# **NOVUS**

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

NVIP-5H-4512M/FWLAD





#### FUNCTIONS













₩ D/N











0.003



#### **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

| Image  |  |  |
|--|--|--|
| Image Sensor   | 5 MPX CMOS sensor 1/2.7" SmartSens   |  |
| Number of Effective Pixels                                 | 2880 (H) x 1620 (V)  |  |
| Min. Illumination  | 0.003 kyF1.2 - color mode, 0 kx (lR 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)                              | 2D, 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   |  |  |
|  | for f = 2.8mm - D: 56m, O: 22.4m, R: 11.2m, I: 5.6m  |  |
| DORI (Detection, Observation, Recognition, Identification) | 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  | $2880 \times 1620, 2560 \times 1440$ (QHD), $2304 \times 1296, 1920 \times 1080$ (Full HD), $1280 \times 720$ (HD), $640 \times 480$ (VGA), $320 \times 240$ (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<br>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<br>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 evit, 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  |  |
| Determent  | 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  |  |

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.





90 mm





242 mm

|        | 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   |
|        | IR LED                                      |  |
|        | LED Number                                  | 2  |
|        | Range                                       | 35 m   |
|        | Smart IR                                    | yes (hardware support)   |
|        | White light illuminator                     |  |
|        | LED Number                                  | 2, warm white color  |
|        | Range                                       | 25 m   |
| 85     | Interfaces                                  |  |
| m<br>m | Audio Input/Output                          | 1 x RCA/1 x RCA<br>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   |
|        | Installation parameters                     |  |
|        | 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, S W (IR illuminator on), 5 W (White light illuminator on), 5 W (white light illuminator on), 8 W (active deterence 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 BEZPIECZENSTWA 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