



# 5MPX IP camera with motorzoom lens, Deep Learning-based image analysis and active deterrence

NVIP-5H-4512M/FWLAD



4000 VSS  
IP

## FUNCTIONS



The camera is dedicated to work with NOVUS 4000 series recorders. Detailed data can be found in the compatibility table available in the **DOWNLOADABLE FILES** tab.

Image	
Image Sensor	5 MPX CMOS sensor 1/2.7" SmartSens
Number of Effective Pixels	2880 (H) x 1620 (V)
Min. Illumination	0.003 lx/F1.2 - color mode, 0 lx (IR on) - B/W mode
Electronic Shutter	auto/manual: 1/5 s - 1/20000 s
Digital Slow Shutter (DSS)	up to 1/5 s
Wide Dynamic Range (WDR)	yes (double scan sensor)
Digital Noise Reduction (DNR)	ZD, 3D
Highlight Compensation (HLC)	yes
Back Light Compensation (BLC)	yes
Reduction of image flicker (Antiflicker)	yes
Lens	
Lens Type	motorized, f=2.8 ~ 12 mm/F1.2
Auto-focus	zoom trigger, manual trigger
DORI	
DORI (Detection, Observation, Recognition, Identification)	for f = 2.8mm - D: 56m, O: 22.4m, R: 11.2m, I: 5.6m for f = 12mm - D: 240m, O: 96m, R: 48m, I: 24m
Day/Night	
Mode	day/night switching: mechanical IR cut filter
Switching Mode	auto, manual
Switching Level Adjustment	yes
Switching Schedule	yes
Network	
Stream Resolution	2880 x 1620, 2560 x 1440 (QHD), 2304 x 1296, 1920 x 1080 (Full HD), 1280 x 720 (HD), 640 x 480 (VGA), 320 x 240 (QVGA)
Frame Rate	30 fps for each resolution
Multistreaming Mode	number of streams: 3 (main stream, sub stream, third stream)
Video/Audio Compression	H.264, H.264+, H.265, H.265+/G.711
Number of Simultaneous Connections	max. 10
Bitrate	for H.264 : 8 kbps - 8192 kbps for H.265 : 8 kbps - 8192 kbps
Network Protocols Support	HTTP, TCP/IP, IPv4/v6, HTTPS, FTP, DHCP, DNS, DDNS, NTP, RTSP, RTP, UPnP, SNMP, SMTP, P2P, HTML5, RTMP
ONVIF Protocol Support	Profile G/S/T/M
Camera Configuration	from Edge, Firefox, Chrome, Opera, Safari browser languages: Polish, English, and others
Compatible Software	NOVUS MANAGEMENT SYSTEM VSS, NOVUS MANAGEMENT SYSTEM AC
Mobile applications	RxCamView (iPhone, Android)
Video Analytics	
Functions	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, multi loiter, face detection, pedestrian detection, cross counting, heat map, queue length detection, objects distinguishing, vehicle detection, intrusion detection, smart motion detection with objects distinguishing
Other functions	
Security	video encryption, IEEE 802.1X support, HTTPS support, MAC/IP address filtering, force change of default password
Privacy Zones	4 video mask type: single color
Motion Detection	yes
Region of Interest (ROI)	8
Audio Detection	yes
Image Processing	180° image rotation, corridor mode, vertical flip, horizontal flip
Prealarm/Postalarm	up to 5 s/up to 30 s
System Reaction to Alarm Events	e-mail with attachment, saving file on FTP server, saving file on SD card, alarm output activation, HTTP notification, active deterrent functions
Deterrent	white LEDs, steady/flashing light, red and blue LEDs, flashing light, audio signaling device (siren), built-in speaker (predefined or custom voice messages)
Restoring default settings	via web browser, using reset button
Licence plate recognition (LPR)	
Autonomous operation mode	yes - recognition function implemented in the camera
Capacity of License Plate Database	up to 10000 license plates, on all lists.
Types of recognized number plates	all countries of the European Union
Barrier control	yes - built-in relay output

## KEY FEATURES

- Resolution: 5 MPX
- Lens: motorized, auto-focus function, f=2.8 ~ 12 mm/F1.2
- support for Chrome, Firefox, Opera, Safari browsers
- D/N function - IR cut filter
- Video content analysis based on Deep Learning
- Licence plate recognition (LPR)
- microSD card support
- WDR with double scan sensor
- two-way audio
- Min. Illumination: 0.003 lx (0 lx, IR on)
- IR LED, range up to 35 m
- white LED illuminator, range up to 25 m
- "Two way power" - when connected to a PoE switch, it allows to power the low power receiver from the camera's power socket

## DIMENSIONS



Data recorded in the camera base	recognition date/time, number of recognised licence plate, image of recognised licence plate, presence on the "white list" or "black list"
Reactions for the licence plate recognition	e-mail with attachment, saving file on FTP server, alarm output activation
<b>IR LED</b>	
LED Number	2
Range	35 m
Smart IR	yes (hardware support)
<b>White light illuminator</b>	
LED Number	2, warm white color
Range	25 m
<b>Interfaces</b>	
Audio Input/Output	1 x RCA/1 x RCA built-in microphone/speaker
Alarm Input/Output	1 (NO/NC)/1 relay type (max. 12VDC/300mA)
Network Interface	1 x Ethernet - RJ-45 interface, 10/100 Mbit/s
Memory Card Slot	microSD - capacity up to 256GB
<b>Installation parameters</b>	
Dimensions (mm)	with bracket: 90 (W) x 85 (H) x 242 (L)
Weight	0.9 kg
Degree of Protection	IP 67 (details in the user's manual)
Enclosure	aluminium, white, fully cable managed wall mount bracket in-set included enclosure type: 4H-B
Power Supply	12 VDC, PoE (IEEE 802.3af, Klasa 3)
Surge protection	TVS 4000 V
Power Consumption	3 W, 5 W (IR illuminator on), 5 W (white light illuminator on), 8 W (active deterrence functions enabled)
Operating Temperature	-35°C ~ 60°C
Humidity	max. 90%, relative (non-condensing)

A memory card is required for the license plate recognition functions to work. AAT SYSTEMY BEZPIECZEŃSTWA sp. z o.o. hereby declares, that this NOVUS product does not contain any components or technologies manufactured by the entities mentioned in the Section 889 of the National Defense Authorization Act (NDAA) for Fiscal Year 2019