°C ~ 50°C
Degree of Protection	-	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)
Dimensions (mm)	122 (Ø) x 96 (H)	151 (Ø) x 113 (H)	116 (Ø) x 91 (H)	150 (Ø) x 114 (H)

# INTELIGENT VIDEO CONTENT ANALYTICS

## NO ADDITIONAL COST

High quality and detailed video image obtained from IP cameras and the image processing efficiency allow to equip IP cameras and recorders in advanced image analysis options (VCA).

Maintenance-free system - automation  
Reducing the number of false alarms  
**Security**

Faster Reaction to Alarm Events

Cost reduction

Smaller archive



**VCA**  
ANALYSIS

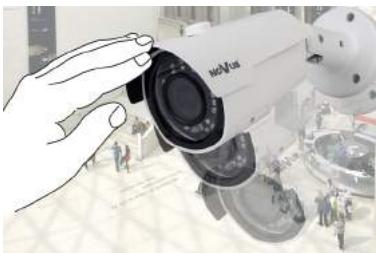


**RECORDING**



Driving in an unauthorised direction





Tamper



Zone entrance



DEVICES



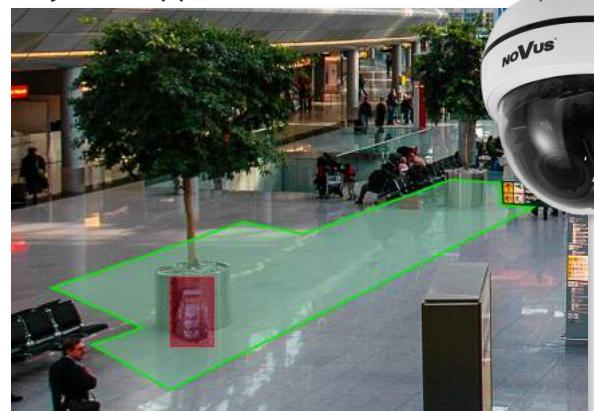
Crowd detection



Illegal parking



Object disappearance/abandonment



## 2 Mpx IP CAMERAS



**2**  
Mpx      **30**  
fps

	NVIP-2DN3033V/IR-1P-II	NVIP-2DN3034AV/IR-1P	NVIP-2DN3036V/IR-1P	NVIP-2DN3037V/IR-1P
<b>Image</b>				
Image Sensor	2 Mpx, CMOS sensor, 1/2.7", APTINA	2 Mpx, CMOS sensor, 1/2.7", APTINA	2 Mpx, CMOS sensor, 1/2.8", SONY Exmor R STARVIS	2 Mpx, CMOS sensor, 1/2.7", APTINA
Number of Effective Pixels	1920 (H) x 1080 (V)	1920 (H) x 1080 (V)	1920 (H) x 1080 (V)	1920 (H) x 1080 (V)
Min. Illumination	0.09 lx/F1.6 - color mode 0 lx (IR ON) - b&w mode	0.07 lx/F1.4 - color mode 0 lx (IR ON) - b&w mode	0.003 lx/F1.4 - color mode 0.0003 lx/F1.4 - b&w mode 0 lx (IR ON) - b&w mode	0.09 lx/F1.6 - color mode 0 lx (IR ON) - b&w mode
Wide Dynamic Range (WDR)	yes (double scan sensor), 120dB	yes (double scan sensor), 120dB	yes	yes (double scan sensor), 120dB
Digital Noise Reduction (DNR)	3D	3D	3D	3D
Defog Function (F-DNR)	yes	yes	-	yes
Highlight Compensation (HLC)	yes	yes	-	yes
Digital Slow Shutter (DSS)	-	-	-	-
<b>Lens</b>				
Lens Type	standard, f=2.8 mm/F1.6	motor-zoom, f=2.8 ~ 12 mm/F1.4	varifocal, f=2.8 ~ 12 mm/F1.4	standard, f=2.8 mm/F1.6
Day/Night				
Switching Type	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter
Switching Mode	auto, manual, time	auto, manual, time	auto, manual, time	auto, manual, time
<b>Network</b>				
Stream Resolution	1920 x 1080 (Full HD), 1280 x 720 (HD), 640 x 480 (VGA), 320 x 240 (QVGA)	1920 x 1080 (Full HD), 1280 x 720 (HD), 640 x 480 (VGA), 320 x 240 (QVGA)	1920 x 1080 (Full HD), 1280 x 720 (HD), 640 x 480 (VGA), 320 x 240 (QVGA)	1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 352 x 288 (CIF)
Frame Rate	30 fps for 1920 x 1080 (Full HD) and lower resolutions	30 fps for 1920 x 1080 (Full HD) and lower resolutions	30 fps for 1920 x 1080 (Full HD) and lower resolutions	30 fps for 1920 x 1080 (Full HD) and lower resolutions
Multistreaming Mode	3 streams	3 streams	3 streams	3 streams
Video/Audio Compression	H.264, H.265, MJPEG/G.711	H.264, H.265, MJPEG/G.711	H.264+, MJPEG/G.711	H.264, H.265, MJPEG/G.711
Number of Simultaneous Connections	max. 4	max. 4	max. 1	max. 5
Bandwidth	9 Mb/s in total	9 Mb/s in total	6 Mb/s in total	9 Mb/s in total
ONVIF Protocol Support	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.3)
Compatible Software	NMS	NMS	NMS	NMS
<b>Other functions</b>				
Privacy Zones	4	4	4	4
Motion Detection	yes	yes	yes	yes
Video Content Analysis (VCA)	tamper, line cross, zone entrance	tamper, line cross, zone entrance	-	tamper, line cross, zone entrance
System Reaction to Alarm Events	e-mail with attachment, saving file on FTP server	e-mail with attachment, saving file on FTP server	e-mail with attachment, saving file on FTP server	e-mail with attachment, saving file on FTP server, saving file on SD card
<b>IR LED</b>				
LED Number	10	2	2	10
Range	20 m	30 m	30 m	10 m
<b>Interfaces</b>				
Audio Input/Output	1 x Jack (3.5 mm)/-	1 x Jack (3.5 mm)/-	-	built-in microphone, 1 x Jack (3.5 mm)/-
Alarm Input/Output	-	-	-	-
Memory card slot	-	-	-	microSD - capacity up to 128GB
<b>Installation parameters</b>				
Enclosure	aluminium vandalproof, white	aluminium vandalproof, white	aluminium vandalproof, white	IK10 impact rating aluminium, white polycarbonate bubble
Power Supply	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC
Operating Temperature	-30°C ~ 50°C	-20°C ~ 50°C	-30°C ~ 50°C	-20°C ~ 50°C
Degree of Protection	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)
Built-in heater/fan	-	-	-	-
Dimensions (mm)	108 (Φ) x 90 (H)	130 (Φ) x 109 (H)	130 (Φ) x 112 (H)	110 (Φ) x 58 (H)

<b>NVIP-2DN5002V/IRH-1P</b>	<b>NVIP-2DN2006H/IR-1P</b>	<b>NVIP-2DN3030H/IR-1P-II</b>	<b>NVIP-2DN3031AH/IR-1P</b>
	 <b>IK10</b>  	 <b>IK10</b>  	 <b>IK10</b>  
2 Mpx, CMOS sensor, 1/3", APTINA	2 Mpx, CMOS sensor, 1/2.8", SONY Exmor R STARVIS	2 Mpx, CMOS sensor, 1/2.7", APTINA	2 Mpx, CMOS sensor, 1/2.7", APTINA
1920 (H) x 1080 (V)	1945 (H) x 1097 (V)	1920 (H) x 1080 (V)	1920 (H) x 1080 (V)
0.8 lx/F2.0 - color mode 0.04 lx/F2.0 - color mode (DSS) 0 lx (IR ON) - b&w mode	0.01 lx/F1.3 - color mode 0 lx (IR ON) - b&w mode	0.09 lx/F1.6 - color mode 0 lx (IR ON) - b&w mode	0.07 lx/F1.4 - color mode 0 lx (IR ON) - b&w mode
yes	yes (double scan sensor), 120dB	yes (double scan sensor), 120dB	yes (double scan sensor), 120dB
2D, 3D	2D, 3D	3D	3D
-	yes	yes	yes
-	-	yes	yes
do 1/5 s	do 1/5 s	-	-
standard, f=2.8 mm/F2.0	motor-zoom, f=2.7 ~ 13.5 mm/F1.3	standard, f=2.8 mm/F1.6	motor-zoom, f=2.8 ~ 12 mm/F1.4
mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter
auto, manual, time	auto, manual	auto, manual, time	auto, manual, time
1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 640 x 480 (VGA), 640 x 360, 352 x 288 (CIF), 320 x 240 (QVGA), 176 x 144 (QCIF)	1920 x 1080 (Full HD), 1280 x 960, 1280 x 720 (HD), 640 x 480 (VGA), 320 x 240 (QVGA)	1920 x 1080 (Full HD), 1280 x 720 (HD), 640 x 480 (VGA), 320 x 240 (QVGA)	1920 x 1080 (Full HD), 1280 x 720 (HD), 640 x 480 (VGA), 320 x 240 (QVGA)
30 fps for 1920 x 1080 (Full HD) and lower resolutions	30 fps for each resolution	30 fps for 1920 x 1080 (Full HD) and lower resolutions	30 fps for 1920 x 1080 (Full HD) and lower resolutions
2 streams	3 streams	3 streams	3 streams
H.264, MJPEG/G.711, RAW_PCM	H.264, H.265/G.711, G.726, ADPCM	H.264, H.265, MJPEG/G.711	H.264, H.265, MJPEG/G.711
max. 2	max. 10	max. 4	max. 4
5 Mb/s in total	8 Mb/s in total	9 Mb/s in total	9 Mb/s in total
Profile S (ONVIF 2.2)	Profile S (ONVIF 2.6)	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.3)
NMS	NMS	NMS	NMS
4	4	4	4
yes	yes	yes	yes
-	tamper, abandoned object, object disappearance, line cross, zone entrance	tamper, line cross, zone entrance	tamper, line cross, zone entrance
e-mail with attachment, saving file on SD card	e-mail with attachment, saving file on FTP server, saving file on SD card, alarm output activation	e-mail with attachment, saving file on FTP server	e-mail with attachment, saving file on FTP server
1	30	36	36
6 m	45 m	30 m	30 m
1 x RCA/1 x RCA	1 x RCA/1 x RCA	1 x Jack (3.5 mm)/-	1 x Jack (3.5 mm)/-
-	1 (NO/NC)/1 relay type	-	-
microSD - capacity up to 32GB	microSD - capacity up to 128GB	-	-
aluminium vandalproof, white	aluminium, white, fully cable managed wall mount bracket in-set included	aluminium, white, fully cable managed wall mount bracket in-set included, IK10 impact rating	aluminium, white, fully cable managed wall mount bracket in-set included, IK10 impact rating
PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC
-20°C ~ 55°C	-35°C ~ 60°C	-20°C ~ 50°C	-20°C ~ 50°C
IP 65 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)
yes/no	-	-	-
100 (Φ) x 53 (H)	with bracket: 84 (Φ) x 241 (L)	with bracket: 87 (Φ) x 219 (L)	with bracket: 87 (Φ) x 219 (L)

## 2 Mpx IP CAMERAS



<b>2</b>	<b>30</b>	<b>60</b>
Mpx	fps	fps

NMS Compatible

ONVIF

	<b>NVIP-2DN3036H/IR-1P</b>	<b>NVIP-2DN7460H/IRH-2P</b>	<b>NVIP-2DN3000C-2P</b>	<b>NVIP-2DN7400C-1P</b>	<b>NVIP-2C5000ATM</b>
<b>IK10</b>					
<b>Image</b>					
Image Sensor	2 Mpx, CMOS sensor, 1/2.8", SONY Exmor R STARVIS	2 Mpx, CMOS sensor, 1/1.9", SONY Exmor	2 Mpx, CMOS sensor, 1/3", SONY	2 Mpx, CMOS sensor, 1/1.9", SONY Exmor	2 Mpx, CMOS sensor, 1/2.8", SONY Exmor R STARVIS
Number of Effective Pixels	1920 (H) x 1080 (V)	1920 (H) x 1080 (V)	1920 (H) x 1080 (V)	1920 (H) x 1080 (V)	1945 (H) x 1097 (V)
Min. Illumination	0.003 lx/F1.4 - color mode 0.0003 lx/F1.4 - b&w mode 0 lx (IR ON) - b&w mode	0.01 lx/F1.5 - color mode (DSS) 0.0005 lx/F1.5 - b&w mode (DSS) 0 lx (IR ON) - b&w mode	0.1 lx/F1.2 - color mode 0.02 lx/F1.2 - b&w mode	0.002 lx/F1.2 - color mode (DSS) 0.0002 lx/F1.2 - b&w mode (DSS)	0.05 lx/F2.0 - color mode 0.05 lx/F2.0 - b&w mode 0.01 lx/F2.0 - color mode (DSS) 0.01 lx/F2.0 - b&w mode (DSS)
Wide Dynamic Range (WDR)	yes	yes (double scan sensor), 120dB	yes	yes (double scan sensor), 120dB	yes (double scan sensor), 120dB
Digital Noise Reduction (DNR)	3D	2D, 3D	3D	2D, 3D	2D, 3D
Defog Function (F-DNR)	-	-	-	-	yes
Digital Slow Shutter (DSS)	-	up to 1 s	-	up to 1 s	up to 1 s
<b>Lens</b>					
Lens Type	varifocal, f=2.8 ~ 12 mm/F1.4	motor-zoom auto-iris function, f=3.3 ~ 8 mm/F1.5	-	-	pinhole, f=3.7 mm/F2.0
Auto-back-focus	-			yes	-
<b>Day/Night</b>					
Switching Type	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	elektroniczna funkcja Day/Night
Switching Mode	auto, manual, time	auto, manual, time, external, light sensor, smart	auto, manual, time	auto, manual, time, external, light sensor, smart	auto, manual, time
<b>Network</b>					
Stream Resolution	1920 x 1080 (Full HD), 1280 x 720 (HD), 640 x 480 (VGA), 320 x 240 (QVGA)	1920 x 1080 (Full HD), 1280 x 1024 (SXGA), 1280 x 720 (HD), 1024 x 768 (XGA), 800 x 600 (SVGA), 720 x 576 (D1), 640 x 480 (VGA), 352 x 288 (CIF), 176 x 144 (QCIF)	1920 x 1080 (Full HD), 1280 x 720 (HD), 1024 x 768 (XGA), 800 x 600 (SVGA), 720 x 576 (D1), 640 x 480 (VGA), 352 x 288 (CIF), 176 x 144 (QCIF)	1920 x 1080 (Full HD), 1280 x 1024 (SXGA), 1280 x 720 (HD), 1024 x 768 (XGA), 800 x 600 (SVGA), 720 x 576 (D1), 640 x 480 (VGA), 352 x 288 (CIF), 176 x 144 (QCIF)	1920 x 1080 (Full HD), 1280 x 720 (HD), 704 x 576, 640 x 480 (VGA), 640 x 360, 352 x 288 (CIF), 320 x 240 (QVGA)
Frame Rate	30 fps for 1920 x 1080 (Full HD) and lower resolutions	60 fps for 1920 x 1080 (Full HD) and lower resolutions	30 fps for 1920 x 1080 (Full HD) and lower resolutions	60 fps for 1920 x 1080 (Full HD) and lower resolutions	30 fps for 1920 x 1080 (Full HD) and lower resolutions
Multistreaming Mode	3 streams	4 streams	2 streams	4 streams	2 streams
Video/Audio Compression	H.264+, MJPEG/G.711	H.264, MJPEG/G.711, G.726	H.264, MJPEG/G.711	H.264, MJPEG/G.711, G.726	H.264, H.265, MJPEG/G.711, RAW_PCM
Number of Simultaneous Connections	max. 1	max. 1	max. 4	max. 1	max. 8
Bandwidth	6 Mb/s in total	6 Mb/s in total	9 Mb/s in total	6 Mb/s in total	30 Mb/s in total
ONVIF Protocol Support	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.6)	Profile S (ONVIF 2.4)	Profile S (ONVIF 2.6)	Profile S (ONVIF 2.6)
Compatible Software	NMS	NMS	NMS	NMS	NMS
<b>Other functions</b>					
Privacy Zones	4	5	4	5	4
Motion Detection	yes	yes	yes	yes	yes
Video Content Analysis (VCA)	-	face detection	-	face detection	-
System Reaction to Alarm Events	e-mail with attachment, saving file on FTP server	e-mail with attachment, saving file on FTP server, saving file on SD card, saving file on NVR server, alarm output activation, HTTP notification	e-mail with attachment, saving file on FTP server, saving file on SD card, alarm output activation	e-mail, e-mail with attachment, saving file on FTP server, saving file on SD card, alarm output activation, HTTP notification	e-mail with attachment, saving file on FTP server, saving file on SD card, alarm output activation
<b>IR LED</b>					
LED Number	36	6	-	-	-
Range	30 m	40 m	-	-	-
<b>Interfaces</b>					
Audio Input/Output	-	1 x Jack (3.5 mm)/ 1 x Jack (3.5 mm)	1 x Jack (3.5 mm)/ 1 x Jack (3.5 mm)	1 x Jack (3.5 mm)/ 1 x Jack (3.5 mm)	1 x Jack (3.5 mm)/ 1 x Jack (3.5 mm)
Alarm Input/Output	-	1 (NO/NC)/1	1 (NO/NC)/1 relay type	1 (NO/NC)/1	2 (NO/NC)/1
Memory card slot	-	microSD - capacity up to 32GB	SD - capacity up to 64GB	microSD - capacity up to 32GB	microSD - capacity up to 128GB
<b>Installation parameters</b>					
Enclosure	aluminium, white, fully cable managed wall mount bracket in-set included, IK10 impact rating	aluminium, white, fully cable managed wall mount bracket in-set included	aluminium, white	aluminium, white	-
Power Supply	PoE, 12 V DC	PoE, 12 V DC/24 V AC	PoE, 12 V DC, 24 V AC	PoE, 12 V DC	12 V DC
Operating Temperature	-30°C ~ 50°C	-40°C ~ 50°C	-10°C ~ 50°C	-10°C ~ 50°C	-10°C ~ 50°C
Degree of Protection	IP66 (details in the user's manual)	IP66 (details in the user's manual)	-	-	-
Built-in heater/fan	-	yes/no	-	-	-
Dimensions (mm)	with bracket: 87 (Φ) x 219 (L)	with bracket: 90 (Φ) x 280 (L)	70 (W) x 60 (H) x 140 (L)	80 (W) x 53 (H) x 150 (L)	33 (W) x 32 (H) x 33 (L) - sensor module



**noVus®**

 **STARLIGHT**

## STARLIGHT! A COLORFUL IMAGE AT NIGHT

ULTRASENSITIVE IP CAMERAS  
WITH A NEW GENERATION TRANSDUCER

Distribution:

# 4 Mpx IP CAMERAS



<b>4</b>	<b>Mpx</b>
<b>20</b>	<b>fps</b>
<b>30</b>	<b>fps</b>

	<b>NVIP-4DN3516D/IR-1P</b>	<b>NVIP-4DN2001V/IR-1P-II</b>	<b>NVIP-4DN2002V/IR-1P-II</b>	<b>NVIP-4DN2004V/IR-1P-II</b>	<b>NVIP-4DN3513V/IR-1P</b>
<b>VCA ANALYSIS</b>					
<b>IK10</b>					
<b>Image</b>					
Image Sensor	4 Mpx, CMOS sensor, 1/3", OV	4 Mpx, CMOS sensor, 1/3", OV	4 Mpx, CMOS sensor, 1/3", OV	4 Mpx, CMOS sensor, 1/3", OV	4 Mpx, CMOS sensor, 1/3", OV
Number of Effective Pixels	2688 (H) x 1520 (V)	2688 (H) x 1520 (V)	2688 (H) x 1520 (V)	2688 (H) x 1520 (V)	2688 (H) x 1520 (V)
Min. Illumination	0.07 lx/F1.4 - color mode 0 lx (IR ON) - b&w mode	0.07 lx/F2.1 - color mode 0 lx (IR ON) - b&w mode	0.06 lx/F1.3 - color mode 0 lx (IR ON) - b&w mode	0.06 lx/F1.3 - color mode 0 lx (IR ON) - b&w mode	0.09 lx/F1.6 - color mode 0 lx (IR ON) - b&w mode
Wide Dynamic Range (WDR)	yes (double scan sensor), 120dB	yes (double scan sensor), 90dB	yes (double scan sensor), 90dB	yes (double scan sensor), 90dB	yes (double scan sensor), 120dB
Digital Noise Reduction (DNR)	2D, 3D	2D, 3D	2D, 3D	2D, 3D	2D, 3D
Defog Function (F-DNR)	yes	yes	yes	yes	yes
Highlight Compensation (HLC)	yes	-	-	-	yes
Digital Slow Shutter (DSS)	-	do 1/5 s	do 1/5 s	do 1/5 s	-
<b>Lens</b>					
Lens Type	varifocal, f=2.8 ~ 12 mm/F1.4	standard, f=2.8 mm/F2.1	varifocal, f=2.7 ~ 13.5 mm/F1.3	motor-zoom, f=2.7 ~ 13.5 mm/F1.3	standard, f=3.6 mm/F1.6
<b>Day/Night</b>					
Switching Type	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter
Switching Mode	auto, manual, time	auto, manual	auto, manual	auto, manual	auto, manual, time
<b>Network</b>					
Stream Resolution	2592 x 1520, 2560 x 1440 (QHD), 2304 x 1296, 1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 352 x 288 (CIF)	2592 x 1520, 2304 x 1296, 2048 x 1520, 1920 x 1080 (Full HD), 1280 x 960, 1280 x 720 (HD), 704 x 576, 640 x 480 (VGA), 320 x 240 (QVGA)	2592 x 1520, 2304 x 1296, 2048 x 1520, 1920 x 1080 (Full HD), 1280 x 960, 1280 x 720 (HD), 704 x 576, 640 x 480 (VGA), 320 x 240 (QVGA)	2592 x 1520, 2304 x 1296, 2048 x 1520, 1920 x 1080 (Full HD), 1280 x 960, 1280 x 720 (HD), 704 x 576, 640 x 480 (VGA), 320 x 240 (QVGA)	2592 x 1520, 2560 x 1440 (QHD), 2304 x 1296, 1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 352 x 288 (CIF)
Frame Rate	30 fps for 2592 x 1520 60 fps for 1920 x 1080 (Full HD) and lower resolutions	20 fps for 2592 x 1520 30 fps for 2048 x 1520 and lower resolutions	20 fps for 2592 x 1520 30 fps for 2048 x 1520 and lower resolutions	20 fps for 2592 x 1520 30 fps for 2048 x 1520 and lower resolutions	30 fps for 2592 x 1520 60 fps for 1920 x 1080 (Full HD) and lower resolutions
Multistreaming Mode	3 streams	3 streams	3 streams	3 streams	3 streams
Video/Audio Compression	H.264, H.265, MJPEG/G.711	H.264, H.265/-	H.264, H.265/-	H.264, H.265/-	H.264, H.265, MJPEG/G.711
Number of Simultaneous Connections	max. 5	max. 10	max. 10	max. 10	max. 5
Bandwidth	30 Mb/s in total	63 Mb/s in total	63 Mb/s in total	63 Mb/s in total	30 Mb/s in total
ONVIF Protocol Support	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.6)	Profile S (ONVIF 2.6)	Profile S (ONVIF 2.6)	Profile S (ONVIF 2.3)
Compatible Software	NMS	NMS	NMS	NMS	NMS
<b>Other functions</b>					
Privacy Zones	4	4	4	4	4
Motion Detection	yes	yes	yes	yes	yes
Video Content Analysis (VCA)	tamper, abandoned object, object disappearance, line cross, zone entrance	tamper, abandoned object, object disappearance, line cross, zone entrance, object counting, face detection, pedestrian detection	tamper, abandoned object, object disappearance, line cross, zone entrance, face detection, pedestrian detection, cross counting	tamper, abandoned object, object disappearance, line cross, zone entrance, face detection, pedestrian detection, cross counting	tamper, abandoned object, object disappearance, line cross, zone entrance
System Reaction to Alarm Events	e-mail with attachment, saving file on FTP server, saving file on SD card	e-mail with attachment, saving file on FTP server	e-mail with attachment, saving file on FTP server	e-mail with attachment, saving file on FTP server	e-mail with attachment, saving file on FTP server
<b>IR LED</b>					
LED Number	30	18	40	40	24
Range	30 m	30 m	40 m	40 m	20 m
<b>Interfaces</b>					
Audio Input/Output	built-in microphone, 1 x Jack (3.5 mm)/-	-	-	-	1 x Jack (3.5 mm)/-
Memory card slot	microSD - capacity up to 128GB	-	-	-	-
Alarm Input/Output	-	-	-	-	-
<b>Installation parameters</b>					
Enclosure	plastikowa, white	aluminium vandalproof, white	aluminium vandalproof, white	aluminium vandalproof, white	IK10 impact rating aluminium, white poly-carbonate bubble
Power Supply	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC
Operating Temperature	-20°C ~ 50°C	-35°C ~ 60°C	-35°C ~ 60°C	-35°C ~ 60°C	-20°C ~ 50°C
Degree of Protection	-	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)
Built-in heater/fan	-	-	-	-	-
Dimensions (mm)	122 (Φ) x 96 (H)	100 (Φ) x 90 (H)	135 (Φ) x 128 (H)	135 (Φ) x 128 (H)	116 (Φ) x 91 (H)

NVIP-4DN3514V/IR-1P	NVIP-4DN3515V/IR-1P	NVIP-4DN3517V/IR-1P	NVIP-4DN5002V/IRH-1P	NVIP-4DN5042V/IRH-2P
 <b>IK10</b>  <b>IK10</b>  <b>IK10</b>	 <b>IK10</b> 			 <b>IK10</b>
				
<b>PRO SERIES</b>	<b>PRO SERIES</b>			
4 Mpx, CMOS sensor, 1/3", OV	4 Mpx, CMOS sensor, 1/3", OV	4 Mpx, CMOS sensor, 1/3", OV	4 Mpx, CMOS sensor, 1/3", OV	4 Mpx, CMOS sensor, 1/3", OV
2688 (H) x 1520 (V)	2688 (H) x 1520 (V)	2688 (H) x 1520 (V)	2688 (H) x 1520 (V)	2688 (H) x 1520 (V)
0.07 lx/F1.4 - color mode 0 lx (IR ON) - b&w mode	0.07 lx/F1.4 - color mode 0 lx (IR ON) - b&w mode	0.09 lx/F1.6 - color mode 0 lx (IR ON) - b&w mode	0.03 lx/F2.0 - color mode 0.015 lx/F2.0 - color mode (DSS) 0 lx (IR ON) - b&w mode	0.07 lx/F1.4 - color mode 0.034 lx/F1.4 - color mode (DSS) 0 lx (IR ON) - b&w mode
yes (double scan sensor), 120dB	yes (double scan sensor), 120dB	yes (double scan sensor), 120dB	yes (double scan sensor), 120dB	yes
2D, 3D	2D, 3D	2D, 3D	2D, 3D	2D, 3D
yes	yes	yes	yes	-
yes	yes	yes	-	-
-	-	-	do 1 s	do 1/5 s
varifocal, f=2.8 ~ 12 mm/F1.4	motor-zoom, f=2.8 ~ 12 mm/F1.4	standard, f=2.8 mm/F1.6	standard, f=2.8 mm/F2.0	varifocal auto iris DC, f=3 ~ 12 mm/F1.4
mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter
auto, manual, time	auto, manual, time	auto, manual, time	auto, manual, time	auto, manual, time
2592 x 1520, 2560 x 1440 (QHD), 2304 x 1296, 1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 352 x 288 (CIF)	2592 x 1520, 2560 x 1440 (QHD), 2304 x 1296, 1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 352 x 288 (CIF)	2592 x 1520, 2560 x 1440 (QHD), 2304 x 1296, 1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 352 x 288 (CIF)	2592 x 1520, 2560 x 1440 (QHD), 2304 x 1296, 1920 x 1080 (Full HD), 1280 x 720 (HD), 704 x 576, 640 x 480 (VGA), 640 x 360, 352 x 288 (CIF), 320 x 240 (QVGA)	2688 x 1520, 2560 x 1440 (QHD), 2304 x 1296, 1920 x 1080 (Full HD), 1280 x 720 (HD), 704 x 576, 640 x 480 (VGA), 640 x 360, 352 x 288 (CIF), 320 x 240 (QVGA)
30 fps for 2592 x 1520 60 fps for 1920 x 1080 (Full HD) and lower resolutions	30 fps for 2592 x 1520 and lower resolutions	30 fps for 2592 x 1520 60 fps for 1920 x 1080 (Full HD) and lower resolutions	20 fps for 2592 x 1520 25 fps for 2304 x 1296 and lower resolutions	20 fps for 2688 x 1520, 2560 x 1440 (QHD) 25 fps for 2304 x 1296 30 fps for 1920 x 1080 (Full HD) and lower resolutions
3 streams	3 streams	3 streams	2 streams	2 streams
H.264, H.265, MJPEG/G.711	H.264, H.265, MJPEG/G.711	H.264, H.265, MJPEG/G.711	H.264, H.265, MJPEG/G.711, RAW_PCM	H.264, MJPEG/G.711, RAW_PCM
max. 5	max. 5	max. 5	max. 8	max. 8
30 Mb/s in total	30 Mb/s in total	30 Mb/s in total	30 Mb/s in total	15 Mb/s in total
Profile S (ONVIF 2.3)	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.6)	Profile S (ONVIF 2.2)
NMS	NMS	NMS	NMS	NMS
4	4	4	4	5
yes	yes	yes	yes	yes
tamper, abandoned object, object disappearance, line cross, zone entrance	tamper, abandoned object, object disappearance, line cross, zone entrance	tamper, abandoned object, object disappearance, line cross, zone entrance	-	tamper, abandoned object, object disappearance, line cross, zone entrance, double line cross, loiter, multi loiter, abnormal speed, converse, illegal parking
e-mail with attachment, saving file on FTP server, saving file on SD card, alarm output activation	e-mail with attachment, saving file on FTP server, saving file on SD card, alarm output activation	e-mail with attachment, saving file on FTP server, saving file on SD card	e-mail with attachment, saving file on FTP server, saving file on SD card	e-mail with attachment, saving file on SD card
30	30	10	1	12
30 m	30 m	10 m	10 m	15 m
1 x Jack (3.5 mm)/1 x Jack (3.5 mm)	1 x Jack (3.5 mm)/1 x Jack (3.5 mm)	built-in microphone, 1 x Jack (3.5 mm)/-	1 x RCA/1 x RCA	1 x RCA/1 x RCA
microSD - capacity up to 128GB	microSD - capacity up to 128GB	microSD - capacity up to 128GB	microSD - capacity up to 128GB	microSD - capacity up to 64GB
1 (NO/NC)/1	1 (NO/NC)/1	-	-	1 (NO/NC)/1
IK10 impact rating aluminium, white white poly-carbonate bubble	IK10 impact rating aluminium, white white poly-carbonate bubble	IK10 impact rating aluminium, white white poly-carbonate bubble	aluminium vandalproof, white	IK10 impact rating aluminium, white polycarbonate bubble
PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC/24 V AC
-20°C ~ 50°C	-20°C ~ 50°C	-20°C ~ 50°C	-30°C ~ 60°C	-25°C ~ 55°C
IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP 65 (details in the user's manual)	IP66 (details in the user's manual)
			yes/no	yes/no
150 (Ø) x 114 (H)	150 (Ø) x 114 (H)	110 (Ø) x 58 (H)	100 (Ø) x 53 (H)	130 (Ø) x 112 (H)

# 4 Mpx IP CAMERAS



**4 Mpx** **20 fps** **30 fps**

	NVIP-4DN2001H/IR-1P-II	NVIP-4DN2002H/IR-1P-II	NVIP-4DN2004H/IR-1P-II	NVIP-4DN3511H/IR-1P	NVIP-4DN3512H/IR-1P
<b>Image</b>					
Image Sensor	4 Mpx, CMOS sensor, 1/3", OV	4 Mpx, CMOS sensor, 1/3", OV	4 Mpx, CMOS sensor, 1/3", OV	4 Mpx, CMOS sensor, 1/3", OV	4 Mpx, CMOS sensor, 1/3", OV
Number of Effective Pixels	2688 (H) x 1520 (V)	2688 (H) x 1520 (V)	2688 (H) x 1520 (V)	2688 (H) x 1520 (V)	2688 (H) x 1520 (V)
Min. Illumination	0.07 lx/F2.1 - color mode 0 lx (IR ON) - b&w mode	0.06 lx/F1.3 - color mode 0 lx (IR ON) - b&w mode	0.06 lx/F1.3 - color mode 0 lx (IR ON) - b&w mode	0.01 lx/F1.8 - color mode 0 lx (IR ON) - b&w mode	0.07 lx/F1.4 - color mode 0 lx (IR ON) - b&w mode
Wide Dynamic Range (WDR)	yes (double scan sensor), 90dB	yes (double scan sensor), 90dB	yes (double scan sensor), 90dB	yes (double scan sensor), 120dB	yes (double scan sensor), 120dB
Digital Noise Reduction (DNR)	2D, 3D	2D, 3D	2D, 3D	2D, 3D	2D, 3D
Defog Function (F-DNR)	yes	yes	yes	yes	yes
Highlight Compensation (HLC)	-	-	-	yes	yes
Digital Slow Shutter (DSS)	up to 1/5 s	up to 1/5 s	up to 1/5 s	-	-
<b>Lens</b>					
Lens Type	standard, f=2.8 mm/F2.1	varifocal, f=2.7 ~ 13.5 mm/F1.3	motor-zoom, f=2.7 ~ 13.5 mm/F1.3	standard, f=2.8 mm/F1.8	varifocal, f=2.8 ~ 12 mm/F1.4
<b>Day/Night</b>					
Switching Type	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter
Switching Mode	auto, manual	auto, manual	auto, manual	auto, manual, time	auto, manual, time
<b>Network</b>					
Stream Resolution	2592 x 1520, 2304 x 1296, 2048 x 1520, 1920 x 1080 (Full HD), 1280 x 960, 1280 x 720 (HD), 704 x 576, 640 x 480 (VGA), 320 x 240 (QVGA)	2592 x 1520, 2304 x 1296, 2048 x 1520, 1920 x 1080 (Full HD), 1280 x 960, 1280 x 720 (HD), 704 x 576, 640 x 480 (VGA), 320 x 240 (QVGA)	2592 x 1520, 2304 x 1296, 2048 x 1520, 1920 x 1080 (Full HD), 1280 x 960, 1280 x 720 (HD), 704 x 576, 640 x 480 (VGA), 320 x 240 (QVGA)	2592 x 1520, 2560 x 1440 (QHD), 2304 x 1296, 1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 352 x 288 (CIF)	2592 x 1520, 2560 x 1440 (QHD), 2304 x 1296, 1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 352 x 288 (CIF)
Frame Rate	20 fps for 2592 x 1520 30 fps for 2048 x 1520 and lower resolutions	20 fps for 2592 x 1520 30 fps for 2048 x 1520 and lower resolutions	20 fps for 2592 x 1520 30 fps for 2048 x 1520 and lower resolutions	30 fps for 2592 x 1520 60 fps for 1920 x 1080 (Full HD) and lower resolutions	30 fps for 2592 x 1520 60 fps for 1920 x 1080 (Full HD) and lower resolutions
Multistreaming Mode	3 streams	3 streams	3 streams	3 streams	3 streams
Video/Audio Compression	H.264, H.265/-	H.264, H.265/-	H.264, H.265/-	H.264, H.265, MJPEG/G.711	H.264, H.265, MJPEG/G.711
Number of Simultaneous Connections	max. 10	max. 10	max. 10	max. 5	max. 5
Bandwidth	63 Mb/s in total	63 Mb/s in total	63 Mb/s in total	30 Mb/s in total	30 Mb/s in total
ONVIF Protocol Support	Profile S (ONVIF 2.6)	Profile S (ONVIF 2.6)	Profile S (ONVIF 2.6)	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.3)
Compatible Software	NMS	NMS	NMS	NMS	NMS
<b>Other functions</b>					
Privacy Zones	4	4	4	4	4
Motion Detection	yes	yes	yes	yes	yes
Video Content Analysis (VCA)	tamper, abandoned object, object disappearance, line cross, zone entrance, face detection, pedestrian detection, cross counting	tamper, abandoned object, object disappearance, line cross, zone entrance, face detection, pedestrian detection, cross counting	tamper, abandoned object, object disappearance, line cross, zone entrance, face detection, pedestrian detection, cross counting	tamper, abandoned object, object disappearance, line cross, zone entrance	tamper, abandoned object, object disappearance, line cross, zone entrance
System Reaction to Alarm Events	e-mail with attachment, saving file on FTP server	e-mail with attachment, saving file on FTP server, saving file on SD card	e-mail with attachment, saving file on FTP server, saving file on SD card	e-mail with attachment, saving file on FTP server	e-mail with attachment, saving file on FTP server
<b>IR LED</b>					
LED Number	18	30	30	36	36
Range	30 m	40 m	40 m	30 m	30 m
<b>Interfaces</b>					
Audio Input/Output	-	-	-	1 x Jack (3.5 mm)/-	1 x Jack (3.5 mm)/-
Memory card slot	-	microSD - capacity up to 128GB	microSD - capacity up to 128GB	-	-
Alarm Input/Output	-	-	-	-	-
<b>Installation parameters</b>					
Enclosure	aluminium, white, fully cable managed wall mount bracket in-set included	aluminium, white, fully cable managed wall mount bracket in-set included	aluminium, white, fully cable managed wall mount bracket in-set included	aluminium, white, fully cable managed wall mount bracket in-set included, IK10 impact rating	aluminium, white, fully cable managed wall mount bracket in-set included, IK10 impact rating
Power Supply	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC
Operating Temperature	-35°C ~ 60°C	-35°C ~ 60°C	-35°C ~ 60°C	-20°C ~ 50°C	-20°C ~ 50°C
Degree of Protection	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)
Dimensions (mm)	with bracket: 71 (Φ) x 138 (L)	with bracket: 84 (Φ) x 241 (L)	with bracket: 84 (Φ) x 241 (L)	with bracket: 87 (Φ) x 219 (L)	with bracket: 87 (Φ) x 219 (L)



MOTOR  
ZOOM



**NOVUS®**

## MOTOR-ZOOM REMOTE FOCUS AND ZOOM

IP CAMERAS WITH MOTOR-ZOOM LENS  
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# 4 Mpx IP CAMERAS



<b>4</b>	<b>Mpx</b>
<b>20</b>	<b>fps</b>
<b>30</b>	<b>fps</b>

NMS Compatible

	<b>NVIP-4DN3513H/IR-1P</b>	<b>NVIP-4DN3552AH/IR-1P</b>	<b>NVIP-4DN5002H/IRH-1P</b>	<b>NVIP-4DN3500C-2P-II</b>	<b>NVIP-4DN7000C-1P</b>
<b>VCA ANALYSIS</b>					
<b>IK10</b>					
<b>Image</b>					
Image Sensor	4 Mpx, CMOS sensor, 1/3", OV	4 Mpx, CMOS sensor, 1/3", OV	4 Mpx, CMOS sensor, 1/3", OV	4 Mpx, CMOS sensor, 1/3", OV	4 Mpx, CMOS sensor, 1/3", OV
Number of Effective Pixels	2688 (H) x 1520 (V)	2688 (H) x 1520 (V)	2688 (H) x 1520 (V)	2688 (H) x 1520 (V)	2688 (H) x 1520 (V)
Min. Illumination	0.07 lx/F1.4 - color mode 0 lx (IR ON) - b&w mode	0.07 lx/F1.4 - color mode 0 lx (IR ON) - b&w mode	0.07 lx/F1.4 - color mode 0.034 lx/F1.4 - color mode (DSS) 0 lx (IR ON) - b&w mode	0.05 lx/F1.2 - color mode 0.01 lx/F1.2 - b&w mode	0.05 lx/F1.2 - color mode (DSS) 0.005 lx/F1.2 - b&w mode (DSS)
Wide Dynamic Range (WDR)	yes (double scan sensor), 120dB	yes (double scan sensor), 120dB	yes	yes (double scan sensor), 120dB	yes (double scan sensor), 120dB
Digital Noise Reduction (DNR)	2D, 3D	2D, 3D	2D, 3D	2D, 3D	2D, 3D
Defog Function (F-DNR)	yes	yes	-	yes	-
Highlight Compensation (HLC)	yes	yes	-	yes	-
Digital Slow Shutter (DSS)	-	-	up to 1/5 s	-	up to 1 s
<b>Lens</b>					
Lens Type	motor-zoom, f=2.8 ~ 12 mm/F1.4	motor-zoom, f=9 ~ 22 mm/F1.4	varifocal auto iris DC, f=3 ~ 12 mm/F1.4	-	-
<b>Day/Night</b>					
Switching Type	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter
Switching Mode	auto, manual, time	auto, manual, time	auto, manual, time	auto, manual, time	auto, manual, time, external
<b>Network</b>					
Stream Resolution	2592 x 1520, 2560 x 1440 (QHD), 2304 x 1296, 1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 352 x 288 (CIF)	2592 x 1520, 2560 x 1440 (QHD), 2304 x 1296, 1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 352 x 288 (CIF)	2688 x 1520, 2560 x 1440 (QHD), 2304 x 1296, 1920 x 1080 (Full HD), 1280 x 720 (HD), 704 x 576, 640 x 480 (VGA), 640 x 360, 352 x 288 (CIF), 320 x 240 (QVGA)	2592 x 1520, 2560 x 1440 (QHD), 2304 x 1296, 1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 352 x 288 (CIF)	2688 x 1512, 2560 x 1440 (QHD), 1920 x 1080 (Full HD), 1280 x 1024 (SXGA), 1280 x 720 (HD), 1024 x 768 (XGA), 800 x 600 (SVGA), 720 x 576 (D1), 640 x 480 (VGA), 352 x 288 (CIF)
Frame Rate	30 fps for 2592 x 1520 and lower resolutions	30 fps for 2592 x 1520 and lower resolutions	20 fps for 2688 x 1520, 2560 x 1440 (QHD) 25 fps for 2304 x 1296 30 fps for 1920 x 1080 (Full HD) and lower resolutions	30 fps for 2592 x 1520 60 fps for 1920 x 1080 (Full HD) and lower resolutions	30 fps for 2160 x 2160 60 fps for 1920 x 1080 (Full HD) and lower resolutions
Multistreaming Mode	3 streams	3 streams	2 streams	3 streams	4 streams
Video/Audio Compression	H.264, H.265, MJPEG/G.711	H.264, H.265, MJPEG/G.711	H.264, MJPEG/G.711, RAW_PCM	H.264, H.265, MJPEG/G.711	H.264, MJPEG/G.711, G.726, AAC
Number of Simultaneous Connections	max. 5	max. 5	max. 8	max. 5	max. 8
Bandwidth	30 Mb/s in total	30 Mb/s in total	15 Mb/s in total	30 Mb/s in total	40 Mb/s in total
ONVIF Protocol Support	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.2)	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.4)
Compatible Software	NMS	NMS	NMS	NMS	NMS
<b>Other functions</b>					
Privacy Zones	4	4	5	4	5
Motion Detection	yes	yes	yes	yes	yes
Video Content Analysis (VCA)	tamper, abandoned object, object disappearance, line cross, zone entrance	tamper, abandoned object, object disappearance, line cross, zone entrance	tamper, abandoned object, object disappearance, line cross, zone entrance, double line cross, loiter, multi loiter, abnormal speed, converse, illegal parking	tamper, abandoned object, object disappearance, line cross, zone entrance	-
System Reaction to Alarm Events	e-mail with attachment, saving file on FTP server, saving file on SD card, alarm output activation	e-mail with attachment, saving file on FTP server, saving file on SD card, alarm output activation	e-mail with attachment, saving file on SD card	e-mail with attachment, saving file on FTP server, saving file on SD card, alarm output activation	e-mail with attachment, saving file on FTP server, saving file on SD card, saving file on NAS server, alarm output activation, HTTP notification
<b>IR LED</b>					
LED Number	48	4	10	-	-
Range	50 m	100 m	20 m	-	-
<b>Interfaces</b>					
Audio Input/Output	1 x Jack (3.5 mm)/1 x Jack (3.5 mm)	1 x Jack (3.5 mm)/1 x Jack (3.5 mm)	1 x RCA/1 x RCA	1 x Jack (3.5 mm)/1 x Jack (3.5 mm)	1 x Jack (3.5 mm)/1 x Jack (3.5 mm) built-in microphone,
Memory card slot	microSD - capacity up to 64GB	SD - capacity up to 128GB	microSD - capacity up to 64GB	SD - capacity up to 64GB	microSD - capacity up to 64GB
Alarm Input/Output	1 (NO/NC)/1	1 (NO/NC)/1	-	1 (NO/NC)/1 relay type	2 (NO/NC)/1
<b>Installation parameters</b>					
Enclosure	aluminium, white, fully cable managed wall mount bracket in-set included, IK10 impact rating	aluminium, white, fully cable managed wall mount bracket in-set included	aluminium, white, fully cable managed wall mount bracket in-set included	aluminium, white	aluminium, white
Power Supply	PoE, 12V DC	PoE, 12V DC	PoE, 12V DC	PoE, 12V DC, 24V AC	PoE, 12V DC
Operating Temperature	-30°C ~ 50°C	-20°C ~ 50°C	-25°C ~ 55°C	-20°C ~ 50°C	-30°C ~ 55°C
Degree of Protection	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)	-	-
Built-in heater/fan	-	-	yes/no	-	-
Dimensions (mm)	with bracket: 109 (Φ) x 284 (L)	with bracket: 109 (Φ) x 360 (L)	with bracket: 83 (W) x 79.8 (H) x 264.5 (L)	70 (W) x 60 (H) x 140 (L)	82 (W) x 52 (H) x 125 (L)

# 5 Mpx IP CAMERAS



<b>5</b>	<b>Mpx</b>
<b>15</b>	<b>fps</b>
<b>30</b>	<b>fps</b>

	NVIP-5DN2008V/IR-1P	NVIP-5DN3512V/IR-1P	NVIP-5DN2004H/IR-1P
		<b>IK10</b>	<b>VCA ANALYSIS</b>
<b>Image</b>			
Image Sensor	6 Mpx, CMOS sensor, 1/2.9", SONY Exmor R STARVIS	5 Mpx, CMOS sensor, 1/1.8", SONY	5 Mpx, CMOS sensor, 1/3.2", OV
Number of Effective Pixels	3096 (H) x 2202 (V)	2592 (H) x 1944 (V)	2592 (H) x 1944 (V)
Min. Illumination	0.03 lx/F2.0 - color mode (DSS) 0 lx (IR ON) - b&w mode	0.016 lx/F1.5 - color mode 0 lx (IR ON) - b&w mode	0.07 lx/F1.4 - color mode 0 lx (IR ON) - b&w mode
Wide Dynamic Range (WDR)	yes	yes	yes
Digital Noise Reduction (DNR)	2D, 3D	2D, 3D	2D, 3D
Defog Function (F-DNR)	yes	nie	yes
Digital Slow Shutter (DSS)	up to 1/5 s	-	up to 1/5 s
<b>Lens</b>			
Lens Type	„fisheye“, f=1.1 mm/F2.0	varifocal, f=3.6 ~ 10 mm/F1.5	motor-zoom, f=2.8 ~ 12 mm/F1.4
<b>Day/Night</b>			
Switching Type	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter
Switching Mode	auto, manual	auto, manual, time, light sensor	auto, manual
<b>Network</b>			
Stream Resolution	2160 x 2160, 1520 x 1520, 1080 x 1080, 720 x 720	2592 x 1944, 2560 x 1440 (QHD), 1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 352 x 288 (CIF)	2592 x 1944, 2592 x 1520, 2304 x 1296, 2048 x 1520, 1920 x 1080 (Full HD), 1280 x 960, 1280 x 720 (HD), 704 x 576, 640 x 480 (VGA), 320 x 240 (QVGA)
Frame Rate	15 fps for 2160 x 2160 30 fps for 1520 x 1520 and lower resolutions	30 fps for 2592 x 1944 and lower resolutions	15 fps for 2592 x 1944 20 fps for 2592 x 1520 30 fps for 2304 x 1296 and lower resolutions
Multistreaming Mode	3 streams	3 streams	3 streams
Video/Audio Compression	H.264, H.265/-	H.264, H.265, MJPEG/G.711	H.264, H.265/-
Number of Simultaneous Connections	max. 10	max. 10	max. 10
Bandwidth	16 Mb/s in total	20 Mb/s in total	63 Mb/s in total
ONVIF Protocol Support	Profile S	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.6)
Compatible Software	NMS	NMS	NMS
<b>Other functions</b>			
Privacy Zones	4	4	4
Motion Detection	yes	yes	yes
System Reaction to Alarm Events	e-mail with attachment, saving file on FTP server	e-mail with attachment, saving file on FTP server, saving file on SD card	e-mail with attachment, saving file on FTP server
Video Content Analysis (VCA)	-	-	tamper, abandoned object, object disappearance, line cross, zone entrance, object counting, face detection, pedestrian detection
<b>IR LED</b>			
LED Number	3	30	30
Range	5 m	30 m	40 m
<b>Interfaces</b>			
Audio Input/Output	-	1 x Jack (3.5 mm)/1 x Jack (3.5 mm)	-
Alarm Input/Output	-	1 (NO/NC) / 1 relay type	-
Memory card slot	-	microSD - capacity up to 128GB	-
<b>Installation parameters</b>			
Enclosure	vandalproof, aluminium, white	vandalproof, IK10 impact rating, aluminium, white poly-carbonate bubble	aluminium, white, fully cable managed wall mount bracket in-set included
Power Supply	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC
Operating Temperature	-30°C ~ 55°C	-20°C ~ 50°C	-35°C ~ 60°C
Degree of Protection	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)
Dimensions (mm)	68 (Ø) x 77 (H)	with bracket: 84 (Ø) x 232 (L)	150 (Ø) x 114 (H)

# 6 Mpx IP CAMERAS



**6**  
Mpx  
**30**  
fps

	NVIP-6DN3618V/IR-1P	NVIP-6DN5021H/IRH-1P	NVIP-6DN5022H/IRH-1P	NVIP-6DN7000C-1P
<b>FISHEYE</b>				
<b>VCA ANALYSIS</b>				
<b>PRO SERIES</b>				
<b>Image</b>				
Image Sensor	6 Mpx, CMOS sensor, 1/2.9", SONY Exmor R STARVIS	6 Mpx, CMOS sensor, 1/1.8", SONY Exmor R STARVIS	6 Mpx, CMOS sensor, 1/1.8", SONY Exmor R STARVIS	6 Mpx, CMOS sensor, 1/1.8", SONY Exmor R STARVIS
Number of Effective Pixels	3096 (H) x 2202 (V)	3072 (H) x 2048 (V)	3072 (H) x 2048 (V)	3072 (H) x 2048 (V)
Min. Illumination	0.1 lx/F2.5 - color mode 0 lx (IR ON) - b&w mode	0.005 lx/F1.5 - color mode (DSS) 0 lx (IR ON) - b&w mode	0.005 lx/F1.5 - color mode (DSS) 0 lx (IR ON) - b&w mode	0.0009 lx/F1.2 - color mode (DSS) 0.0009 lx/F1.2 - b&w mode (DSS)
Wide Dynamic Range (WDR)	yes	yes	yes	yes
Digital Noise Reduction (DNR)	2D, 3D	2D, 3D	2D, 3D	2D, 3D
Defog Function (F-DNR)	-	yes	yes	-
Highlight Compensation (HLC)	yes	-	-	-
Digital Slow Shutter (DSS)	-	up to 1/5 s	up to 1/5 s	up to 1 s
<b>Lens</b>				
Lens Type	„fisheye”, f=1.07 mm/F2.5	varifocal auto iris DC, f=3 ~ 12 mm/F1.5	varifocal auto iris DC, f=3 ~ 12 mm/F1.5	-
Auto-back-focus	-	-	-	yes
<b>Day/Night</b>				
Switching Type	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter
Switching Mode	auto, manual, time	auto, manual, time	auto, manual, time	auto, manual, time, external, smart
<b>Network</b>				
Stream Resolution	2160 x 2160, 1920 x 1920, 1440 x 1440, 960 x 960, 480 x 480	3072 x 2048, 2592 x 1944, 2688 x 1520, 2304 x 1296, 2048 x 1536 (QXGA), 1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 704 x 480, 640 x 480 (VGA)	3072 x 2048, 2592 x 1944, 2688 x 1520, 2304 x 1296, 2048 x 1536 (QXGA), 1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 704 x 480, 640 x 480 (VGA)	3072 x 2048, 1920 x 1080 (Full HD), 1280 x 1024 (SXGA), 1280 x 720 (HD), 1024 x 768 (XGA), 800 x 600 (SVGA), 720 x 576 (D1), 640 x 480 (VGA), 352 x 288 (CIF), 320 x 240 (QVGA)
Frame Rate	30 fps for 2160 x 2160 and lower presolutions	30 fps for 3072 x 2048 and lower presolutions	30 fps for 3072 x 2048 and lower presolutions	30 fps for 3072 x 2048 60 fps for 1920 x 1080 (Full HD) and lower presolutions
Multistreaming Mode	3 streams	2 streams	2 streams	4 streams
Video/Audio Compression	H.264, H.265, MJPEG/G.711	H.264, MJPEG/G.711, RAW_PCM	H.264, MJPEG/G.711, RAW_PCM	H.264, MJPEG/G.711, G.726, AAC, LPCM
Number of Simultaneous Connections	max. 11	max. 8	max. 8	max. 10
Bandwidth	16 Mb/s in total	25 Mb/s in total	25 Mb/s in total	45 Mb/s in total
ONVIF Protocol Support	Profile S/G	Profile S (ONVIF2.2)	Profile S (ONVIF2.2)	Profile S (ONVIF 2.6)
Compatible Software	NMS	NMS	NMS	NMS
<b>Other functions</b>				
Privacy Zones	4	5	5	5
Motion Detection	yes	yes	yes	yes
System Reaction to Alarm Events	e-mail with attachment, saving file on FTP server, saving file on SD card, alarm output activation	e-mail with attachment, saving file on SD card	e-mail with attachment, saving file on SD card	e-mail with attachment, saving file on FTP server, saving file on SD card, saving file on NAS server, alarm output activation, HTTP notification
Video Content Analysis (VCA)	-	-	tamper, abandoned object, object disappearance, line cross, zone entrance, double line cross, loiter, multi loiter, abnormal speed, converse, illegal parking	-
<b>IR LED</b>				
LED Number	6	17	17	-
Range	30 m	40 m	40 m	-
<b>Interfaces</b>				
Audio Input/Output	1 x Jack (3.5 mm)/1 x Jack (3.5 mm) built-in microphone	1 x RCA/1 x RCA	1 x RCA/1 x RCA	1 x Jack (3.5 mm)/1 x Jack (3.5 mm)
Alarm Input/Output	1 (NO/NC)/1	1 (NO/NC)/1	1 (NO/NC)/1	1 (NO/NC)/1
Memory card slot	microSD - capacity up to 128GB	SD - capacity up to 64GB	SD - capacity up to 64GB	microSD - capacity up to 64GB
<b>Installation parameters</b>				
Degree of Protection	IP 67 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)	-
Enclosure	vandalproof aluminium, white	aluminium, white, fully cable managed wall mount bracket in-set included	aluminium, white, fully cable managed wall mount bracket in-set included	aluminium, white
Power Supply	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC	PoE, 12 V DC
Operating Temperature	-20°C ~ 50°C	-30°C ~ 60°C	-30°C ~ 60°C	-10°C ~ 50°C
Built-in heater/fan	-	yes/no	yes/no	-
Dimensions (mm)	130 (Φ) x 39 (H)	with bracket: 110 (Φ) x 377 (L)	with bracket: 110 (Φ) x 377 (L)	80 (W) x 53 (H) x 150 (L)

# 8 AND 9 Mpx IP CAMERAS



**8**  
Mpx    **9**  
Mpx    **30**  
fps

	NVIP-8DN3512V/IR-1P	NVIP-8DN7560V/IRH-2P	NVIP-8DN3512H/IR-1P	NVIP-9DN2018V/IR-1P
<b>VCA ANALYSIS</b>	 	 PRO SERIES	  	 
<b>Image</b>				
Image Sensor	8 Mpx, CMOS sensor, 1/2.5", SONY Exmor R STARVIS	8 Mpx, CMOS sensor, 1/1.7", SONY Exmor R STARVIS	8 Mpx, CMOS sensor, 1/2.5", SONY Exmor R STARVIS	12 Mpx, CMOS sensor, 1/1.7", SONY Exmor R STARVIS
Number of Effective Pixels	3840 (H) x 2160 (V)	4152 (H) x 2174 (V)	3840 (H) x 2160 (V)	4072 (H) x 3046 (V)
Min. Illumination	0.01 lx/F1.4 - color mode 0 lx (IR ON) - b&w mode	0.05 lx/F1.45 - color mode (DSS) 0.005 lx/F1.45 - b&w mode (DSS) 0 lx (IR ON) - b&w mode	0.01 lx/F1.4 - color mode 0 lx (IR ON) - b&w mode	0.04 lx/F2.4 - color mode 0 lx (IR ON) - b&w mode
Digital Slow Shutter (DSS)	-	up to 1 s	-	up to 1/5 s
Wide Dynamic Range (WDR)	yes	yes	yes	yes
Digital Noise Reduction (DNR)	2D, 3D	2D, 3D	2D, 3D	2D, 3D
Defog Function (F-DNR)	yes	-	yes	yes
Highlight Compensation (HLC)	yes	-	yes	-
<b>Lens</b>				
Lens Type	motor-zoom, f=3.3 ~ 12 mm/F1.4	motor-zoom auto-iris function (P-Iris), f=3.5 ~ 8 mm/F1.45	motor-zoom, f=3.3 ~ 12 mm/F1.4	„fisheye“, f=2.0 mm/F2.4
<b>Day/Night</b>				
Switching Type	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter
Switching Mode	auto, manual, time, light sensor	auto, manual, time, external, light sensor, smart	auto, manual, time, light sensor	auto, manual
<b>Network</b>				
Stream Resolution	3840 x 2160 (4K Ultra HD), 1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 352 x 288 (CIF)	3840 x 2160 (4K Ultra HD), 3200 x 1800 (QHD+), 1920 x 1080 (Full HD), 1280 x 1024 (SXGA), 1280 x 720 (HD), 1024 x 768 (XGA), 800 x 600 (SVGA), 720 x 576 (D1), 640 x 480 (VGA), 352 x 288 (CIF), 320 x 240 (QVGA)	3840 x 2160 (4K Ultra HD), 1920 x 1080 (Full HD), 1280 x 720 (HD), 720 x 576 (D1), 352 x 288 (CIF)	3000 x 3000, 2560 x 2560, 2160 x 2160, 1520 x 1520, 1080 x 1080, 720 x 720, 480 x 480
Frame Rate	30 fps for 3840 x 2160 (UHD) and lower resolutions	30 fps for 3840 x 2160 (UHD) 60 fps for 1920 x 1080 (Full HD) and lower resolutions	30 fps for 3840 x 2160 (UHD) and lower resolutions	30 fps for 3000 x 3000 and lower resolutions
Multistreaming Mode	3 streams	4 streams	3 streams	3 streams
Video/Audio Compression	H.264, H.265, MJPEG/G.711	H.264, MJPEG/G.711, G.726, AAC, LPCM	H.264, H.265, MJPEG/G.711	H.264, H.265/G.711, G.726, ADPCM
Number of Simultaneous Connections	max. 4	max. 10	max. 4	max. 10
Bandwidth	50 Mb/s in total	70 Mb/s in total	50 Mb/s in total	40 Mb/s in total
ONVIF Protocol Support	Profile S (ONVIF 2.3)	Profile S/G (ONVIF 2.6)	Profile S (ONVIF 2.3)	Profile S
Compatible Software	NMS	NMS	NMS	NMS
<b>Other functions</b>				
Privacy Zones	4	5	4	4
Motion Detection	yes	yes	yes	yes
Video Content Analysis (VCA)	tamper, abandoned object, object disappearance, line cross, zone entrance	-	tamper, abandoned object, object disappearance, line cross, zone entrance	-
System Reaction to Alarm Events	e-mail with attachment, saving file on FTP server, saving file on SD card, alarm output activation	e-mail with attachment, saving file on FTP server, saving file on SD card, saving file on NAS server, alarm output activation, HTTP notification	e-mail with attachment, saving file on FTP server, saving file on SD card, alarm output activation	e-mail with attachment, saving file on FTP server, saving file on SD card, alarm output activation
<b>IR LED</b>				
LED Number	30	8	48	3
Range	30 m	40 m	50 m	10 m
<b>Interfaces</b>				
Audio Input/Output	1 x Jack (3.5 mm)/1 x Jack (3.5 mm)	1/1	1 x Jack (3.5 mm)/1 x Jack (3.5 mm)	built-in microphone/-
Alarm Input/Output	1 (NO/NC)/1	1 (NO/NC)/1	1 (NO/NC)/1	1 (NO/NC)/1
Memory card slot	microSD - capacity up to 128GB	SD - capacity up to 64GB	microSD - capacity up to 128GB	microSD - capacity up to 128GB
<b>Installation parameters</b>				
Degree of Protection	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)
Enclosure	IK10 impact rating aluminium, white white poly-carbonate bubble	IK10 impact rating aluminium, white white poly-carbonate bubble	aluminium, white, wall mount bracket in-set included	vandalproof aluminium, white
Power Supply	PoE, 12 V DC	PoE, 24 V AC, 10 ~ 48 V DC	PoE, 12 V DC	PoE, 12 V DC
Operating Temperature	-20°C ~ 50°C	-50°C ~ 50°C	-20°C ~ 50°C	-30°C ~ 55°C
Built-in heater/fan	-	yes/no	-	-
Dimensions (mm)	150 (Φ) x 114 (H)	134 (Φ) x 117.5 (H)	with bracket: 109 (Φ) x 284 (L)	120 (Φ) x 55 (H)

# 12 Mpx IP CAMERAS



**12**  
Mpx

**20**  
fps

NMS Compatible

ONVIF

	NVIP-12DN5060V/IRH-2P	NVIP-12DN7021V/IR-1P	NVIP-12DN7023V/IR-1P	NVIP-12DN7560V/IRH-2P
<b>IK10</b>	<b>IK10</b>	<b>IK10</b>	<b>IK10</b>	<b>IK10</b>
	<b>PRO SERIES</b>	<b>PRO SERIES</b>	<b>PRO SERIES</b>	<b>PRO SERIES</b>
<b>Image</b>				
Image Sensor	12 Mpx, CMOS sensor, 1/1.7", SONY Exmor R STARVIS	12 Mpx, CMOS sensor, 1/1.7", SONY Exmor R STARVIS	12 Mpx, CMOS sensor, 1/1.7", SONY Exmor R STARVIS	12 Mpx, CMOS sensor, 1/1.7", SONY Exmor R STARVIS
Number of Effective Pixels	4072 (H) x 3046 (V)	4072 (H) x 3046 (V)	4072 (H) x 3046 (V)	4072 (H) x 3046 (V)
Min. Illumination	0.04 lx/F2.4 - color mode 0 lx (IR ON) - b&w mode	0.1 lx/F2.8 - color mode (DSS) 0.01 lx/F2.8 - b&w mode (DSS) 0 lx (IR ON) - b&w mode	0.1 lx/F2.8 - color mode (DSS) 0.01 lx/F2.8 - b&w mode (DSS) 0 lx (IR ON) - b&w mode	0.05 lx/F1.3 - color mode (DSS) 0.005 lx/F1.3 - b&w mode (DSS) 0 lx (IR ON) - b&w mode
Digital Slow Shutter (DSS)	up to 1/5 s	up to 1 s	up to 1 s	up to 1 s
Wide Dynamic Range (WDR)	yes	yes	yes	yes
Cyfrowa stabilizacja obrazu (DIS)	yes	-	-	-
Digital Noise Reduction (DNR)	2D, 3D	2D, 3D	2D, 3D	2D, 3D
Defog Function (F-DNR)	yes	-	-	-
Highlight Compensation (HLC)	yes	-	-	-
<b>Lens</b>				
Lens Type	„fisheye”, f=1.8 mm/F2.4	„fisheye”, f=1.65 mm/F2.8	„fisheye”, f=1.65 mm/F2.8	motor-zoom auto-iris function (P-Iris), f=4 ~ 9 mm/F1.3
<b>Day/Night</b>				
Switching Type	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter
Switching Mode	auto, manual, time	auto, manual, time, external, light sensor, smart	auto, manual, time, external, light sensor, smart	auto, manual, time, external, light sensor, smart
<b>Network</b>				
Stream Resolution	4000 x 3000, 3840 x 2160 (4K Ultra HD), 3840 x 2160 (4K Ultra HD), 3000 x 3000, 2560 x 2560, 1920 x 1080 (Full HD), 1280 x 960, 720 x 720, 704 x 576	4000 x 3000, 3840 x 2160 (4K Ultra HD), 3200 x 1800 (QHD+), 3072 x 2048, 1920 x 1080 (Full HD), 1280 x 1024 (SXGA), 1280 x 720 (HD), 1024 x 768 (XGA), 800 x 600 (SVGA), 720 x 576 (D1), 640 x 480 (VGA), 352 x 288 (CIF), 320 x 240 (QVGA)	4000 x 3000, 3840 x 2160 (4K Ultra HD), 3200 x 1800 (QHD+), 3072 x 2048, 1920 x 1080 (Full HD), 1280 x 1024 (SXGA), 1280 x 720 (HD), 1024 x 768 (XGA), 800 x 600 (SVGA), 720 x 576 (D1), 640 x 480 (VGA), 352 x 288 (CIF), 320 x 240 (QVGA)	4000 x 3000, 3840 x 2160 (4K Ultra HD), 3200 x 1800 (QHD+), 1920 x 1080 (Full HD), 1280 x 1024 (SXGA), 1280 x 720 (HD), 1024 x 768 (XGA), 800 x 600 (SVGA), 720 x 576 (D1), 640 x 480 (VGA), 352 x 288 (CIF), 320 x 240 (QVGA)
Frame Rate	20 fps for 4000 x 3000 25 fps for 4096 x 2160 and lower resolutions	20 fps for 4000 x 3000 30 fps for 3840 x 2160 (UHD) 60 fps for 1920 x 1080 (Full HD) and lower resolutions	20 fps for 4000 x 3000 30 fps for 3840 x 2160 (UHD) 60 fps for 1920 x 1080 (Full HD) and lower resolutions	20 fps for 4000 x 3000 30 fps for 3840 x 2160 (UHD) 60 fps for 1920 x 1080 (Full HD) and lower resolutions
Multistreaming Mode	2 streams	4 streams	4 streams	4 streams
Video/Audio Compression	H.264, H.265, MJPEG/G.711, RAW_PCM	H.264, MJPEG/G.711, G.726, AAC, LPCM	H.264, MJPEG/G.711, G.726, AAC, LPCM	H.264, MJPEG/G.711, G.726, AAC, LPCM
Number of Simultaneous Connections	max. 8	max. 10	max. 10	max. 10
Bandwidth	30 Mb/s in total	70 Mb/s in total	70 Mb/s in total	70 Mb/s in total
ONVIF Protocol Support	Profile S	Profile G (ONVIF 2.6)	Profile G (ONVIF 2.6)	Profile S/G (ONVIF 2.6)
Compatible Software	NMS	NMS	NMS	NMS
<b>Other functions</b>				
Privacy Zones	4	5	5	5
Motion Detection	yes	yes	yes	yes
System Reaction to Alarm Events	e-mail with attachment, saving file on FTP server, saving file on SD card, alarm output activation	e-mail with attachment, saving file on FTP server, saving file on SD card, saving file on NAS server, alarm output activation, HTTP notification	e-mail with attachment, saving file on FTP server, saving file on SD card, saving file on NAS server, alarm output activation, HTTP notification	e-mail with attachment, saving file on FTP server, saving file on SD card, saving file on NAS server, alarm output activation, HTTP notification
<b>IR LED</b>				
LED Number	6	4	4	8
Range	10 m	5 m	5 m	40 m
<b>Interfaces</b>				
Audio Input/Output	1 x RCA/1 x RCA built-in: microphone	1 x Jack (3.5 mm)/1 x Jack (3.5 mm)	1/1 built-in microphone, speaker,	1/1
Alarm Input/Output	1 (NO/NC)/1	1 (NO/NC)/1	1 (NO/NC)/1	1 (NO/NC)/1
Memory card slot	microSD - capacity up to 128GB	microSD - capacity up to 64GB	microSD - capacity up to 64GB	SD - capacity up to 64GB
<b>Installation parameters</b>				
Degree of Protection	IP66 (details in the user's manual)	IP66 (details in the user's manual)	-	IP66 (details in the user's manual)
Enclosure	vandalproof IK10 impact rating aluminium, white	IK10 impact rating aluminium, white	IK10 impact rating aluminium, white	IK10 impact rating aluminium, white poly-carbonate bubble
Power Supply	PoE, 12 V DC/24 V AC	PoE, 12 V DC	PoE, 12 V DC	PoE, 24 V AC, 10 ~ 48 V DC
Operating Temperature	-30°C ~ 60°C	-10°C ~ 50°C	-10°C ~ 50°C	-50°C ~ 50°C
Built-in heater/fan	yes/no	-	-	yes/no
Dimensions (mm)	162 (Φ) x 52 (H)	117 (Φ) x 55 (H)	117 (Φ) x 55 (H)	134 (Φ) x 117.5 (H)

$1 \times 12 = 12 \text{ Mpx}$

$4072 \times 3046 \text{ pixels}$



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12 MPX - MORE LEEWAY

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Distribution:

# ONE SOFTWARE THREE TECHNOLOGIES



## A COMPREHENSIVE SYSTEM SOLUTION FOR VISION MONITORING

- Cooperation with IP cameras along with IP and AHD NOVUS recorders
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- No additional costs for expansion**
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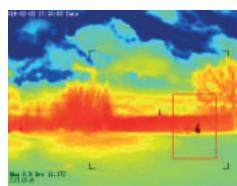
Cooperation with software for number plate recognition (NMS ANPR)



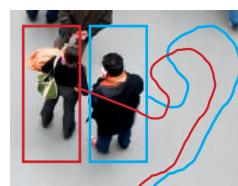
Compatibility with POS - text data capture



Cooperation with **NOVUS** thermal cameras



Support for **NOVUS** cameras with intelligent image analysis



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# PTZ IP CAMERAS



<b>30</b>	<b>fps</b>
<b>2</b>	<b>Mpx</b>
<b>3</b>	<b>Mpx</b>

	NVIP-2DN5120SD/IRH-2	NVIP-3DN3520SD/IRH-2-II	NVIP-3DN5030SD/IRH-2	NVIP-3DN7030SD/IRH-2P
<b>Image</b>				
Image Sensor	2 Mpx, CMOS sensor, 1/2.8", SONY Exmor R STARVIS	3 Mpx, CMOS sensor, 1/2.8", SONY	3 Mpx, CMOS sensor, 1/2.8", SONY	3 Mpx, CMOS sensor, 1/2.8", SONY
Number of Effective Pixels	1920 (H) x 1080 (V)	2048 (H) x 1536 (V)	2048 (H) x 1536 (V)	2048 (H) x 1536 (V)
Min. Illumination	0.05 lx/F1.2 - color mode 0.01 lx/F1.2 - b&w mode 0 lx (IR ON) - b&w mode	4.0 lx/F1.6 - color mode 0 lx (IR ON) - b&w mode	0.07 lx/F1.6 - color mode 0.007 lx/F1.6 - b&w mode 0 lx (IR ON) - b&w mode	0.04 lx/F1.6 - color mode (DSS) 0.01 lx/F1.6 - b&w mode (DSS) 0 lx (IR ON) - b&w mode
Digital Slow Shutter (DSS)	up to 1 s	-	up to 1 s	up to 1 s
Wide Dynamic Range (WDR)	yes	yes	yes	yes (triple and double scan sensor), 120dB
Digital Noise Reduction (DNR)	2D, 3D	3D	2D, 3D	2D, 3D
Defog Function (F-DNR)	yes	yes	yes	-
<b>Lens</b>				
Optical zoom	20x	20x	30x	30x
Lens Type	motor-zoom auto-iris function, f=4.7 ~ 94 mm/F1.6 ~ F3.5	motor-zoom auto-iris function, f=5.5 ~ 110 mm/F1.6 ~ F3.5	motor-zoom auto-iris function, f=4.3 ~ 129 mm/F1.6 ~ F14	motor-zoom auto-iris function (P-Iris), f=4.3 ~ 129 mm/F1.6 ~ F4.7
<b>Day/Night</b>				
Switching Type	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter
Switching Mode	auto, manual, time	auto, manual, time	auto, manual, time	auto, manual, time
<b>Network</b>				
Stream Resolution	1920 x 1080 (Full HD), 720 x 576 (D1), 640 x 480 (VGA), 640 x 360, 352 x 288 (CIF), 320 x 240 (QVGA)	2048 x 1536 (QXGA), 1920 x 1080 (Full HD), 1280 x 720 (HD), 640 x 480 (VGA), 320 x 240 (QVGA)	2048 x 1536 (QXGA), 1920 x 1080 (Full HD), 704 x 576, 640 x 480 (VGA), 640 x 360, 352 x 288 (CIF), 320 x 240 (QVGA)	2048 x 1536 (QXGA), 1920 x 1080 (Full HD), 1280 x 1024 (SXGA), 1280 x 720 (HD), 1024 x 768 (XGA), 800 x 600 (SVGA), 720 x 576 (D1), 640 x 480 (VGA), 352 x 288 (CIF), 320 x 240 (QVGA)
Frame Rate	30 fps for 1920 x 1080 (Full HD) and lower resolutions	30 fps for 2048 x 1536 (QXGA) and lower resolutions	30 fps for 2048 x 1536 (QXGA) and lower resolutions	60 fps for 2048 x 1536 (QXGA) and lower resolutions
Multistreaming Mode	2 streams	3 streams	2 streams	4 streams
Number of Simultaneous Connections	max. 10	max. 3	max. 10	max. 10
Bandwidth	18 Mb/s in total	18 Mb/s in total	18 Mb/s in total	50 Mb/s in total
ONVIF Protocol Support	Profile S (ONVIF 2.4)	Profile S (ONVIF 2.3)	Profile S (ONVIF 2.4)	Profile S (ONVIF 2.6)
Compatible Software	NMS	NMS	NMS	NMS
<b>PTZ</b>				
Presety	247	235	400	256
Tours	12 (up to 32 presets per tour)	8 (up to 16 presets per tour)	12 (up to 32 presets per tour)	8 (up to 64 presets per tour)
Auto-Scans	12	2	12	4
Patterns	6 (max. 1000 commands or 3000 s in total for all patterns)	4 (max. 180 s dla jednej trasy)	6 (max. 1000 commands or 3000 s in total for all patterns)	8
Tilt/Pan Range	0° ~ 98°/360° (continuous)	0° ~ 93°/360° (continuous)	0° ~ 98°/360° (continuous)	-20° ~ 200°/360° (continuous)
<b>Other functions</b>				
Privacy Zones	8	-	4	20
System Reaction to Alarm Events	e-mail with attachment, alarm output activation, HTTP notification, PTZ	e-mail with attachment, alarm output activation, HTTP notification, PTZ	e-mail with attachment, alarm output activation, HTTP notification, PTZ	e-mail with attachment, saving file on FTP server, saving file on SD card, saving file on NAS server, alarm output activation, HTTP notification, PTZ
Motion Detection	-	yes	-	yes
<b>IR LED</b>				
Range	up to 100 m (depends on current optical zoom value)	up to 100 m (depends on current optical zoom value)	up to 100 m (depends on current optical zoom value)	up to 100 m (depends on current optical zoom value)
<b>Interfaces</b>				
Audio Input/Output	1 x RCA/1 x RCA	1 x Jack (3.5 mm)/1 x Jack (3.5 mm)	1 x RCA/1 x RCA	1/1
Alarm Input/Output	7 (NO/NC)/2 relay type	4 (NO/NC)/1 relay type	7 (NO/NC)/2 relay type	4 (NO/NC)/2 relay type
Memory card slot	-	microSD - capacity up to 64GB	-	SD - capacity up to 64GB
<b>Installation parameters</b>				
Degree of Protection	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)
Enclosure	aluminium, white, in-set included: outdoor housing (integrated with the camera), wall mount bracket	aluminium, white, in-set included: outdoor housing (integrated with the camera), wall mount bracket	aluminium, white, in-set included: outdoor housing (integrated with the camera), wall mount bracket	aluminium, white, in-set included: outdoor housing (integrated with the camera), wall mount bracket
Power Supply	24 V AC	24 V DC/24 V AC	24 V AC	12 V DC, 24 V AC, High PoE (60W)
Operating Temperature with housing	-40°C ~ 60°C	-	-40°C ~ 60°C	-
Built-in heater/fan	yes/yes	yes/no	yes/yes	yes/yes
Operating Temperature	-	-20°C ~ 60°C	-	-40°C ~ 50°C
Dimensions (mm)	205 (Ø) x 332 (H) with bracket: 205 (W) x 410 (H) x 270 (L)	208 (Ø) x 317 (H) with bracket: 205 (W) x 470 (H) x 313 (L)	205 (Ø) x 332 (H) with bracket: 205 (W) x 410 (H) x 270 (L)	207 (Ø) x 300 (H) with bracket: 207 (W) x 399 (H) x 260 (L)

# THERMAL CAMERAS



**THERMO  
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	NVIP-T5000H-1P	NVIP-T5001H-1P	NVIP-T5002H-1P	NVIP-T5003H-1P	NVIP-T5004H-1P
<b>PRO SERIES</b>	<b>PRO SERIES</b>	<b>PRO SERIES</b>	<b>PRO SERIES</b>	<b>PRO SERIES</b>	<b>PRO SERIES</b>
<b>IMAGE - THERMAL MODULE</b>					
Image Sensor	Uncooled FPA Microbolometer				
Number of Effective Pixels	396 (H) x 264 (V)				
Pixel Pitch	20 µm				
Spectral Range	8 - 14 µm				
Min. Illumination	50 mK				
Thermovision Modes	White Hot, Black Hot, Rainbow, Ironbow, HSV, Autumn, Bone, Cool, Copper, Fire Hot, Pink, Spring, Summer, Winter, Jet, Flame, Rosebengal	White Hot, Black Hot, Rainbow, Ironbow, HSV, Autumn, Bone, Cool, Copper, Fire Hot, Pink, Spring, Summer, Winter, Jet, Flame, Rosebengal	White Hot, Black Hot, Rainbow, Ironbow, HSV, Autumn, Bone, Cool, Copper, Fire Hot, Pink, Spring, Summer, Winter, Jet, Flame, Rosebengal	White Hot, Black Hot, Rainbow, Ironbow, HSV, Autumn, Bone, Cool, Copper, Fire Hot, Pink, Spring, Summer, Winter, Jet, Flame, Rosebengal	White Hot, Black Hot, Rainbow, Ironbow, HSV, Autumn, Bone, Cool, Copper, Fire Hot, Pink, Spring, Summer, Winter, Jet, Flame, Rosebengal
Detection Temperature	-10°C ~ 200°C				
<b>Lens - Thermal module</b>					
Lens Type	f=8 mm/F1.0	f=15 mm/F1.0	f=25 mm/F1.0	f=35 mm/F1.0	f=50 mm/F1.0
Object Recognition Range	100m - human , 200m - vehicle	200m - human , 350m - vehicle	300m - human , 600m - vehicle	450m - human , 850m - vehicle	650m - human , 1200m - vehicle
<b>Image</b>					
Digital Noise Reduction (DNR)	2D, 3D				
<b>Network</b>					
Stream Resolution	for thermal module: 704 x 480, 352 x 240	for thermal module: 704 x 480, 352 x 240	for thermal module: 704 x 480, 352 x 240	for thermal module: 704 x 480, 352 x 240	for thermal module: 704 x 480, 352 x 240
Frame Rate	30 fps for each resolution				
Multistreaming Mode	2 streams				
Video/Audio Compression	H.264, MJPEG/G.711, RAW_PCM				
Number of Simultaneous Connections	max. 8				
Bandwidth	15 Mb/s in total				
ONVIF Protocol Support	Profile S (ONVIF 2.4)				
Compatible Software	NMS	NMS	NMS	NMS	NMS
<b>Other functions</b>					
Temperature Measurement	yes	yes	yes	yes	yes
Temperature Alarm	yes	yes	yes	yes	yes
Temperature Measurement Zones	5	5	5	5	5
Privacy Zones	5	5	5	5	5
System Reaction to Alarm Events	e-mail, saving file on SD card, alarm output activation	e-mail, saving file on SD card, alarm output activation	e-mail, saving file on SD card, alarm output activation	e-mail, saving file on SD card, alarm output activation	e-mail, saving file on SD card, alarm output activation
<b>Interfaces</b>					
Audio Input/Output	1 x RCA/1 x RCA				
Alarm Input/Output	2 (NO/NC)/2				
Memory card slot	SD - capacity up to 32GB				
<b>Installation parameters</b>					
Degree of Protection	IP66 (details in the user's manual)				
Enclosure	aluminium, white, fully cable managed wall mount bracket in-set included	aluminium, white, fully cable managed wall mount bracket in-set included	aluminium, white, fully cable managed wall mount bracket in-set included	aluminium, white, fully cable managed wall mount bracket in-set included	aluminium, white, fully cable managed wall mount bracket in-set included
Power Supply	PoE, 12 V DC				
Operating Temperature	-30°C ~ 55°C				
Dimensions (mm)	with bracket: 110 (Φ) x 388 (L)				

# THERMAL CAMERAS


**THERMO VISION**

	<b>NVIP-T52/2DN5022DPT-1</b>	<b>NVIP-T53/2DN5022DPT-1</b>	<b>NVIP-T54/2DN5022DPT-1</b>
<b>IMAGE - THERMAL MODULE</b>			
Image Sensor	Uncooled FPA Microbolometer	Uncooled FPA Microbolometer	Uncooled FPA Microbolometer
Number of Effective Pixels	396 (H) x 264 (V)	396 (H) x 264 (V)	396 (H) x 264 (V)
Pixel Pitch	20 µm	20 µm	20 µm
Spectral Range	8 - 14 µm	8 - 14 µm	8 - 14 µm
Min. Illumination	50 mK	50 mK	50 mK
Thermovision Modes	White Hot, Black Hot, Rainbow, Ironbow, HSV, Autumn, Bone, Cool, Copper, Fire Hot, Pink, Spring, Summer, Winter, Jet, Flame, Rosebengal	White Hot, Black Hot, Rainbow, Ironbow, HSV, Autumn, Bone, Cool, Copper, Fire Hot, Pink, Spring, Summer, Winter, Jet, Flame, Rosebengal	White Hot, Black Hot, Rainbow, Ironbow, HSV, Autumn, Bone, Cool, Copper, Fire Hot, Pink, Spring, Summer, Winter, Jet, Flame, Rosebengal
Detection Temperature	-10°C ~ 200°C	-10°C ~ 200°C	-10°C ~ 200°C
Digital Noise Reduction (DNR)	2D, 3D	2D, 3D	2D, 3D
<b>LENS - THERMAL MODULE</b>			
Lens Type	f=25 mm/F1.0	f=35 mm/F1.0	f=50 mm/F1.0
Object Recognition Range	300m - human , 600m - vehicle	450m - human , 850m - vehicle	650m - human , 1200m - vehicle
<b>Image</b>			
Image Sensor	2 Mpx, CMOS sensor, 1/2.8", SONY Exmor	2 Mpx, CMOS sensor, 1/2.8", SONY Exmor	2 Mpx, CMOS sensor, 1/2.8", SONY Exmor
Number of Effective Pixels	1920 (H) x 1080 (V)	1920 (H) x 1080 (V)	1920 (H) x 1080 (V)
Min. Illumination	0.36 lx/F1.6 - color mode 0.18 lx/F1.6 - b&w mode	0.36 lx/F1.6 - color mode 0.18 lx/F1.6 - b&w mode	0.36 lx/F1.6 - color mode 0.18 lx/F1.6 - b&w mode
Wide Dynamic Range (WDR)	yes	yes	yes
Digital Noise Reduction (DNR)	3D	3D	3D
Defog Function (F-DNR)	yes	yes	yes
<b>Lens</b>			
Optical zoom	22x	22x	22x
Lens Type	motor-zoom auto-iris function, f=4.7 ~ 103 mm/F1.6 ~ F3.2	motor-zoom auto-iris function, f=4.7 ~ 103 mm/F1.6 ~ F3.2	motor-zoom auto-iris function, f=4.7 ~ 103 mm/F1.6 ~ F3.2
<b>Day/Night</b>			
Switching Type	mechanical IR cut filter	mechanical IR cut filter	mechanical IR cut filter
Switching Mode	auto, manual, time	auto, manual, time	auto, manual, time
<b>Network</b>			
Stream Resolution	1920 x 1080 (Full HD), 1280 x 720 (HD), 704 x 576, 640 x 480 (VGA), 640 x 360, 352 x 288 (CIF), 320 x 240 (QVGA) for thermal module: 704 x 480, 352 x 240	1920 x 1080 (Full HD), 1280 x 720 (HD), 704 x 576, 640 x 480 (VGA), 640 x 360, 352 x 288 (CIF), 320 x 240 (QVGA) for thermal module: 704 x 480, 352 x 240	1920 x 1080 (Full HD), 1280 x 720 (HD), 704 x 576, 640 x 480 (VGA), 640 x 360, 352 x 288 (CIF), 320 x 240 (QVGA) for thermal module: 704 x 480, 352 x 240
Frame Rate	30 fps for each resolution	30 fps for each resolution	30 fps for each resolution
Multistreaming Mode	2 streams	2 streams	2 streams
Number of Simultaneous Connections	max. 8	max. 8	max. 8
Bandwidth	15 Mb/s in total	15 Mb/s in total	15 Mb/s in total
ONVIF Protocol Support	Profile S (ONVIF 2.4)	Profile S (ONVIF 2.4)	Profile S (ONVIF 2.4)
Compatible Software	NMS	NMS	NMS
<b>PTZ</b>			
Presety	233	233	233
Tours	6 (up to 16 presets per tour)	6 (up to 16 presets per tour)	6 (up to 16 presets per tour)
Auto-Scans	6	6	6
Patterns	3 (max. 1000 commands or 300 s for each pattern)	3 (max. 1000 commands or 300 s for each pattern)	3 (max. 1000 commands or 300 s for each pattern)
Tilt/Pan Range	-85° ~ 85°/360° (continuous)	-85° ~ 85°/360° (continuous)	-85° ~ 85°/360° (continuous)
Pan/Tilt Speed	up to 80°/s	up to 80°/s	up to 80°/s
Preset Speed	up to 80°/s	up to 80°/s	up to 80°/s
<b>Other functions</b>			
Temperature Measurement	yes - for thermal module	yes - for thermal module	yes - for thermal module
Temperature Alarm	yes - for thermal module	yes - for thermal module	yes - for thermal module
Temperature Measurement Zones	5 - for thermal module	5 - for thermal module	5 - for thermal module
<b>Interfaces</b>			
Video Output	BNC, 1.0 Vp-p, 75 Ohm - maintenance only, for visual module	BNC, 1.0 Vp-p, 75 Ohm - maintenance only, for visual module	BNC, 1.0 Vp-p, 75 Ohm - maintenance only, for visual module
Network Interface	1 x Ethernet - RJ-45 interface, 10/100 Mbit/s	1 x Ethernet - RJ-45 interface, 10/100 Mbit/s	1 x Ethernet - RJ-45 interface, 10/100 Mbit/s
<b>Installation parameters</b>			
Degree of Protection	IP66 (details in the user's manual)	IP66 (details in the user's manual)	IP66 (details in the user's manual)
Enclosure	aluminium, white,	aluminium, white,	aluminium, white,
Power Supply	12 VDC (230 VAC/12 VDC PSU in-set included)	12 VDC (230 VAC/12 VDC PSU in-set included)	12 VDC (230 VAC/12 VDC PSU in-set included)
Operating Temperature	-30°C ~ 55°C	-30°C ~ 55°C	-30°C ~ 55°C
Built-in heater/fan	yes/yes	yes/yes	yes/yes
Dimensions (mm)	with bracket: 375 (W) x 246 (H) x 225 (L)	with bracket: 375 (W) x 246 (H) x 225 (L)	with bracket: 375 (W) x 246 (H) x 225 (L)



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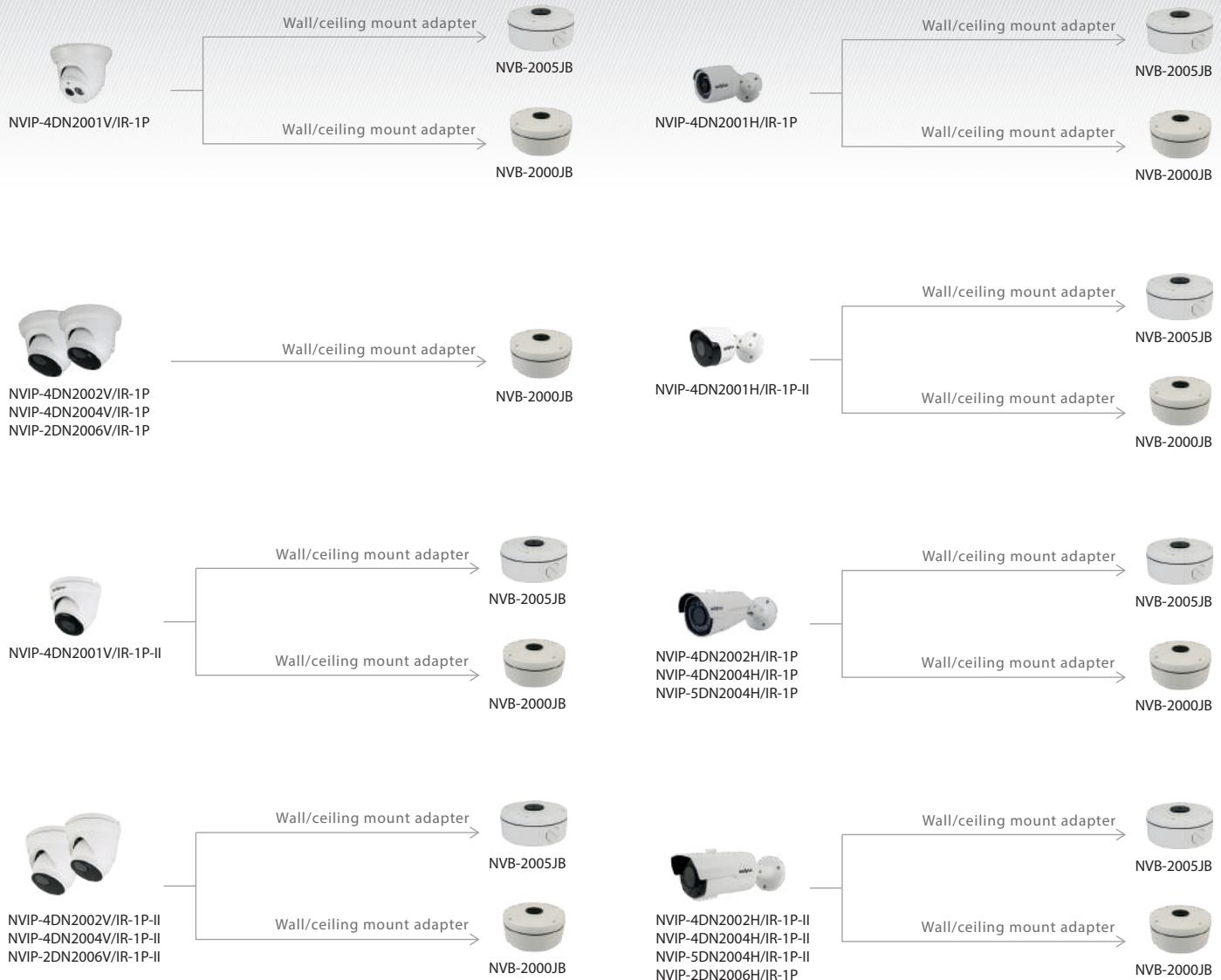
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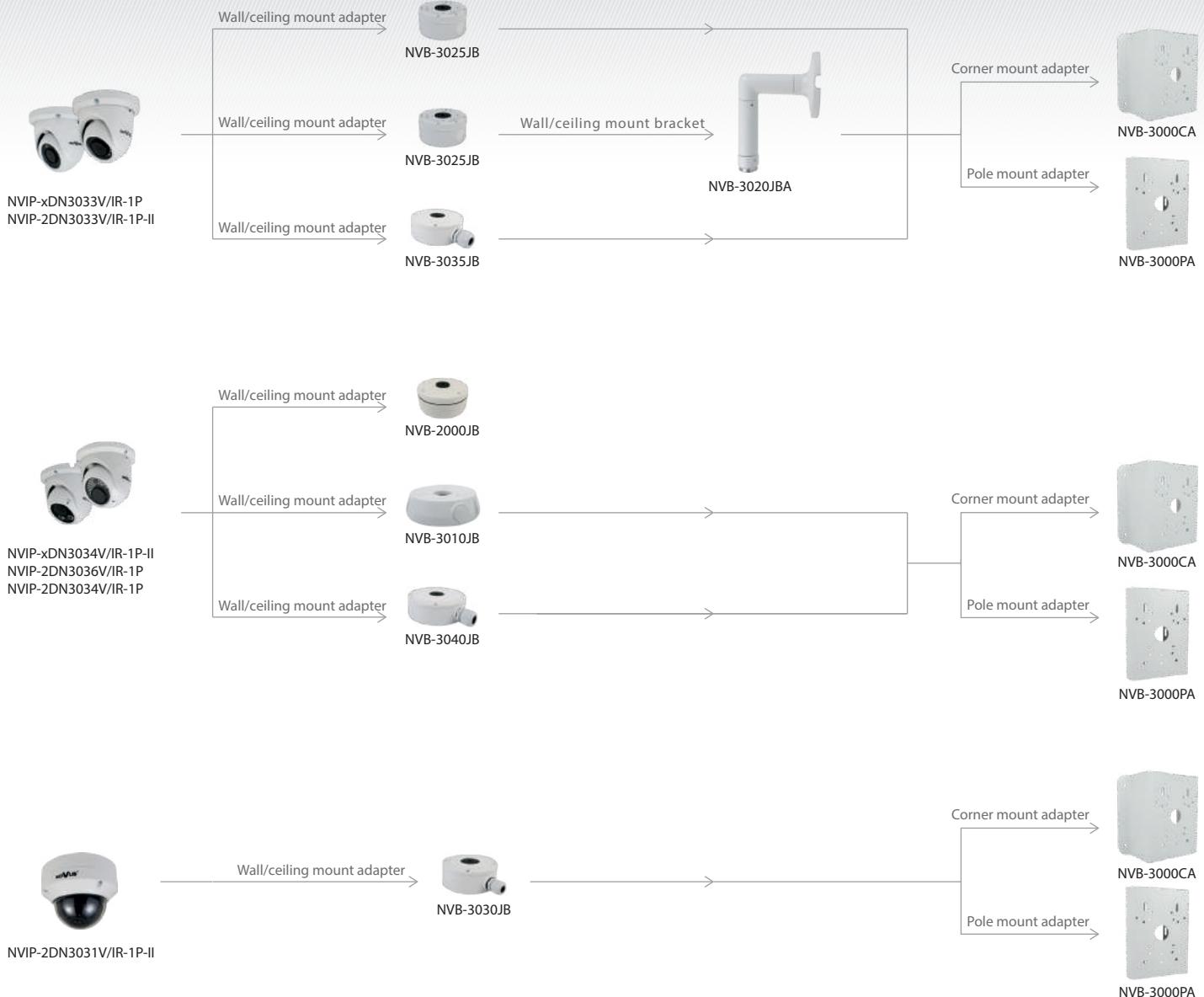
**THERMOVISION –  
TECHNOLOGY FOR SPECIAL ASSIGNMENTS**  
**OBSERVATION IN COMPLETE DARKNESS**  
IMAGE CREATED BY THERMAL RADIATION  
GENERATED BY ANY OBJECTS

Distribution:

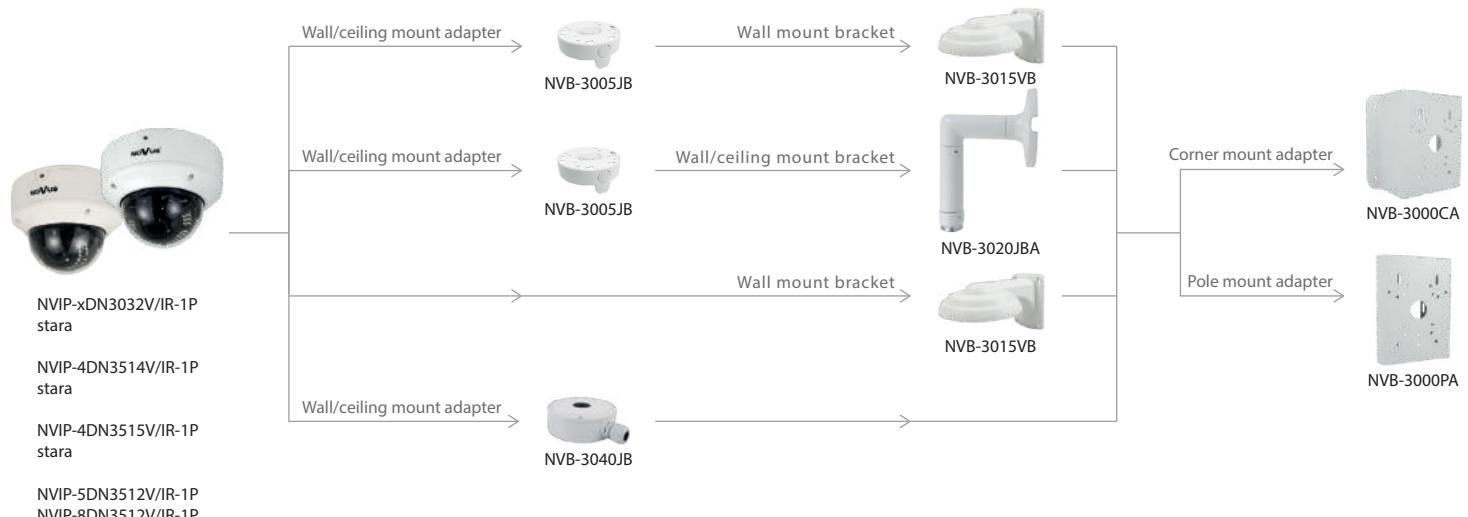
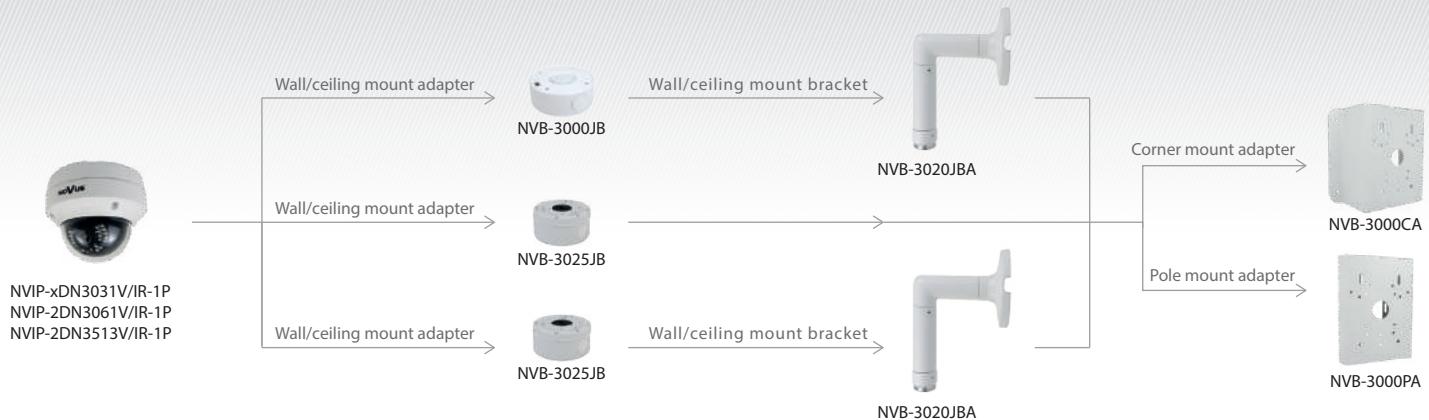
# BRACKETS & ADAPTERS FOR 2000 SERIES IP CAMERAS

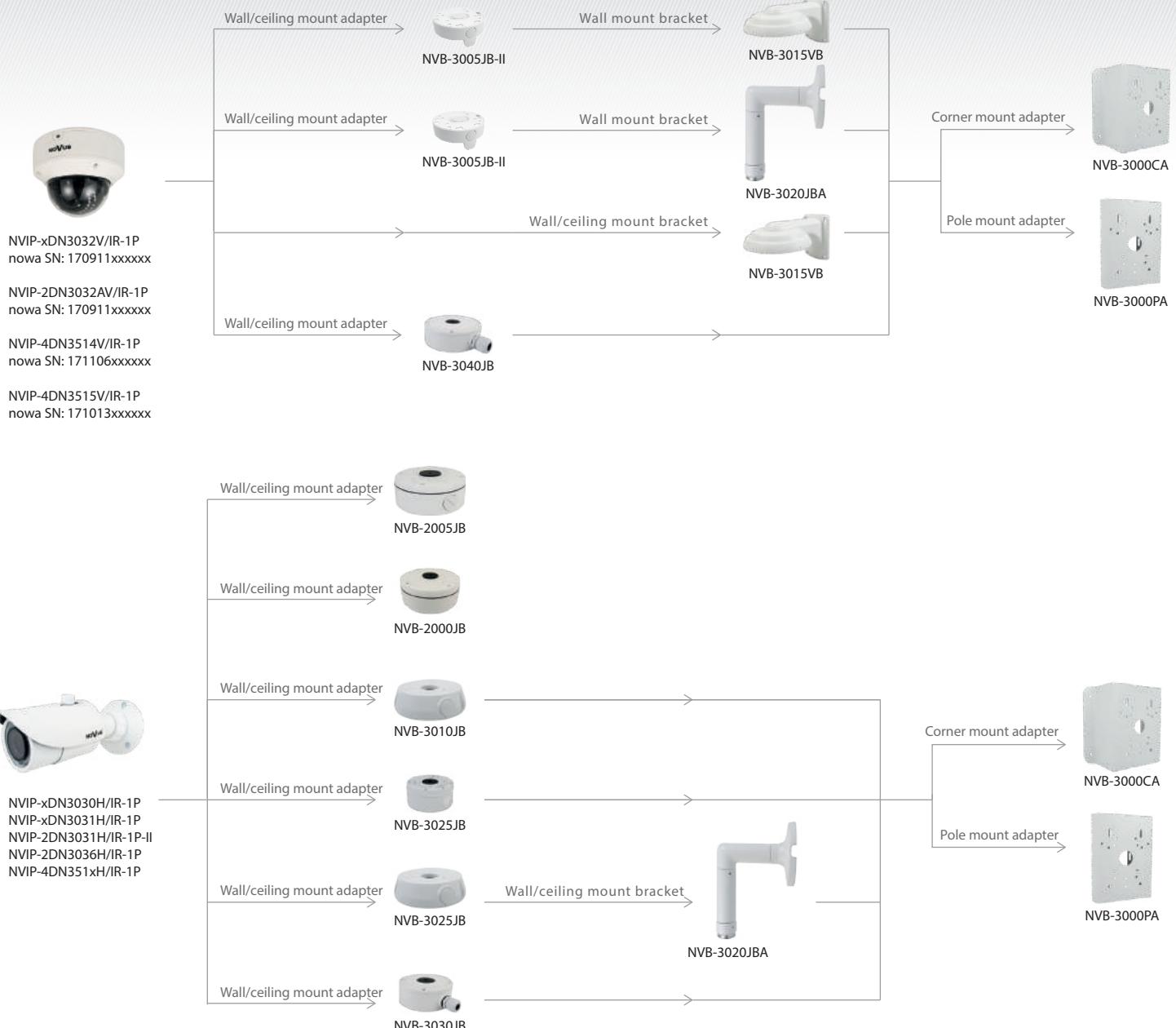


## BRACKETS & ADAPTERS FOR 3000 SERIES IP CAMERAS



## BRACKETS & ADAPTERS FOR 3000 SERIES IP CAMERAS

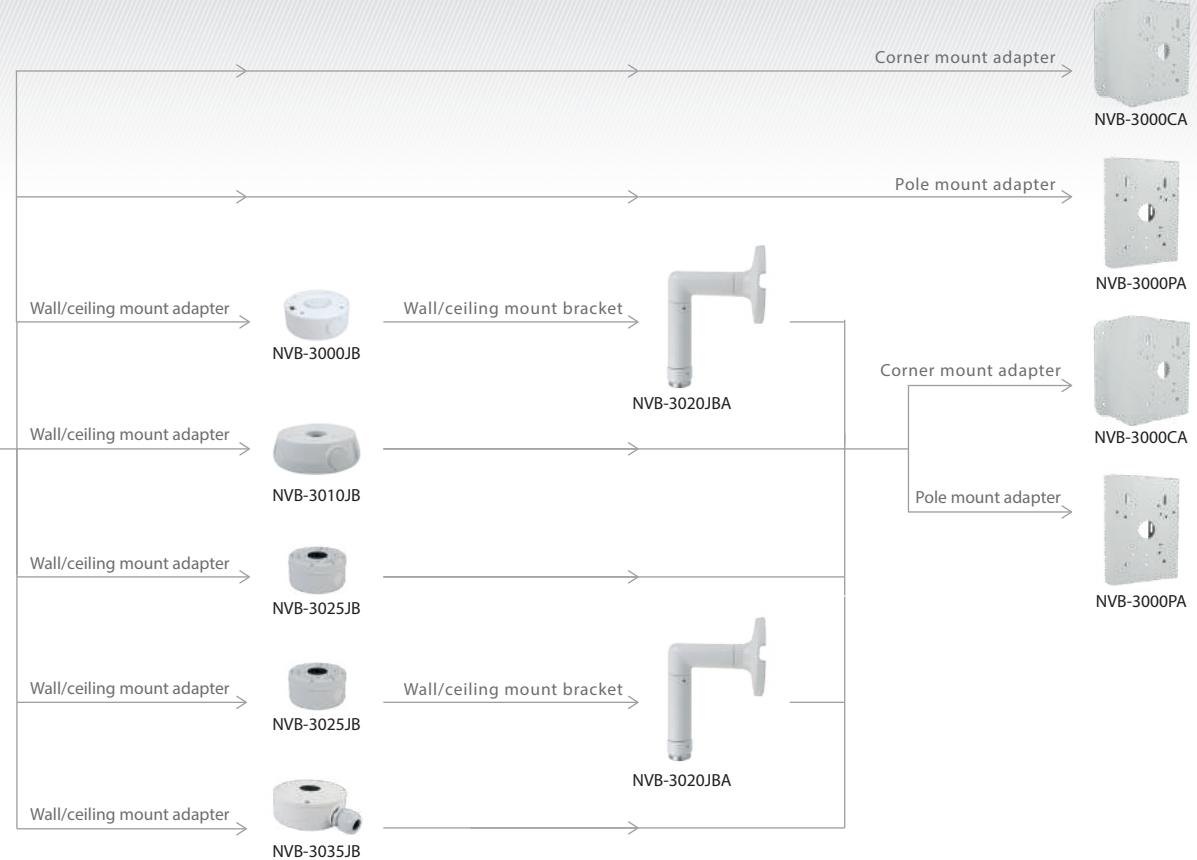




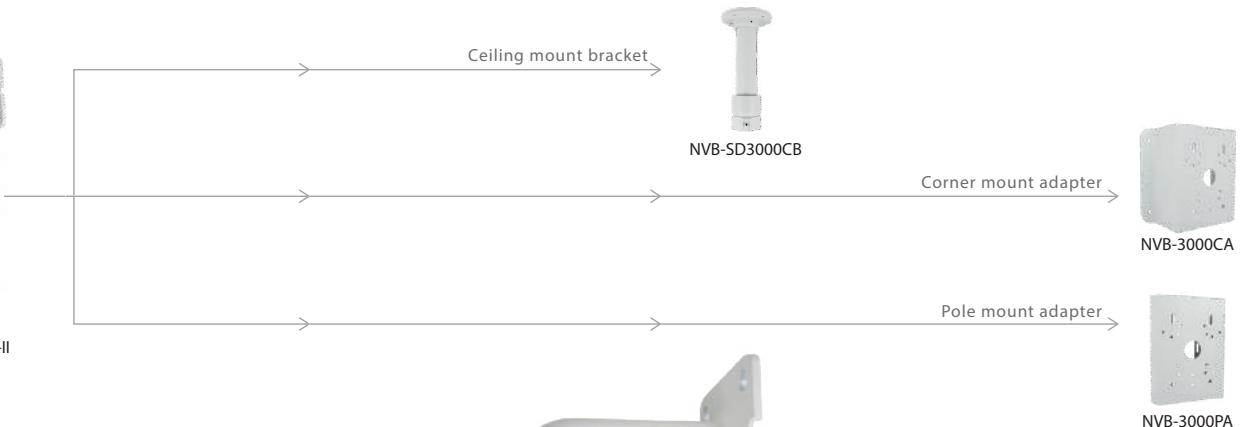
## BRACKETS & ADAPTERS FOR 3000 SERIES IP CAMERAS



NVIP-1DN3040H/IR-1P  
NVIP-3DN3552H/IR-1P  
NVIP-4DN3513H/IR-1P  
NVIP-4DN3552AH/IR-1P  
NVIP-5DN3512H/IR-1P  
NVIP-8DN3512H/IR-1P



NVIP-3DN3520SD/IRH-2  
NVIP-3DN3520SD/IRH-2-II



## BRACKETS & ADAPTERS FOR 5000 SERIES IP CAMERAS



NVIP-2DN5002V/IRH-1P  
NVIP-4DN5002V/IRH-1P



NVB-5020JB



NVIP-4DN5042V/IRH-2P

Wall/ceiling mount adapter →



Wall/ceiling mount adapter →



NVB-5000JB

Corner mount adapter →



Pole mount adapter →



Wall mount adapter →



NVIP-12DN5060V/IRH-2P

Wall/ceiling mount adapter →



NVB-5000JB

Wall/ceiling mount adapter →



NVB-5060JB

Corner mount adapter →



Pole mount adapter →



Pole mount adapter →



NVIP-1DN5001H/IRH-1P

Wall/ceiling mount adapter →



NVB-5000JB

Pole mount adapter →



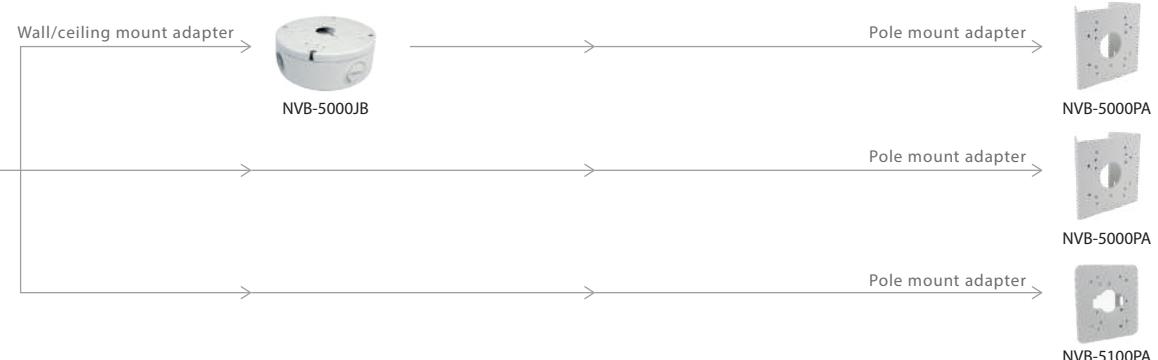
## BRACKETS & ADAPTERS FOR 5000 SERIES IP CAMERAS



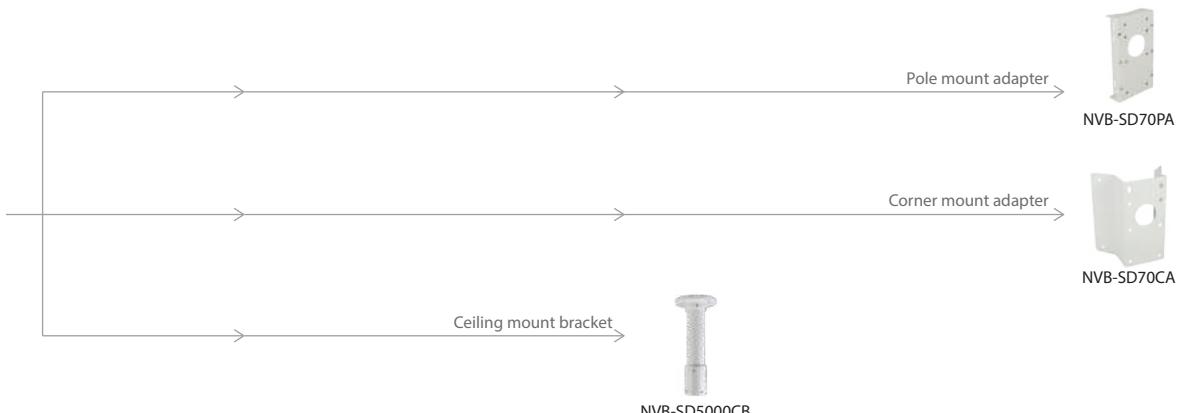
NVIP-4DN5002H/IRH-1P



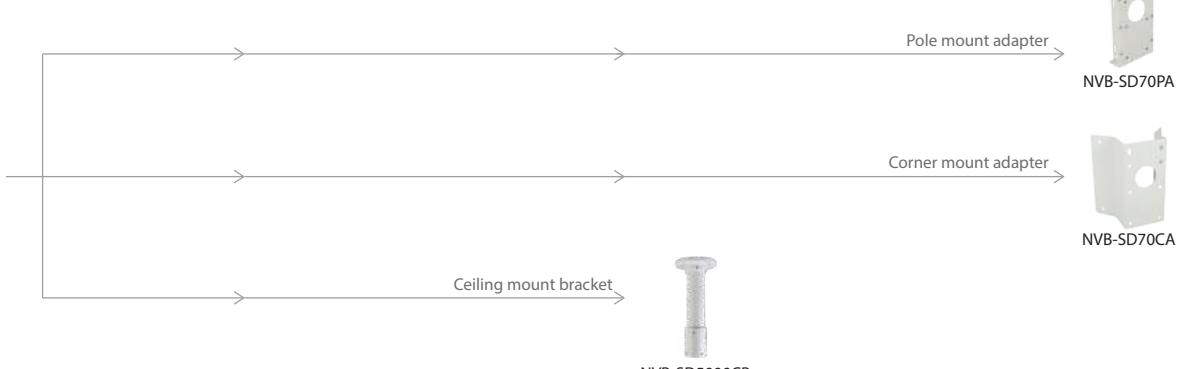
NVIP-T500XH-1P  
NVIP-6DN5021H/IRH-1P  
NVIP-6DN5022H/IRH-1P



NVIP-2DN5120SD/IRH-2



NVIP-3DN5030SD/IRH-2



## BRACKETS & ADAPTERS FOR 7000 SERIES IP CAMERAS



In-ceiling mount adapter



Wall mount adapter



Pole mount adapter



NVIP-8DN7560H/IRH-2P  
NVIP-2DN7460H/IRH-2P

NVB-5010JB-II

Pole mount adapter



Wall/ceiling mount adapter



Ceiling mount bracket



Corner mount adapter



NVIP-3DN7030SD/IRH-2P

Pole mount adapter





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H.265

# H.265 – THE BEST COMPRESSION IN VIDEO SURVEILLANCE

**WITH H.265 COMPRESSION YOU GAIN MUCH MORE  
ON THE SAME DISK SPACE**

Distribution:

## 4- AND 8-CHANNEL IP RECORDERS



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	NVR-6304P4-H1	NVR-7704P4-H1	NVR-6308P8-H1	NVR-7708P8-H1
<b>POE</b>	<b>POE</b>	<b>POE</b>	<b>POE</b>	<b>POE</b>
<b>Video</b>				
IP Cameras	4 channels at 3840 x 2160 resolution (video + audio)	4 channels at 3840 x 2160 resolution (video + audio)	8 channels at 3840 x 2160 resolution (video + audio)	8 channels at 3840 x 2160 resolution (video + audio)
Supported Resolution	max. 3840 x 2160			
Compression	H.264, H.264+, H.265	H.264, H.264+, H.265	H.264, H.264+, H.265	H.264, H.264+, H.265
Monitor Output	main (split screen, full screen, sequence): 1 x VGA, 1 x HDMI (4K UltraHD) (up to 2 monitors simultaneously)	main (split screen, full screen, sequence): 1 x VGA, 1 x HDMI (4K UltraHD) (up to 2 monitors simultaneously)	main (split screen, full screen, sequence): 1 x VGA, 1 x HDMI (4K UltraHD) (up to 2 monitors simultaneously)	main (split screen, full screen, sequence): 1 x VGA, 1 x HDMI (4K UltraHD) (up to 2 monitors simultaneously)
Dualstreaming Support	yes*	yes*	yes*	yes*
<b>Audio</b>				
Audio Output	1 x line-out (RCA) 1 x HDMI			
<b>Recording</b>				
Recording Speed	120 fps (4 x 30 fps for 3840 x 2160 and lower resolutions)	120 fps (4 x 30 fps for 3840 x 2160 and lower resolutions)	240 fps (8 x 30 fps for 3840 x 2160 and lower resolutions)	240 fps (8 x 30 fps for 3840 x 2160 and lower resolutions)
Stream Size	40 Mb/s in total from all cameras	60 Mb/s in total from all cameras	50 Mb/s in total from all cameras	80 Mb/s in total from all cameras
<b>Display</b>				
Display Speed	120 fps (4 x 30 fps)**	120 fps (4 x 30 fps)**	240 fps (8 x 30 fps)**	240 fps (8 x 30 fps)**
<b>Playback</b>				
Playback Speed	do 4x30 fps (auxiliary streams) lub 1x 30 fps (main stream)	do 4x30 fps (auxiliary streams) lub 1x 30 fps (main stream)	do 8x30 fps (auxiliary streams) lub 1x 30 fps (main stream)	do 8x30 fps (auxiliary streams) lub 1x 30 fps (main stream)
<b>Storage</b>				
Internal storage for recording	available mount: 1 x HDD 3.5" 6 TB SATA ***	available mount: 1 x HDD 3.5" 24/7 grade for recording***	available mount: 1 x HDD 3.5" 8 TB SATA ***	available mount: 1 x HDD 3.5" 24/7 grade for recording***
Total Capacity	8 TB	8 TB	8 TB	8 TB
<b>Alarm</b>				
Alarm Input/Output	supports camera's alarm input/output *	-	supports camera's alarm input/output *	-
Motion Detection	supports camera's motion detection*			
System Reaction to Alarm Events	buzzer, recording activation, PTZ, e-mail with attachment	buzzer, alarm output activation, recording activation, PTZ, e-mail with attachment	buzzer, recording activation, PTZ, e-mail with attachment	buzzer, alarm output activation, recording activation, PTZ, e-mail with attachment
Internal Alarm Input/Output	-	2/1 relay type	-	2/1 relay type
<b>Video Content Analysis (VCA)</b>				
Supported functions	Object Detection, Exception, Scene Change, Video Blurred, Video Color Cast, Tripwire, Intrusion	-	Object Detection, Exception, Scene Change, Video Blurred, Video Color Cast, Tripwire, Intrusion	-
<b>Network</b>				
Network Interface	1 x Ethernet - RJ-45 interface, 10/100 Mbit/s 4 x Ethernet PoE - interface RJ-45, 10/100 Mbit/s	1 x Ethernet - RJ-45 interface, 10/100 Mbit/s 4 x Ethernet PoE - interface RJ-45, 10/100 Mbit/s	1 x Ethernet - RJ-45 interface, 10/100 Mbit/s 8 x Ethernet PoE - interface RJ-45, 10/100 Mbit/s	1 x Ethernet - RJ-45 interface, 10/100 Mbit/s 8 x Ethernet PoE - interface RJ-45, 10/100 Mbit/s
ONVIF Protocol Support	Profile S (ONVIF 2.2 or higher)			
PC/MAC Software	Internet Explorer, NVR-6000 Viewer/Safari	NMS, Internet Explorer, Firefox, Chrome, Opera/Safari	Internet Explorer, NVR-6000 Viewer/Safari	NMS, Internet Explorer, Firefox, Chrome, Opera/Safari
Smartphone Software	SuperLive Plus (iPhone, Android)	NVR 7000 Viewer (iPhone, Android)	SuperLive Plus (iPhone, Android)	NVR 7000 Viewer (iPhone, Android)
Bandwidth	40 Mb/s in total to all client workstations	60 Mb/s in total to all client workstations	50 Mb/s in total to all client workstations	80 Mb/s in total to all client workstations
<b>PTZ</b>				
PTZ Functions	pan/tilt/zoom, preset commands*	pan/tilt/zoom, preset commands*	pan/tilt/zoom, preset commands*	pan/tilt/zoom, preset commands*
<b>Operating system</b>				
Operating system	Linux	Linux	Linux	Linux
Operation Mode	tripleks	tripleks	tripleks	tripleks
OSD	languages: Polish, English, others			
System Diagnostic	automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss
Security	password protection, IP filtering, MAC filtering	password protection	password protection, IP filtering, MAC filtering	password protection

\* Function depends on communication protocol, for details please check compatibility table in section DOWNLOADABLE FILES. \*\* Available with dual streaming mode. \*\*\* List of compatible HDD models and maximum of their capacities is available in each product's catalog card on our website in the DOWNLOADABLE FILES.

# 16-CHANNEL IP RECORDERS



**8**  
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## Video

	NVR-6316-H1	NVR-6316P16-H2	NVR-7716P16-H2
<b>IP Cameras</b>	16 channels at 3840 x 2160 resolution (video + audio)	16 channels at 3840 x 2160 resolution (video + audio)	16 channels at 3840 x 2160 resolution (video + audio)
Supported Resolution	max. 3840 x 2160	max. 3840 x 2160	max. 3840 x 2160
Compression	H.264, H.264+, H.265	H.264, H.264+, H.265	H.264, H.264+, H.265
Monitor Output	main (split screen, full screen, sequence): 1 x HDMI (4K UltraHD) (up to 2 monitors simultaneously)	main (split screen, full screen, sequence): 1 x VGA, 1 x HDMI (4K UltraHD) (up to 2 monitors simultaneously)	main (split screen, full screen, sequence): 1 x VGA, 1 x HDMI (4K UltraHD) (up to 2 monitors simultaneously)
Dualstreaming Support	yes*	yes*	yes*
<b>Audio</b>			
Audio Output	1 x line-out (RCA) 1 x HDMI	1 x line-out (RCA) 1 x HDMI	1 x line-out (RCA) 1 x HDMI
<b>Recording</b>			
Recording Speed	480 fps (16 x 30 fps for 3840 x 2160 and lower resolutions)	480 fps (16 x 30 fps for 3840 x 2160 and lower resolutions)	480 fps (16 x 30 fps for 3840 x 2160 and lower resolutions)
Stream Size	80 Mb/s in total from all cameras	112 Mb/s in total from all cameras	160 Mb/s in total from all cameras
<b>Display</b>			
Display Speed	480 fps (16 x 30 fps)**	480 fps (16 x 30 fps)**	480 fps (16 x 30 fps)**
<b>Playback</b>			
Playback Speed	do 16x30 fps (streams pomocnicze) lub 1x 30 fps (strumień główny)	do 16x30 fps (streams pomocnicze) lub 1x 30 fps (strumień główny)	do 16x30 fps (streams pomocnicze) lub 1x 30 fps (strumień główny)
<b>Storage</b>			
Internal storage for recording	available mount: 1 x HDD 3.5" 8 TB SATA***	available mount: 2 x HDD 3.5" 8 TB SATA***	available mount: 2 x HDD 3.5" 10 TB SATA***
Total Capacity	8 TB	16 TB	20 TB
<b>Alarm</b>			
Internal Alarm Input/Output	supports camera's alarm input/output*	supports camera's alarm input/output*	-
Motion Detection	supports camera's motion detection*	supports camera's motion detection*	supports camera's motion detection*
System Reaction to Alarm Events	buzzer, recording activation, PTZ, e-mail with attachment	buzzer, e-mail, alarm output activation, recording activation, PTZ	buzzer, alarm output activation, recording activation, PTZ, e-mail with attachment
Local alarm input/output	4/1 relay type	-	4/1 relay type
<b>Video Content Analysis (VCA)</b>			
Supported functions	Object Detection, Exception, Scene Change, Video Blurred, Video Color Cast, Tripwire, Intrusion	Object Detection, Exception, Scene Change, Video Blurred, Video Color Cast, Tripwire, Intrusion	-
<b>Network</b>			
Network Interface	1 x Ethernet - RJ-45 interface, 10/100 Mbit/s	1 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s 16 x Ethernet PoE - interface RJ-45, 10/100 Mbit/s	1 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s 16 x Ethernet PoE - interface RJ-45, 10/100 Mbit/s
ONVIF Protocol Support	Profile S (ONVIF 2.2 or higher)	Profile S (ONVIF 2.2 or higher)	Profile S (ONVIF 2.2 or higher)
PC/MAC Software	Internet Explorer, NVR-6000 Viewer/Safari	Internet Explorer, NVR-6000 Viewer/Safari	NMS, Internet Explorer, Firefox, Chrome, Opera/Safari
Smartphone Software	SuperLive Plus (iPhone, Android)	SuperLive Plus (iPhone, Android)	NVR 7000 Viewer (iPhone, Android)
Bandwidth	80 Mb/s in total to all client workstations	112 Mb/s in total to all client workstations	160 Mb/s in total to all client workstations
<b>PTZ</b>			
PTZ Functions	pan/tilt/zoom, preset commands*	pan/tilt/zoom, preset commands*	pan/tilt/zoom, preset commands*
<b>Operating system</b>			
Operating system	Linux	Linux	Linux
Operation Mode	triplex	triplex	triplex
OSD	languages: Polish, English, others	languages: Polish, English, others	languages: Polish, English, others
System Diagnostic	automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss
Security	password protection, IP filtering, MAC filtering	password protection, IP filtering, MAC filtering	password protection, IP filtering, MAC filtering

\* Function depends on communication protocol, for details please check compatibility table in section DOWNLOADABLE FILES. \*\* Available with dual streaming mode.

\*\*\* List of compatible HDD models and maximum of their capacities is available in each product's catalog card on our website in the DOWNLOADABLE FILES.



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8 HDD

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8 DISCS INSIDE!  
MUCH MORE SPACE FOR YOUR ARCHIVE  
IN NVR-6332-H8 RECORDER

Distribution:

# 32-CHANNEL IP RECORDERS



**8**  
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	NVR-6332-H2	NVR-6332-H8	NVR-6332P16-H4	NVR-7732-H8
<b>Video</b>				
IP Cameras	32 channels at 3840 x 2160 resolution (video + audio)	32 channels at 3840 x 2160 resolution (video + audio)	32 channels at 3840 x 2160 resolution (video + audio)	32 channels at 3840 x 2160 resolution (video + audio)
Supported Resolution	max. 3840 x 2160	max. 3840 x 2160	max. 3840 x 2160	max. 3840 x 2160
Compression	H.264, H.264+, H.265	H.264, H.264+, H.265	H.264, H.264+, H.265	H.264, H.264+, H.265
Monitor Output	main (split screen, full screen, sequence); 1 x VGA, 1 x HDMI (4K UltraHD) (up to 2 monitors simultaneously)	main (split screen, full screen, sequence); 1 x VGA, 1 x HDMI (4K UltraHD) spot: 1 x HDMI (FullHD)	main (split screen, full screen, sequence); 1 x VGA, 1 x HDMI (4K UltraHD) (up to 2 monitors simultaneously)	main (split screen, full screen, sequence); 1 x VGA, 1 x BNC, 1 x HDMI (4K UltraHD) (up to 3 monitors simultaneously) spot: 1 x HDMI (FullHD), 1 x VGA
Dualstreaming Support	yes*	yes*	yes*	yes*
<b>Audio</b>				
Audio Output	1 x line-out (RCA) 1 x HDMI	1 x line-out (RCA) 1 x HDMI	1 x line-out (RCA) 1 x HDMI	1 x line-out (RCA) 1 x HDMI
<b>Recording</b>				
Recording Speed	960 fps (32 x 30 fps for 3840 x 2160 and lower resolutions)	960 fps (32 x 30 fps for 3840 x 2160 and lower resolutions)	960 fps (32 x 30 fps for 3840 x 2160 and lower resolutions)	960 fps (32 x 30 fps for 3840 x 2160 and lower resolutions)
Stream Size	256 Mb/s in total from all cameras	256 Mb/s in total from all cameras	256 Mb/s in total from all cameras	320 Mb/s in total from all cameras
<b>Display</b>				
Display Speed	960 fps (32 x 30 fps)**	960 fps (32 x 30 fps)**	960 fps (32 x 30 fps)**	960 fps (32 x 30 fps)**
<b>Playback</b>				
Playback Speed	do 16x30 fps (streams pomocnicze) lub 1x 30 fps (strumień główny)	do 16x30 fps (streams pomocnicze) lub 1x 30 fps (strumień główny)	do 16x30 fps (streams pomocnicze) lub 1x 30 fps (strumień główny)	do 16x30 fps (streams pomocnicze) lub 1x 30 fps (strumień główny)
<b>Storage</b>				
Internal storage for recording	available mount: 2 x HDD 3.5" 6 TB SATA ***	available mount: 8 x HDD 3.5" 6 TB SATA ***	available mount: 4 x HDD 3.5" 8 TB SATA ***	available mount: 8 x HDD 3.5" 8 TB SATA ***
Total Capacity	12 TB	48 TB	32 TB	64 TB
<b>Alarm</b>				
Internal Alarm Input/Output	supports camera's alarm input/output *	supports camera's alarm input/output *	supports camera's alarm input/output *	-
Motion Detection	supports camera's motion detection*	supports camera's motion detection*	supports camera's motion detection*	supports camera's motion detection*
System Reaction to Alarm Events	buzzer, e-mail, recording activation, PTZ	buzzer, e-mail, alarm output activation, recording activation, PTZ	buzzer, e-mail, alarm output activation, recording activation, PTZ	buzzer, alarm output activation, recording activation, PTZ, e-mail with attachment
Local alarm input/output	-	8/4 relay type	16/4 relay type	16/4 relay type
<b>Video Content Analysis (VCA)</b>				
Supported functions	Object Detection, Exception, Scene Change, Video Blurred, Video Color Cast, Tripwire, Intrusion	Object Detection, Exception, Scene Change, Video Blurred, Video Color Cast, Tripwire, Intrusion	Object Detection, Exception, Scene Change, Video Blurred, Video Color Cast, Tripwire, Intrusion	-
<b>Network</b>				
Network Interface	1 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s	2 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s	1 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s 16 x Ethernet PoE - interface RJ-45, 10/100 Mbit/s	2 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s
ONVIF Protocol Support	Profile S (ONVIF 2.2 or higher)	Profile S (ONVIF 2.2 or higher)	Profile S (ONVIF 2.2 or higher)	Profile S (ONVIF 2.2 or higher)
PC/MAC Software	Internet Explorer, NVR-6000 Viewer/Safari	Internet Explorer, NVR-6000 Viewer/Safari	Internet Explorer, NVR-6000 Viewer/Safari	NMS, Internet Explorer, Firefox, Chrome, Opera/Safari
Smartphone Software	SuperLive Plus (iPhone, Android)	SuperLive Plus (iPhone, Android)	SuperLive Plus (iPhone, Android)	NVR 7000 Viewer (iPhone, Android)
Bandwidth	256 Mb/s in total to all client workstations	256 Mb/s in total to all client workstations	256 Mb/s in total to all client workstations	320 Mb/s in total to all client workstations
<b>PTZ</b>				
PTZ Functions	pan/tilt/zoom, preset commands*	pan/tilt/zoom, preset commands*	pan/tilt/zoom, preset commands*	pan/tilt/zoom, preset commands*
<b>Operating system</b>				
Operating system	Linux	Linux	Linux	Linux
Operation Mode	triplex	triplex	triplex	triplex
OSD	languages: Polish, English, others	languages: Polish, English, others	languages: Polish, English, others	languages: Polish, English, others
System Diagnostic	automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss
Security	password protection, IP filtering, MAC filtering	password protection, IP filtering, MAC filtering	password protection, IP filtering, MAC filtering	password protection, IP filtering, MAC filtering

\* Function depends on communication protocol, for details please check compatibility table in section DOWNLOADABLE FILES. \*\* Available with dual streaming mode.

\*\*\* List of compatible HDD models and maximum of their capacities is available in each product's catalog card on our website in the DOWNLOADABLE FILES.



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**8 HDD**



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## LIFEBOY FOR YOUR DATA

BUILT-IN RAID CONTROLLER WITH HOT SPARE FUNCTION

Distribution:

# NMS IP RECORDERS



**12**  
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**NMS** On board

	<b>NMS NVR 3-T</b>	<b>NMS NVR 3-4U</b>	<b>NMS NVR 5-4U</b>	<b>NMS NVR 7XE-4U</b>	<b>NMS NVR X-4U</b>
<b>Video</b>					
IP Cameras	20 channels at 1280 x 720 resolution (video + audio)	20 channels at 1280 x 720 resolution (video + audio)	40 channels at 1920 x 1080 resolution (video + audio)	75 channels at 1280 x 720 resolution (video + audio)	110 channels at 1280 x 720 resolution (video + audio)
Supported Cameras/Protocols	NOVUS, ONVIF, RTSP****	NOVUS, ONVIF, RTSP****	NOVUS, ONVIF, RTSP****	NOVUS, ONVIF, RTSP****	NOVUS, ONVIF, RTSP****
Supported Resolution	max. 4000 x 3000	max. 4000 x 3000	max. 4000 x 3000	max. 4000 x 3000	max. 4000 x 3000
Compression	H.264, MJPEG, H.264+, H.265	H.264, MJPEG, H.264+, H.265	H.264, MJPEG, H.264+, H.265	H.264, MJPEG, H.264+, H.265	H.264, MJPEG, H.264+, H.265
Monitor Output	main (split screen, full screen, sequence): 1 x HDMI, 1 x Display Port, 1 x DVI-D (up to 3 monitors simultaneously)*	main (split screen, full screen, sequence): 1 x HDMI, 1 x Display Port, 1 x DVI-D (up to 3 monitors simultaneously)*	main (split screen, full screen, sequence): 1 x HDMI, 1 x Display Port, 1 x DVI-D (up to 3 monitors simultaneously)*	main (split screen, full screen, sequence): 1 x HDMI, 1 x Display Port, 1 x DVI-D (up to 3 monitors simultaneously)*	main (split screen, full screen, sequence): 1 x HDMI, 1 x Display Port, 1 x DVI-D (up to 3 monitors simultaneously)*
Dualstreaming Support	yes	yes	yes	yes	yes
<b>Audio</b>					
Audio Output	1 x line-out (Jack 3.5 mm) 1 x HDMI 1 x S/PDIF (optical)	1 x line-out (Jack 3.5 mm) 1 x HDMI 1 x S/PDIF (optical)	1 x line-out (Jack 3.5 mm) 1 x HDMI 1 x S/PDIF (optical)	1 x line-out (Jack 3.5 mm) 1 x HDMI 1 x S/PDIF (optical)	1 x line-out (Jack 3.5 mm) 1 x HDMI 1 x S/PDIF (optical)
<b>Recording</b>					
Recording Speed	600 fps (20 x 30 fps for 1280 x 720) 480 fps (16 x 30 fps for 1920 x 1080) 240 fps (16 x 15 fps for 2048 x 1536) 192 fps (16 x 12 fps for 2560 x 1440) 120 fps (8 x 15 fps for 3072 x 2048)	600 fps (20 x 30 fps for 1280 x 720) 480 fps (16 x 30 fps for 1920 x 1080) 240 fps (16 x 15 fps for 2048 x 1536) 192 fps (16 x 12 fps for 2560 x 1440) 120 fps (8 x 15 fps for 3072 x 2048)	1200 fps (40 x 30 fps for 1280 x 720) 1080 fps (36 x 30 fps for 1920 x 1080) 540 fps (36 x 15 fps for 2048 x 1536) 432 fps (36 x 12 fps for 2560 x 1440) 270 fps (18 x 15 fps for 3072 x 2048)	2250 fps (75 x 30 fps for 1280 x 720) 1800 fps (60 x 30 fps for 1920 x 1080) 900 fps (60 x 15 fps for 2048 x 1536) 720 fps (60 x 12 fps for 2560 x 1440) 450 fps (30 x 15 fps for 3072 x 2048)	3300 fps (110 x 30 fps for 1280 x 720) 2400 fps (80 x 30 fps for 1920 x 1080) 1200 fps (60 x 15 fps for 2048 x 1536) 960 fps (80 x 12 fps for 2560 x 1440) 600 fps (40 x 15 fps for 3072 x 2048)
Stream Size	120 Mb/s in total from all cameras	120 Mb/s in total from all cameras	250 Mb/s in total from all cameras	250 Mb/s in total from all cameras	250 Mb/s in total from all cameras
<b>Display</b>					
Display Speed	600 fps (20 x 30 fps when recording 20 channels at 1280 x 720)** 240 fps (8 x 30 fps when recording 16 channels at 1920 x 1080)** 120 fps (8 x 15 fps when recording 16 channels at 2048 x 1536)** 96 fps (8 x 12 fps when recording 16 channels at 2592 x 1944)** 120 fps (8 x 15 fps when recording 13 channels at 3072 x 2048)**	600 fps (20 x 30 fps when recording 20 channels at 1280 x 720)** 480 fps (16 x 30 fps when recording 16 channels at 1920 x 1080)** 240 fps (16 x 15 fps when recording 16 channels at 2048 x 1536)** 192 fps (16 x 12 fps when recording 16 channels at 2592 x 1944)** 120 fps (8 x 15 fps when recording 13 channels at 3072 x 2048)**	1200 fps (40 x 30 fps when recording 40 channels at 1280 x 720)** 1080 fps (36 x 30 fps when recording 16 channels at 1920 x 1080)** 540 fps (30 x 15 fps when recording 16 channels at 2048 x 1536)** 432 fps (36 x 12 fps when recording 16 channels at 2592 x 1944)** 375 fps (25 x 15 fps when recording 13 channels at 3072 x 2048)**	2250 fps (75 x 30 fps when recording 75 channels at 1280 x 720)** 1800 fps (60 x 30 fps when recording 60 channels at 1920 x 1080)** 900 fps (60 x 15 fps when recording 60 channels at 2048 x 1536)** 720 fps (60 x 12 fps when recording 60 channels at 2592 x 1944)** 450 fps (30 x 15 fps when recording 30 channels at 3072 x 2048)**	1080 fps (36 x 30 fps when recording 110 channels at 1280 x 720)** 1350 fps (45 x 30 fps when recording 80 channels at 1920 x 1080)** 900 fps (60 x 15 fps when recording 80 channels at 2048 x 1536)** 720 fps (60 x 12 fps when recording 80 channels at 2592 x 1944)** 450 fps (30 x 15 fps when recording 40 channels at 3072 x 2048)**
<b>Playback</b>					
Playback Speed	270 fps (9 x 30 fps for 1280 x 720) 240 fps (8 x 30 fps for 1920 x 1080) 90 fps (6 x 15 fps for 2048 x 1536) 48 fps (4 x 12 fps for 2560 x 1440) 60 fps (4 x 15 fps for 3072 x 2048)	270 fps (9 x 30 fps for 1280 x 720) 240 fps (8 x 30 fps for 1920 x 1080) 90 fps (6 x 15 fps for 2048 x 1536) 48 fps (4 x 60 fps for 2560 x 1440)	270 fps (9 x 30 fps for 1280 x 720) 240 fps (8 x 30 fps for 1920 x 1080) 90 fps (6 x 15 fps for 2048 x 1536) 48 fps (4 x 12 fps for 2592 x 1944) 60 fps (4 x 15 fps for 3072 x 2048)	480 fps (16 x 30 fps for 1280 x 720) 270 fps (9 x 30 fps for 1920 x 1080) 135 fps (9 x 15 fps for 2048 x 1536) 108 fps (9 x 12 fps for 2560 x 1440) 90 fps (6 x 15 fps for 3072 x 2048)	480 fps (16 x 30 fps for 1280 x 720) 270 fps (9 x 30 fps for 1920 x 1080) 135 fps (9 x 15 fps for 2048 x 1536) 108 fps (9 x 12 fps for 2560 x 1440) 90 fps (6 x 15 fps for 3072 x 2048)
<b>Storage</b>					
Internal storage for recording	available mount: 4 x HDD 3.5" 24/7 grade for recording****	available mount: 5 x HDD 3.5" 24/7 grade for recording****	available mount: 5 x HDD 3.5" 24/7 grade for recording****	available mount: 5 x HDD 3.5" 24/7 grade for recording****	available mount: 8 x HDD 3.5" 24/7 grade for recording***
Internal storage for system	built-in: 1 x HDD 3,5" SATA	built-in: 1 x HDD 3,5" SATA	built-in: 1 x HDD 3,5" SATA	built-in: 1 x HDD 3,5" SATA	built-in: 1 x HDD 3,5" SATA
<b>Alarm</b>					
Internal Alarm Input/Output	supports camera's alarm input/output ***	supports camera's alarm input/output ***	supports camera's alarm input/output ***	supports camera's alarm input/output ***	supports camera's alarm input/output ***
Motion Detection	supports camera's motion detection***	supports camera's motion detection***	supports camera's motion detection***	supports camera's motion detection***	supports camera's motion detection***
System Reaction to Alarm Events	buzzer, e-mail, SMS, screen message, recording activation, PTZ	buzzer, e-mail, SMS, screen message, recording activation, PTZ	buzzer, e-mail, SMS, screen message, recording activation, PTZ	buzzer, e-mail, SMS, screen message, recording activation, PTZ	buzzer, e-mail, SMS, screen message, recording activation, PTZ
<b>Network</b>					
Network Interface	1 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s	1 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s	1 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s	2 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s	2 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s
Network Protocols Support	HTTP, TCP/IP, IPv4, UDP, FTP, DHCP, DNS, NTP, RTSP, UPnP, SMTP	HTTP, TCP/IP, IPv4, UDP, FTP, DHCP, DNS, NTP, RTSP, UPnP, SMTP	HTTP, TCP/IP, IPv4, UDP, FTP, DHCP, DNS, NTP, RTSP, UPnP, SMTP	HTTP, TCP/IP, IPv4, UDP, FTP, DHCP, DNS, NTP, RTSP, UPnP, SMTP	HTTP, TCP/IP, IPv4, UDP, FTP, DHCP, DNS, NTP, RTSP, UPnP, SMTP
PC/MAC Software	NMS, Internet Explorer/-	NMS, Internet Explorer/-	NMS, Internet Explorer/-	NMS, Internet Explorer/-	NMS, Internet Explorer/-
Smartphone Software	NMS Mobile	NMS Mobile	NMS Mobile	NMS Mobile	NMS Mobile
Bandwidth	120 Mb/s in total to all client workstations	120 Mb/s in total to all client workstations	250 Mb/s in total to all client workstations	250 Mb/s in total to all client workstations	250 Mb/s in total to all client workstations
<b>PTZ</b>					
PTZ Functions	pan/tilt/zoom, preset commands, patterns, tours, auto-scans***	pan/tilt/zoom, preset commands, patterns, tours, auto-scans***	pan/tilt/zoom, preset commands, patterns, tours, auto-scans***	pan/tilt/zoom, preset commands, patterns, tours, auto-scans***	pan/tilt/zoom, preset commands, patterns, tours, auto-scans***
<b>Other</b>					
Operation Mode	pentapleks	pentapleks	pentapleks	pentapleks	pentapleks
OSD	languages: Polish, English, Russian, others	languages: Polish, English, Russian, others	languages: Polish, English, Russian, others	languages: Polish, English, Russian, others	languages: Polish, English, Russian, others
System Diagnostic	automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss
Security	password protection, IP filtering, limiting the number of connections	password protection, IP filtering, limiting the number of connections	password protection, IP filtering, limiting the number of connections	password protection, IP filtering, limiting the number of connections	password protection, IP filtering, limiting the number of connections

\* To support more than two monitors it is required to use Display Port output. \*\* Available with dual streaming mode. \*\*\* Function capability depends on used devices and communication protocols. \*\*\*\* List of compatible HDD models and maximum of their capacities is available in section DOWNLOADABLE FILES. \*\*\*\*\* To support more than 1 RTSP stream and 1 ONVIF stream you will need special licence key.

<b>NMS NVR X-2U/24/R</b>	<b>NMS NVR X-2U/48/R</b>	<b>NMS NVR X-2U/72/R</b>	<b>NMS NVR X-2U/96/R</b>	<b>NMS NVR X-2U/120/R</b>	<b>NMS NVR X-2U/144/R</b>
 	 	 	 	 	 
110 channels at 1280 x 720 resolution (video + audio) NOVUS, ONVIF, RTSP**** max. 4000 x 3000 H.264, MJPEG, H.264+, H.265 main (split screen, full screen, sequence): 1 x DVI, 1 x Display Port (up to 2 monitors simultaneously)	110 channels at 1280 x 720 resolution (video + audio) NOVUS, ONVIF, RTSP**** max. 4000 x 3000 H.264, MJPEG, H.264+, H.265 main (split screen, full screen, sequence): 1 x DVI, 1 x Display Port (up to 2 monitors simultaneously)	110 channels at 1280 x 720 resolution (video + audio) NOVUS, ONVIF, RTSP**** max. 4000 x 3000 H.264, MJPEG, H.264+, H.265 main (split screen, full screen, sequence): 1 x DVI, 1 x Display Port (up to 2 monitors simultaneously)	110 channels at 1280 x 720 resolution (video + audio) NOVUS, ONVIF, RTSP**** max. 4000 x 3000 H.264, MJPEG, H.264+, H.265 main (split screen, full screen, sequence): 1 x DVI, 1 x Display Port (up to 2 monitors simultaneously)	110 channels at 1280 x 720 resolution (video + audio) NOVUS, ONVIF, RTSP**** max. 4000 x 3000 H.264, MJPEG, H.264+, H.265 main (split screen, full screen, sequence): 1 x DVI, 1 x Display Port (up to 3 monitors simultaneously)	110 channels at 1280 x 720 resolution (video + audio) NOVUS, ONVIF, RTSP**** max. 4000 x 3000 H.264, MJPEG, H.264+, H.265 main (split screen, full screen, sequence): 1 x DVI, 1 x Display Port (up to 3 monitors simultaneously)
yes	yes	yes	yes	yes	yes
1 x line-out (Jack 3.5 mm) 1 x S/PDIF (optical)	1 x line-out (Jack 3.5 mm) 1 x S/PDIF (optical)	1 x line-out (Jack 3.5 mm) 1 x S/PDIF (optical)	1 x line-out (Jack 3.5 mm) 1 x S/PDIF (optical)	1 x line-out (Jack 3.5 mm) 1 x S/PDIF (optical)	1 x line-out (Jack 3.5 mm) 1 x S/PDIF (optical)
3300 fps (110 x 30 fps for 1280 x 720) 2400 fps (80 x 30 fps for 1920 x 1080) 1200 fps (80 x 15 fps for 2048 x 1536) 960 fps (80 x 12 fps for 2560 x 1440)	3300 fps (110 x 30 fps for 1280 x 720) 2400 fps (80 x 30 fps for 1920 x 1080) 1200 fps (80 x 15 fps for 2048 x 1536) 960 fps (80 x 12 fps for 2560 x 1440)	3300 fps (110 x 30 fps for 1280 x 720) 2400 fps (80 x 30 fps for 1920 x 1080) 1200 fps (80 x 15 fps for 2048 x 1536) 960 fps (80 x 12 fps for 2560 x 1440)	3300 fps (110 x 30 fps for 1280 x 720) 2400 fps (80 x 30 fps for 1920 x 1080) 1200 fps (80 x 15 fps for 2048 x 1536) 960 fps (80 x 12 fps for 2560 x 1440)	3300 fps (110 x 30 fps for 1280 x 720) 2400 fps (80 x 30 fps for 1920 x 1080) 1200 fps (80 x 15 fps for 2048 x 1536) 960 fps (80 x 12 fps for 2560 x 1440)	3300 fps (110 x 30 fps for 1280 x 720) 2400 fps (80 x 30 fps for 1920 x 1080) 1200 fps (80 x 15 fps for 2048 x 1536) 960 fps (80 x 12 fps for 2560 x 1440)
250 Mb/s in total from all cameras					
1080 fps (36 x 30 fps when recording 110 channels at 1280 x 720)** 1350 fps (45 x 30 fps when recording 80 channels at 1920 x 1080)** 900 fps (60 x 15 fps when recording 80 channels at 2048 x 1536)** 720 fps (60 x 12 fps when recording 80 channels at 2592 x 1944)**	1080 fps (36 x 30 fps when recording 110 channels at 1280 x 720)** 1350 fps (45 x 30 fps when recording 80 channels at 1920 x 1080)** 900 fps (60 x 15 fps when recording 80 channels at 2048 x 1536)** 720 fps (60 x 12 fps when recording 80 channels at 2592 x 1944)**	1080 fps (36 x 30 fps when recording 110 channels at 1280 x 720)** 1350 fps (45 x 30 fps when recording 80 channels at 1920 x 1080)** 900 fps (60 x 15 fps when recording 80 channels at 2048 x 1536)** 720 fps (60 x 12 fps when recording 80 channels at 2592 x 1944)**	1080 fps (36 x 30 fps when recording 110 channels at 1280 x 720)** 1350 fps (45 x 30 fps when recording 80 channels at 1920 x 1080)** 900 fps (60 x 15 fps when recording 80 channels at 2048 x 1536)** 720 fps (60 x 12 fps when recording 80 channels at 2592 x 1944)**	1080 fps (36 x 30 fps when recording 110 channels at 1280 x 720)** 1350 fps (45 x 30 fps when recording 80 channels at 1920 x 1080)** 900 fps (60 x 15 fps when recording 80 channels at 2048 x 1536)** 720 fps (60 x 12 fps when recording 80 channels at 2592 x 1944)**	1080 fps (36 x 30 fps when recording 110 channels at 1280 x 720)** 1350 fps (45 x 30 fps when recording 80 channels at 1920 x 1080)** 900 fps (60 x 15 fps when recording 80 channels at 2048 x 1536)** 720 fps (60 x 12 fps when recording 80 channels at 2592 x 1944)**
480 fps (16 x 30 fps for 1280 x 720) 270 fps (9 x 30 fps for 1920 x 1080) 135 fps (9 x 15 fps for 2048 x 1536) 108 fps (9 x 12 fps for 2560 x 1440)	480 fps (16 x 30 fps for 1280 x 720) 270 fps (9 x 30 fps for 1920 x 1080) 135 fps (9 x 15 fps for 2048 x 1536) 108 fps (9 x 12 fps for 2560 x 1440)	480 fps (16 x 30 fps for 1280 x 720) 270 fps (9 x 30 fps for 1920 x 1080) 135 fps (9 x 15 fps for 2048 x 1536) 108 fps (9 x 12 fps for 2560 x 1440)	480 fps (16 x 30 fps for 1280 x 720) 270 fps (9 x 30 fps for 1920 x 1080) 135 fps (9 x 15 fps for 2048 x 1536) 108 fps (9 x 12 fps for 2560 x 1440)	480 fps (16 x 30 fps for 1280 x 720) 270 fps (9 x 30 fps for 1920 x 1080) 135 fps (9 x 15 fps for 2048 x 1536) 108 fps (9 x 12 fps for 2560 x 1440)	480 fps (16 x 30 fps for 1280 x 720) 270 fps (9 x 30 fps for 1920 x 1080) 135 fps (9 x 15 fps for 2048 x 1536) 108 fps (9 x 12 fps for 2560 x 1440)
built-in: 12 x HDD 3.5" 2 TB SAS 24/7 grade for recording	built-in: 12 x HDD 3.5" 4 TB SAS 24/7 server grade for recording	built-in: 12 x HDD 3.5" 6 TB SAS 24/7 server grade for recording	built-in: 12 x HDD 3.5" 8 TB SAS 24/7 server grade for recording	built-in: 12 x HDD 3.5" 10 TB SAS 24/7 server grade for recording	built-in: 12 x HDD 3.5" 12 TB SAS 24/7 server grade for recording
built-in: 1 x HDD 2,5" SATA					
supports camera's alarm input/output ***					
supports camera's motion detection***					
buzzer, e-mail, SMS, screen message, recording activation, PTZ	buzzer, e-mail, SMS, screen message, recording activation, PTZ	buzzer, e-mail, SMS, screen message, recording activation, PTZ	buzzer, e-mail, SMS, screen message, recording activation, PTZ	buzzer, e-mail, SMS, screen message, recording activation, PTZ	buzzer, e-mail, SMS, screen message, recording activation, PTZ
2 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s	2 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s	2 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s	2 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s	2 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s	2 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s
HTTP,TCP/IP,IPv4/v6, UDP,FTP,DHCP,DNS,NTP,RTSP,UPnP,SMTP					
NMS, Internet Explorer/- NMS Mobile					
250 Mb/s in total to all client workstations	250 Mb/s in total to all client workstations	250 Mb/s in total to all client workstations	250 Mb/s in total to all client workstations	250 Mb/s in total to all client workstations	250 Mb/s in total to all client workstations
pan/tilt/zoom, preset commands, patterns, tours, auto-scans***					
pentapleks languages: Polish, English, Russian, others					
automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss
password protection, IP filtering, limiting the number of connections	password protection, IP filtering, limiting the number of connections	password protection, IP filtering, limiting the number of connections	password protection, IP filtering, limiting the number of connections	password protection, IP filtering, limiting the number of connections	password protection, IP filtering, limiting the number of connections

# IP RECORDERS - PC CLIENT STATIONS



**12**  
MPX



	NMS CLIENT 7XE-T	NMS CLIENT 7XE-R
<b>Video</b>		
IP Cameras	up to 120 channels 2592 x 1944 resolution (video + audio)	up to 120 channels 2592 x 1944 resolution (video + audio)
Supported Cameras/Protocols	NOVUS	NOVUS
Supported Resolution	max. 4000 x 3000	max. 4000 x 3000
Monitor Output	main (split screen, full screen, sequence): 2 x HDMI, 2 x Display Port, 2 x DVI-D (up to 6 monitors simultaneously)*	main (split screen, full screen, sequence): 2 x HDMI, 2 x Display Port, 2 x DVI-D (up to 6 monitors simultaneously)*
Dualstreaming Support	yes	yes
<b>Audio</b>		
Audio Output	1 x line-out (Jack 3.5 mm) 2 x HDMI 1 x S/PDIF (optical)	1 x line-out (Jack 3.5 mm) 2 x HDMI 1 x S/PDIF (optical)
<b>Display</b>		
Display Speed	2250 fps (75 x 30 fps for 1280 x 720)** 1800 fps (60 x 30 fps for 1920 x 1080)** 900 fps (60 x 15 fps for 2048 x 1536)** 720 fps (60 x 12 fps for 2592 x 1944)**	2250 fps (75 x 30 fps for 1280 x 720)** 1800 fps (60 x 30 fps for 1920 x 1080)** 900 fps (60 x 15 fps for 2048 x 1536)** 720 fps (60 x 12 fps for 2592 x 1944)**
<b>Playback</b>		
Recorded Data Search	by date/time, events, "Text-in"	by date/time, events, "Text-in"
<b>Storage</b>		
Internal storage for system	built-in: 1 x HDD 3,5" SATA	built-in: 1 x HDD 3,5" SATA
<b>Network</b>		
Network Interface	1 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s	1 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s
Network Protocols Support	HTTP, TCP/IP, IPv4, UDP, FTP, DHCP, DNS, NTP, RTSP, UPnP, SMTP	HTTP, TCP/IP, IPv4, UDP, FTP, DHCP, DNS, NTP, RTSP, UPnP, SMTP
Smartphone Software	NMS Mobile	NMS Mobile
Bandwidth	250 Mb/s in total from all NVRs	250 Mb/s in total from all NVRs
<b>PTZ</b>		
PTZ Functions	pan/tilt/zoom, preset commands, patterns, tours, auto-scans***	pan/tilt/zoom, preset commands, patterns, tours, auto-scans***
<b>Auxiliary Interfaces</b>		
Porty USB	2 x USB 2.0, 6 x USB 3.0	2 x USB 2.0, 6 x USB 3.0
<b>Other</b>		
Recording and Surveillance System	NMS (Novus Management System)	NMS (Novus Management System)
Operation Mode	triplex	triplex
OSD	languages: Polish, English, Russian, others	languages: Polish, English, Russian, others
System Diagnostic	automatic control of: HDDs, network, camera connection loss	automatic control of: HDDs, network, camera connection loss
Security	password protection, IP filtering, limiting the number of connections	password protection, IP filtering, limiting the number of connections

\* To support more than four monitors it is required to use Display Port output. \*\* Available with dual streaming mode.

\*\*\* Function capability depends on used devices and communication protocols.



442 mm



442 mm



205 mm



540 mm



180 mm



483 mm



508 mm



**12**  
Mpx

**ANPR**  
ON BOARD

### NMS ANPR SERVER 7-4U



<b>Wide</b>	
Supported Resolution	max. 4000 x 3000
Monitor Output	main (split screen, full screen, sequence): 1 x HDMI, 1 x Display Port, 1 x DVI-D (up to 3 monitors simultaneously)*
Dualstreaming Support	yes
<b>Audio</b>	
Audio Output	1 x line-out (Jack 3.5 mm) 1 x HDMI 1 x S/PDIF (optical)
<b>Display</b>	
Recorded Data Search	by date/time, events, "Text-in"
<b>BACKUP</b>	
Backup Methods	USB port (HDD or Flash memory), network
Backup File Format	JPEG, BMP, AVI, NMS
<b>Storage</b>	
Internal storage for system	built-in: 1 x HDD 3,5" SATA
<b>Alarmy</b>	
System Reaction to Alarm Events	buzzer, e-mail, SMS, screen message, recording activation, PTZ
<b>Network</b>	
Network Interface	2 x Ethernet - interface RJ-45, 10/100/1000 Mbit/s
PC/MAC Software	Internet Explorer, NMS-ANPR 2.0/-
<b>PTZ</b>	
PTZ Functions	pan/tilt/zoom, preset commands, patterns, tours, auto-scans***
<b>Auxiliary Interfaces</b>	
Porty USB	6 x USB 2.0, 4 x USB 3.0
<b>Other</b>	
Recording and Surveillance System	NMS (Novus Management System)
Number-plate recognition	ANPR ***
OSD	languages: Polish, English, Russian, others
Control	PC mouse and keyboard (in-set included), network
Security	password protection

\* To support more than two monitors it is required to use Display Port output. \*\* Function capability depends on used devices and communication protocols. \*\*\* Require buying the license: NMS ANPR-1CH/UE - for one video channel, NMS ANPR-2CH/UE - for two video channels, NMS ANPR-4CH/UE - for four video channels.

## Number plate recognition system system **NMS ANPR 2.0**

License for NMS ANPR 2.0 software that allows you to recognize number plates and save them in the database. The application has built-in modules for recognition of number plates, time spent in the zone and parking zones. NMS ANPR 2.0 works well in static surveillance systems, e.g. in car parks, in garages etc. It allows you to create emergency reactions based on recognized number plates. The software has the function of remote synchronization of the database with other instances of the program. The possibility of integration with NMS software (including live display, search, event scenarios etc.)

**NMS-ANPR 2.0 1CH** - single-channel license

**NMS-ANPR 2.0 2CH** - two-channel license

**NMS-ANPR 2.0 4CH** - four-channel license

**NMS-ANPR 2.0 6CH** - six-channel license

**NMS-ANPR 2.0 9CH** - nine-channel license



180 mm

483 mm



508 mm

# PROFESSIONAL SOFTWARE FOR AUTOMATIC NUMBER PLATE RECOGNITION

## NMS ANPR 2.0 IS AN IMPROVED, FASTER SOLUTION FOR VEHICLE ACCESS CONTROL

When a vehicle appears in the camera's field of view, software analyzes the image and reads the number plate. All the results, including date, time, photo of the number plate and other parameters, are being saved in the database. The application is able to control executive mechanisms (gates or barriers) and allows to define specific reactions depending on the recognized number plate.

improved recognition algorithm  
**higher efficiency**  
recognition accuracy exceed: 97%  
enhanced functionality less resources consumption

OPENLY BARRIER

NUMBER PLATE RECOGNITION

Direct way to automation of transport access!

**NMS ANPR**

DATE	CHANNEL	REGISTRATION NUMBER	PHOTO/VIDEO*	ACCESS
22/05/2017	1	WN 7395G		GRANTED ✓
22/05/2017	2	KKD 006		DENIED ✗

\*Video only when combined with NMS

## CONTROL OF BARRIERS

The program allows you to control barriers, so only authorized vehicle will be able to enter the area. This eliminates the need to install additional access control systems, improves the flow of traffic and increases security.

## CAR PARK MANAGEMENT

NMS ANPR 2.0 software automatically manages the car parks by counting parking spaces and entering/leaving vehicles. This enables the analysis of number of vacancies and the residence time at the parking lot in order to enter the lock in case they run out. In conjunction with function of reactions it is possible to display „No parking spaces available” message as a result of the verification of the use of total parking lot.

# SERVER-CLIENT ARCHITECTURE

The program enables creating distributed systems thanks to Client-Server configuration based on one common database. This is an important facilitation for structures, such as headquarters with its branches, because single server with number plates database is sufficient for vehicle access control at all these facilities at once. Analogically, such solution enables simultaneous control of multiple entries and exits in specific facility while basing on one server.



## AUTOMATIC REACTIONS

Due to reactions it is possible to configure event scenarios, e.g. to set alarm while someone is trying to exit the vehicle after the timeout and with no fee for guarded parking lot. Those automatic reactions with providing information to the operator make the NMS ANPR 2.0 an autonomous system.

## UP TO 9 CAMERAS\* SUPPORT

Depending on the chosen user's license, NMS ANPR 2.0 can support from one to nine video channels on one server.\* Software identifies number plates of all European Union countries. The system has been tested for recognizing number plates of cars driving at the speed of up to 140 km/h.

\*functionality available on request



## FULLY AUTOMATED SYSTEM

Transport access control based on NMS ANPR 2.0 is a fully automated system. Number plates of all vehicles that visited a particular area are continuously being saved in the database – that creates a full record of transit. User can view the video from the cameras in the live mode, preview and edit database or generate reports.

## USER-FRIENDLY OPERATION

Clear and intuitive interface ensures easy operation. Administrator defines permissions for individual vehicles by allowing them to access the site or by setting time restrictions.

## INTEGRATION WITH NMS

**NMS ANPR 2.0** can work as an autonomous software but it is also fully integrated with NMS program. This solution allows user to create reaction scenarios for identified number plate and links specific number plate with archival video stream. It makes the verification of incident simple and quick.



# VENO DEVICES



Device Type	Net I/O Power Socket
Number of sockets	6
Maximum current (in total for all sockets)	10 A
Power Supply	230 VAC
Maximum power (in total for all sockets)	2300 W
Fuse	2 x 10 A
Network Interface	1 x Ethernet - RJ-45 interface, 10/100 Mbps
Operating Temperature	0°C ~ 60°C
Weight	1.95 kg
Dimensions (mm)	100 (L) x 425 (W) x 45 (H) (without Rack brackets)



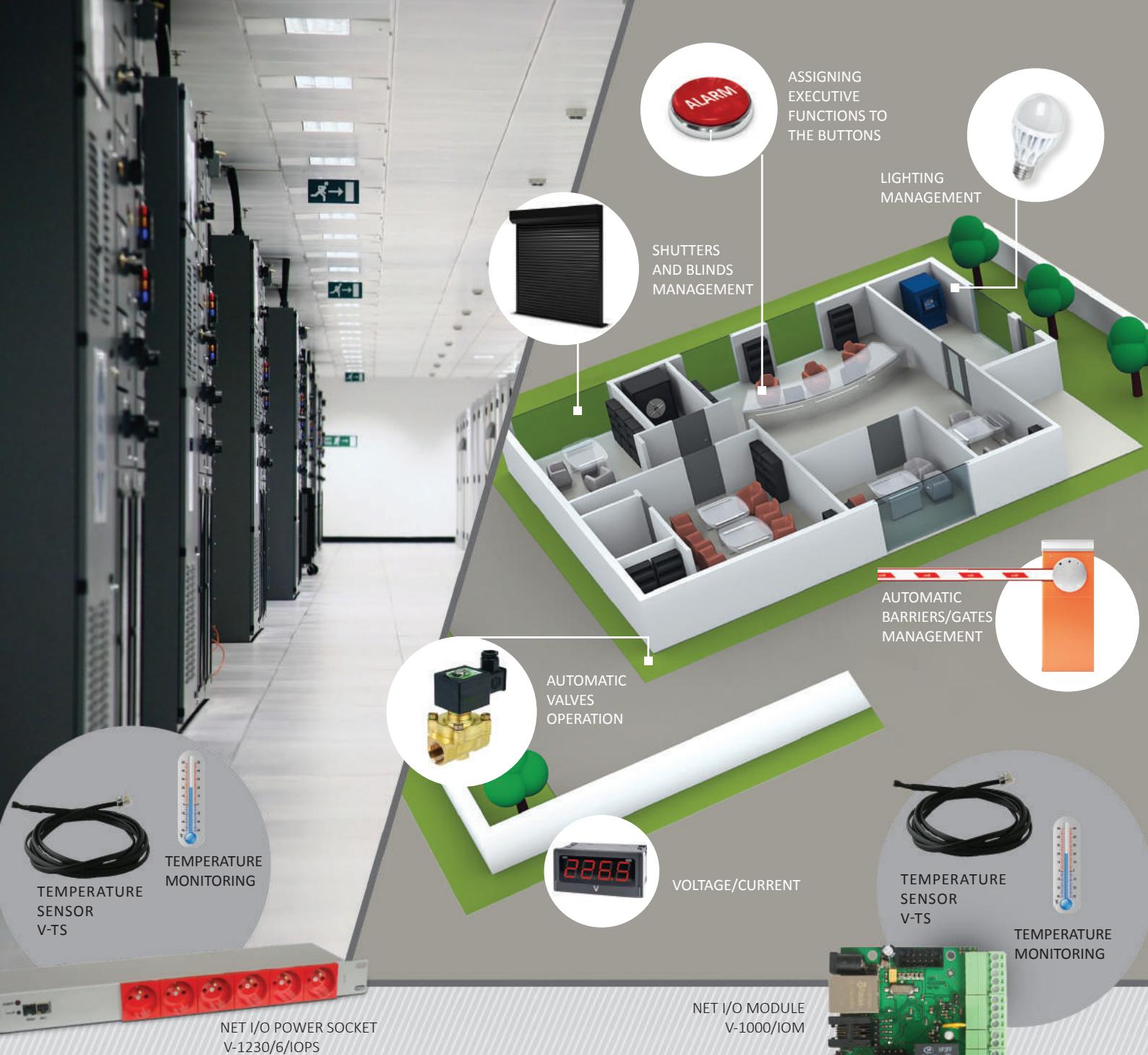
Device Type	Net I/O Power Socket
Number of sockets	6
Maximum current (in total for all sockets)	10 A
Power Supply	230 VAC
Maximum power (in total for all sockets)	2300 W
Fuse	2 x 10 A
Network Interface	1 x Ethernet - RJ-45 interface, 10/100 Mbps
Operating Temperature	0°C ~ 60°C
Weight	1.95 kg
Dimensions (mm)	100 (L) x 425 (W) x 45 (H) (without Rack brackets)



Device Type	Relay board 10 A	Relay board 16 A
Description	Relay board increases the functionality of the network I/O module V-1000/IOM with 4 additional relays	Relay board increases the functionality of the network I/O module V-1000/IOM with 4 additional relays
Normal load current AC1 category	10 A / 240 V AC	16 A / 240 V AC
Normal load current DC1 category	15 A / 24 V DC	16 A / 24 V DC



Device Type	Current Sensor	Temperature sensor	Temperature and Humidity Sensor	Wire for V-THS sensor	Splitter Board
Description	Current Sensor is designed to work with Net I/O Module V-1000/IOM	Temperature sensor is designed to work with Net I/O Module V-1000/IOM or with Net I/O Power Socket V-1230/6/IOPS	Temperature and Humidity Sensor is designed to work with Net I/O Module V-1000/IOM	60 cm wire to connect V-THS sensor with V-1000/IOM Net I/O Module	Splitter Board allows to connect up to 4 V-TS temperature sensors to V-1000/IOM or V-1230/6/IOPS
Temperature measurement range	-	-50 °C ~ 125 °C	-40 °C ~ 125 °C	-	-
Humidity measurement range	-	-	0 ~ 100 %	-	-
Current measurement range	0 ~ 15 A, constant current	-	-	-	-



**IS**  
**VENO**

SECURITY SYSTEMS INTEGRATION  
WITH VENO DEDICATED DEVICES  
YOU CAN **MONITOR, SUPERVISE AND CONTROL** ON A LARGE SCALE  
CREATE AN INTELIGENT OBJECT,  
WHICH MANAGES AND REACTS BY ITSELF!

Distribution:

## IP SURGE PROTECTORS

	NVS-100E	NVS-100E/O	NVS-110E	NVS-110E/O	NVS-810E
Device Type	Surge protector operating in Ethernet cable network transmission	Surge protector in network transmission utilizing overhead cables	Surge protector operating in Ethernet cable network transmission	Surge protector in network transmission utilizing overhead cables	Surge protector operating in Ethernet cable network transmission
Nominal Voltage	5 V	120 V	5 V	120 V	5 V
Maximum Voltage	6 V	150 V	6 V	150 V	6 V
Line-Line Voltage Protection Level	Up ≤ 40 V (1kV/μs, C3)	-	Up ≤ 40 V (1kV/μs, C3)	-	Up ≤ 40 V (1kV/μs, C3)
Line-Ground Voltage Protection Level	Up ≤ 600 V (1 kV/μs, C3)	Up ≤ 1000 V (1.2/50μs, C2)	Up ≤ 600 V (1 kV/μs, C3)	Up ≤ 1000 V (1.2/50μs, C2)	Up ≤ 600 V (1 kV/μs, C3)
Line-Line Nominal Discharge Current	In = 20 A (10/1000 μs, C3)	-	In = 20 A (10/1000 μs, C3)	-	In = 20 A (10/1000 μs, C3)
Line-Ground Nominal Discharge Current	In = 20 A (10/1000 μs), C3	In = 2 kA (8/20 μs)	In = 20 A (10/1000 μs), C3	In = 2 kA (8/20 μs)	In = 20 A (10/1000 μs), C3
Connector	Input: 1 x RJ45 / Output: 1 x RJ45	Input: 1 x RJ45 / Output: 1 x RJ45	Input: 1 x RJ45 / Output: 1 x RJ45	Input: 1 x RJ45 / Output: 1 x RJ45	Input: 8 x RJ45 / Output: 8 x RJ45
Dimensions (mm)	66 (W) x 60 (H) x 30 (L)	66 (W) x 60 (H) x 30 (L)	95 (W) x 50 (H) x 30 (L)	95 (W) x 50 (H) x 30 (L)	162 (W) x 90 (H) x 37 (L)
Weight	80 g	80 g	160 g	160 g	500 g

## SIGNAL TRANSMISSION

NV-01SFP	
	
General	
Device Type	SFP Module
Network	
Speed transmission	1 Gb/s
Transmit Wavelength	1310 nm
Receiver Sensitivity	-24 dBm
Emission Light Power	-8 dBm ~ -3 dBm
Transmission medium	Single-Mode fiber 9/125 um Multi-Mode fiber 50/125 um
Connector type	LC
Installation parameters	
Operating Temperature	0°C ~ 70°C

## POE INJECTOR

NV-1001PS/P+	
	
General	
Device Type	PoE+ injector
Network	
Transmission Distance	1 ports in PoE+ mode: 100 m *
PoE Standards	IEEE802.3 af, IEEE802.3 at
Protocols Support	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab
Installation parameters	
Case	ABS Plastic, color black
Dimensions (mm)	64 (W) x 40 (H) x 160 (L)
Power Supply	100 ~ 240 V AC, 50/60Hz
Power Consumption	30 W
Power Efficiency	30 W
Operating Temperature	-10°C ~ 55°C
Connector	Input: 1 x RJ45 / Output: 1 x RJ45
Weight	200 g

\* The values was achieved in a test environment. In different environment this value can change due to interferences or influence of other devices.

# IR LED



## NV-IR60/150LED

### IR LED

- Outdoor range up to 150 m
- 60° LED angle
- 20 High Power LEDs
- Extended IR LED life
- Adjustable IR LED intensity
- Adjustable visible light sensor sensitivity
- Weatherproof enclosure  
(Operating Temperature: -30°C ~ 40°C ,  
Degree of Protection: IP66)
- Power consumption: 45 W



## NVB-IR2KIT

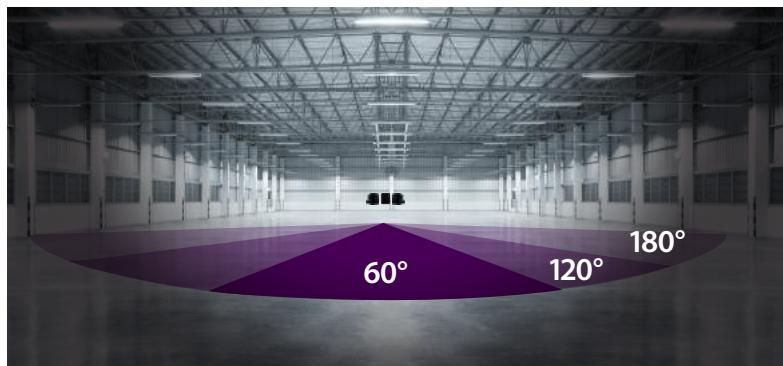
Wall mount bracket for mounting two NV-IR60/150LED infrared illuminators



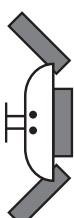
## NVB-IR3KIT

Wall mount bracket for mounting three NV-IR60/150LED infrared illuminators

### WHILE KEEPING 150 M OF RANGE

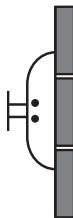


### WHILE KEEPING 60 DEGREES



### INCREASE THE VIEWING ANGLE

- for two infrared illuminators – 120°
- for three infrared illuminators – 180°



### INCREASE THE OPERATING RANGE

- for two infrared illuminators – 180 m
- for three infrared illuminators – 210 m



**noVus®**



LET THE PICTURE SPEAK FOR ITSELF!

MICROPHONES DEDICATED TO VSS  
(VIDEO SURVEILLANCE SYSTEMS)

Distribution:

# MICROPHONE

	NV-003MIC	NV-004MIC	NV-005MIC	NV-105MIC	NV-106MIC
					
Device Type	Microphone with increased sensitivity	Microphone with increased sensitivity	Microphone with high sensitivity	Microphone with high sensitivity and background noise filters	Microphone with high sensitivity and background noise filters
Audio Output	1 x RCA + adapter jack 3,5mm	1 x RCA + adapter jack 3,5mm	1 x RCA + adapter jack 3,5mm	1 x RCA + adapter jack 3,5mm	1 x RCA + adapter jack 3,5mm
Output Impedance	600 Ohm	600 Ohm	600 Ohm	600 Ohm	600 Ohm
Frequency Response	10 Hz~10 kHz	10 Hz~10 kHz	10 Hz~10 kHz	10 Hz~20 kHz	10 Hz~20 kHz
Power Output	2.5 / 5.5 mm male power connector on the cord	2.5 / 5.5 mm male power connector on the cord	2.5 / 5.5 mm male power connector on the cord	2.5 / 5.5 mm male power connector on the cord	2.5 / 5.5 mm male power connector on the cord
Power Supply	12V DC	12V DC	12V DC	12V DC	12V DC
Power Consumption	240 mW	240 mW	240 mW	240 mW	240 mW
Operating Temperature	-25°C ~ 50°C	-25°C ~ 50°C	-25°C ~ 50°C	-25°C ~ 50°C	-25°C ~ 50°C
Dimensions (mm)	5 (Φ) x 35 (L) with 35 cm cable	35 (W) x 30 (H) x 15 (D)	65 (W) x 30 (H) x 18 (D)	50 (Φ) x 20 (H)	80 (Φ) x 25 (H)
Weight	25 g	30 g	40 g	70 g	85 g
Cable	35 cm power supply/audio	35 cm power supply/audio	35 cm power supply/audio	35 cm power supply/audio	35 cm power supply/audio

# IP CAMERAS LENSES

	NVL-3MP660D/IR	NVL-4MP2713D/IR	NVL-5MP3818D/IR
			
Format	1/2.5"	1/2.8"	1/2"
Focal Length	6 ~ 60 mm	2.7 ~ 13 mm	3.8 ~ 18 mm
Mount Type	CS	CS	C
Angle of View (H)	43° ~ 5.6° (1/2.5")	106° ~ 20° (1/2.8")	114° ~ 26° (1/1.8") 100° ~ 23° (1/2")
Weight	200 g	120 g	240 g
Iris Operation	auto, D	auto, D	auto, D
Relative Aperture	F=1.4-360	F=1.4-360	F=1.6-360
Compatible with cameras up to	3 Mpx	4 Mpx	5 Mpx
Dimensions (mm)	50 (W) x 45 (H) x 89 (L)	42 (W) x 37 (H) x 48 (L)	50 (W) x 50 (H) x 74.23 (L)
Accessories	-	-	pierścień redukcyjny CS w zestawie

# NETWORK PoE SWITCHES

	NVS-3004SP	NVS-3008SP	NVS-5024SP+
<b>General</b>			
Device Type	PoE Switch	PoE Switch	PoE+ Managed Switch
<b>Network</b>			
Ports	PoE Ports: 4 x 10/100 Mb/s UPLINK ports: 1 x 10/100 Mb/s,	PoE Ports: 8 x 10/100 Mb/s UPLINK ports: 1 x 10/100 Mb/s,	PoE Ports: 24 x 10/100 Mb/s UPLINK ports: 2 x 10/100/1000 Mb/s, Optical UPLINK ports: 2 x SFP
PoE Standards	IEEE802.3 af, IEEE802.3 at	IEEE802.3 af, IEEE802.3 at	IEEE802.3 af, IEEE802.3 at
Switching Capacity	1 Gbit/s	1.8 Gbit/s	8.8 Gbit/s
Protocols Support	IEEE 802.3, IEEE 802.3u, IEEE 802.3x	IEEE 802.3, IEEE 802.3u, IEEE 802.3x	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x, IEEE 802.1D, IEEE 802.1w, IEEE 802.1Q
MAC ADDRESS list	1K	4K	4K
Additional network functions	-	-	VLAN, IGMP snooping
QoS Support	-	-	yes
<b>Functions</b>			
CCTV	CCTV mode button that increases transmission range and PoE to 250m (Using 10 Mbit/s bandwidth)	CCTV mode button that increases transmission range and PoE to 250m (Using 10 Mbit/s bandwidth)	-
Surge Protection	yes	yes	yes
Buttons	-	-	1 button to device reset
<b>Installation parameters</b>			
Dimensions (mm)	100 (W) x 26 (H) x 100 (L)	178 (W) x 26 (H) x 104 (L)	284 (W) x 44 (H) x 440 (L)
Weight	225 g	600 g	4.35 kg
Power Supply	51 VDC (power supply 100 ~ 240 VAC/51 VDC included)	51 VDC (power supply 100 ~ 240 VAC/51 VDC included)	100 ~ 240 V AC, 50/60Hz
Power consumption	63 W	63 W	420 W
Power Efficiency	63 W for ports 1 to 4, up to 30 W for one port	63 W for ports 1 to 8, up to 30 W for one port	370 W for ports 1 to 24, up to 38 W for one port
Operating Temperature	0°C ~ 40°C	0°C ~ 40°C	0°C ~ 40°C
RACK Mount 19"	-	-	1U





**noVus®**



## RELIABLE SWITCHES - PoE POWER SUPPLY UP TO 240 M

The best solution for advanced IP systems  
ALL PORTS WITH PoE FUNCTION

HIGH POWER BUDGET – UP TO **370 W**

Distribution:

## BRACKETS & ADAPTERS

NVB-2000JB	NVB-2005JB	NVB-3005JB	NVB-3005JB-II
			
Type	wall/ceiling mount adapter, indoor/outdoor	wall/ceiling mount adapter, indoor/outdoor	wall/ceiling mount adapter, indoor/outdoor
Application	2000 series IP cameras and 3000 series AHD cameras*	2000 series IP cameras and 3000 series AHD cameras*	3000 series IP cameras
Material	aluminium	aluminium	aluminium
Color	white	white	white
Load Capacity	3 kg	3 kg	10 kg
Dimensions (mm)	147 φ x 59 (height)	134 φ x 59 (height)	152 φ x 35 (height)
Weight	0.45 kg	0.42 kg	0.3 kg
Degree of Protection	-	-	-

\* Detailed compatibility list available as a file to download in section „Downloadable Files“

NVB-5000JB	NVB-5010JB-II	NVB-5020JB	NVB-5060JB
			
Type	wall/ceiling mount adapter, indoor/outdoor	wall mount adapter, indoor/outdoor	indoor, wall/ceiling mount adapter
Application*	5000 series IP cameras and 5000 series AHD cameras*	5000 and 7000 series IP cameras and 5000 series AHD cameras	vandal proof IP cameras with fisheye lens NVIP-6DN5060V/IRH-2P and NVIP-12DN5060V/IRH-2P
Material	aluminium	aluminium	plastic
Color	white	white	white
Load Capacity	15 kg	10 kg	0.35 kg
Dimensions (mm)	142 φ x 51 (height)	137 (W) x 137 (H) x 51 (D)	99 φ x 51 (height)
Weight	0.47 kg	0.65 kg	0.052 kg

\* Detailed compatibility list available as a file to download in section „Downloadable Files“

NVB-3000PA	NVB-5000PA	NVB-5100PA	NVB-SD70PA	NVB-SD3000CB
				
Type	pole mount adapter	pole mount adapter	pole mount adapter	ceiling mount cable-managed bracket
Application*	3000 series IP cameras	5000 series IP cameras	3000 and 7000 series IP cameras and 5000 series AHD cameras	Wall mount bracket, 3000 and 7000 series IP cameras and 5000 series AHD cameras
Material	steel	steel	aluminium	steel
Color	white	white	white	white
Load Capacity	8 kg	10 kg	-	25 kg
Dimensions (mm)	164 (W) x 215 (H) φ range = 118 ~ 140 mm	124 (W) x 120 (H) φ range = 115 ~ 140 mm	120 (W) x 120 (H)	136 (W) x 232 (H) φ range = 112 ~ 130 mm
Weight	1 kg	0.47 kg	0.3 kg	0.97 kg

\* Detailed compatibility list available as a file to download in section „Downloadable Files“

NVB-3010JB	NVB-3025JB	NVB-3030JB	NVB-3035JB	NVB-3040JB
				
wall/ceiling mount adapter, indoor/outdoor	wall/ceiling mount adapter, indoor/outdoor			
3000 series IP cameras	3000 and 7000 series IP cameras	3000 series IP cameras	3000 series IP cameras	3000 series IP cameras
aluminium white 6 kg	aluminium white 10 kg	aluminium white 10 kg	aluminium white 10 kg	aluminium white 10 kg
154 φ x 40 (height) 0.35 kg -	112 φ x 55 (height) 0.35 kg -	118 φ x 47 (height) 0.4 kg IP66	140 φ x 50 (height) 0.5 kg IP66	156 φ x 50 (height) 0.6 kg IP66

NVB-7000JB	NVB-3000CA	NVB-5000CA	NVB-SD70CA	NVB-7000FMB
				
wall/ceiling mount adapter, indoor/outdoor	corner mount adapter	corner mount adapter	corner mount adapter	ceiling mount adapter
7000 series IP cameras	3000 series IP cameras	5000 series IP cameras	Wall mount bracket, 3000 and 7000 series IP cameras and 5000 series AHD cameras*	7000 series IP cameras
aluminium white 2 kg	steel white 8 kg	steel white 10 kg	steel white 25 kg	plastic, steel white 1.5 kg
150 φ x 74 (wysokość) 0.75 kg	215 (W) x 215 (H) x 121 (gl.) 2 kg	180 (W) x 121 (H) x 68 (gl.) 0.468 kg	222 (W) x 204 (H) x 117 (gl.) 1.88 kg	189 φ x 70 (wysokość) 0.55 kg

NVB-SD5000CB	NVB-SD70CB	NVB-3015VB	NVB-5000WB	NVB-3020JBA
				
ceiling mount cable-managed bracket	ceiling mount cable-managed bracket	wall mount cable-managed bracket, indoor/outdoor	wall mount bracket	indoor/outdoor, wall/ceiling mount cable-managed bracket
5000 series IP cameras and 5000 series AHD cameras	Speed dome IP camera NVP-3DN7030SD/IRH-2P*	3000 series IP cameras*	5000 series IP cameras*	wall/ceiling mount adapter, indoor/outdoor NVB-3000JB, NVB-3005JB
steel white 6 kg	steel white 6 kg	aluminium white 6 kg	aluminium white 5 kg	aluminium white 6 kg
257 (L) x 116 (diameter) 1.06 kg	250 (L) x 140 (diameter) 1.06 kg	136 φ x 120 (height) 0.3 kg	130 (W) x 158 (H) x 297 (L) 1 kg	121 φ x 234 (height) 0.45 kg



## COMPLETE SET FOR IP MONITORING!

- pre-configured IP recorder - ready to work
- installed and formatted 1 TB hard disk drive
- mobile application for Android and iOS platforms
- cameras that allow effective observation both during the day, as well as at night - built-in infrared illuminator
- effective detection of alarm events - cameras and recorders with built-in image analysis functions (VCA)

A set that enables simple and quick installation and launch of IP monitoring in 2Mpx (1080p) resolution.

## SET CONTAINS:

### NV-IPSET-1

- 1 x** IP Recorder **NVR-6304P4-H1**
- 1 x** hard drive 1 TB
- 2 x** IP Camera **NVIP-2DN3033V/IR-1P-II**
- 2 x** 20 m UTP cable
- 1 x** 1 m UTP cable
- 1 x** 1,5 m HDMI cable
- 1 x** optical mouse

### NV-IPSET-2

- 1 x** IP Recorder **NVR-6304P4-H1**
- 1 x** hard drive 1 TB
- 4 x** IP Camera **NVIP-2DN3033V/IR-1P-II**
- 4 x** 20 m UTP cable
- 1 x** 1 m UTP cable
- 1 x** 1,5 m HDMI cable
- 1 x** optical mouse

## 3 SIMPLE STEPS TO CONNECT



INSTALL THE CAMERA

## 3 SIMPLE STEPS FOR REMOTE VIEW



INSTALL FREE APPLICATION  
FOR SMARTPHONE OR TABLET



CONNECT THE CAMERA TO THE RECORDER



CONNECT THE ROUTER TO RECORDER



CONNECT THE RECORDER  
TO THE MONITOR



SCAN YOUR QR CODE AND WATCH



Full HD  
1080



SuperLive Plus



## VISUALIZATION AND INTEGRATION SOFTWARE FOR SECURITY SYSTEMS

We have combined our knowledge and experience with four security systems:

fire alarm, CCTV, intruder alarm & access control to create one supervisory system that integrates all object security. Explore **VENO!**



## EFFECTIVE SAFETY MANAGEMENT IN A FACILITY

Each security system installed in a facility provides different kinds of information about its condition. A complete picture of the situation can be achieved only after the merger of the information coming from all systems. Summarizing and synchronizing such a large amount of data is often very difficult, especially in the case of advanced systems. The VENO software integrates fire alarm, VSS, intruder alarm, access control and other systems, thus ensuring a higher degree of protection in the facility than each system separately.



## FLEXIBLE CONFIGURATION, NON-STANDARD FUNCTIONALITIES

Each facility has different characteristics, and thus specific needs. The advantage of VENO software is high flexibility. The software can be easily configured to meet individual requirements and match the character and purpose of a particular installation. The number of possible configurations is practically unlimited. The administrator is responsible for the management of the entire system and he grants privileges to operators.

## A WIDE RANGE OF APPLICATIONS

VENO software does not impose any restrictions on the size of the system - there are no limits on the number of devices operating in fire alarm, VSS, intruder alarm, access control systems, nor the limits of the number of operators. VENO is great for both large, dispersed facilities, as well as in smaller installations. The software is dedicated to all types of dispersed facilities - residential, commercial and utility buildings public and large industrial complexes.

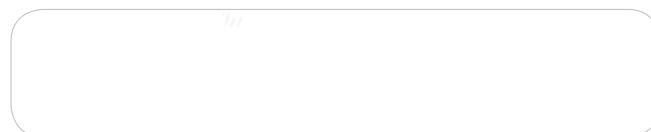


## ONE COMMON INTERFACE FOR ALL SYSTEMS

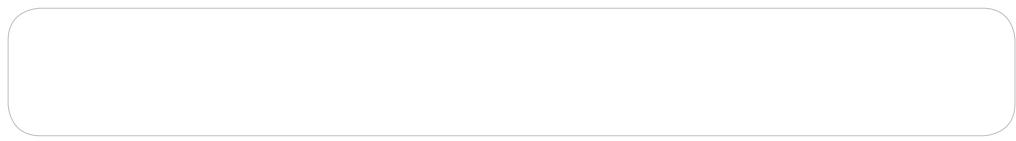
One management software guarantees higher efficiency of the safety management within the facility. The operator, who receives data from all devices and systems at the same time, can precisely identify the cause of the alarm and take actions appropriate to the situation. One common interface and standardized alarm notification allow people responsible for the building safety to make the right decisions faster.



Distribution:



Distribution:



**AAT HOLDING S.A.**  
ul. Puławska 431, 02-801 Warszawa,  
Polska (Poland)

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