# **NOVUS**

## 8MPX panoramic IP camera with Deep Learning-based image analysis and active deterrence

NVIP-8VE-4501P/WLAD





#### FUNCTIONS









8



















Onvir\*10000

#### **KEY FEATURES**

- •Resolution: 8 MPX (4K Ultra HD)
  •Lens: fixed focal, f=2.0 mm/F2.4
- •180° horizontal viewing angle •D/N function IR cut filter
- •Video content analysis based on Deep
- Learning
  •microSD card support
- •WDR with double scan sensor
- •two-way audio
- •Min. Illumination: 0.04 lx (0 lx, IR on)
- •IR LED, range up to 25 m
- white LED illuminator, range up to 15 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

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	8 MPX CMOS sensor 1/2.8" SONY STARVIS
Number of Effective Pixels	3840 (H) x 2160 (V)
Min. Illumination	0.04 lx/F2.4 - 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)	3D
Highlight Compensation (HLC)	yes
Back Light Compensation (BLC)	yes
Reduction of image flicker (Antiflicker)	yes
Lens	
Lens Type	fixed focal, f=2.0 mm/F2.4
DORI	incer rocal, 1=2.0 minut 2.4
DORI (Detection, Observation, Recognition, Identification)	for f = 2.0mm - D: 58m, O: 23m, R: 11.6m, I: 6m
Day/Night Page 1997	
Mode	day/night switching: mechanical IR cut filter
Switching Mode	auto, manual, time
Switching Level Adjustment	yes
Network	
Stream Resolution	3840 x 2160 (4K Ultra HD), 3072 x 1728, 2592 x 1520, 2592 x 1944, 2304 x 1296, 1920 x 1080 (Full HD),
	1280 x 960, 1280 x 720 (HD), 640 x 480 (VGA)
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. 3 connections, (max. 10 streams in total)
Bandwidth	40 Mb/s in total
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, Safari browser languages: Polish, English, Russian, and others
Compatible Software	NOVUS MANAGEMENT SYSTEM VSS
Mobile applications	RxCamView (iPhone, Android)
Video Analytics	
	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, zone violation, multi
Functions	loiter, pedestrian detection, cross counting, heat map, queue length detection, objects distinguishing, vehicle detection, intrusion detection
Functions  Other functions	loiter, pedestrian detection, cross counting, heat map, queue length detection, objects distinguishing, vehicle detection, intrusion detection
Other functions	vehicle detection, intrusion detection
Other functions Privacy Zones	loiter, pedestrian detection, cross counting, heat map, queue length detection, objects distinguishing, vehicle detection, intrusion detection  6 video mask type: single color  ves
Other functions Privacy Zones Motion Detection	vehicle detection, intrusion detection  6 video mask type: single color yes
Other functions Privacy Zones Motion Detection Region of interest (ROI)	vehicle detection, intrusion detection  6 video mask type: single color yes 8
Other functions Privacy Zones Motion Detection Region of interest (ROI)  Audio Detection	vehicle detection, intrusion detection  6 video mask type: single color yes 8 yes
Other functions Privacy Zones Motion Detection Region of interest (ROI)  Audio Detection Image Processing	vehicle detection, intrusion detection  6 video mask type: single color  yes  8  yes  180° image rotation, corridor mode, vertical filp, horizontal filip
Other functions Privacy Zones Motion Detection Region of interest (ROI)  Audio Detection	vehicle detection, intrusion detection  6 video mask type: single color  yes  8  yes  180' image rotation, corridor mode, vertical filp, horizontal filp  up to 5 s/up to 30 s  e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent
Other functions Privacy Zones Motion Detection Region of interest (ROI)  Audio Detection Image Processing Prealarm/Postalarm System Reaction to Alarm Events	vehicle detection, intrusion detection  6 video mask type: single color  yes  8  yes  180' image rotation, corridor mode, vertical flip, horizontal flip  up to 5 s/up to 3 0 s  e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions  white LEDs. steady/flashino lioht, red and blue LEDs. flashino lioht.
Other functions Privacy Zones Motion Detection Region of interest (ROI)  Audio Detection Image Processing Prealarm/Postalarm System Reaction to Alarm Events Determent	vehicle detection, intrusion detection  6 video mask type: single color  yes  8  yes  180' image rotation, corridor mode, vertical flip, horizontal flip  up to 5 s/up to 30 s  e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions  white LEDs, steady/flashing light, red and blue LEDs, flashing light, audio signaling device (siren)
Other functions Privacy Zones Motion Detection Region of interest (ROI) Audio Detection Image Processing Prealarm/Postalarm System Reaction to Alarm Events Determent Restoring default settings	vehicle detection, intrusion detection  6 video mask type: single color  yes  8  yes  180' image rotation, corridor mode, vertical flip, horizontal flip  up to 5 s/up to 3 0 s  e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions  white LEDs. steady/flashino lioht, red and blue LEDs. flashino lioht.
Other functions Privacy Zones Motion Detection Region of interest (ROI)  Exactly Audio Detection Image Processing Prealarm/Postalarm  System Reaction to Alarm Events  Determent Restoring default settings IR LED	vehicle detection, intrusion detection  6 video mask type: single color  yes  8  yes  180' image rotation, corridor mode, vertical flip, horizontal flip  up to 5 s/up to 30 s  e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions  white LEDs, steady/flashing light, red and blue LEDs, flashing light, audio signaling device (siren)  via web browser, using reset button
Other functions Privacy Zones Motion Detection Region of interest (ROI) Audio Detection Image Processing Prealarm/Postalarm System Reaction to Alarm Events Determent Restoring default settings IR LED LED Number	vehicle detection, intrusion detection  6 video mask type: single color  yes  8  yes  180' image rotation, corridor mode, vertical flip, horizontal flip  up to 5 slup to 30 s  e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions  white LEDs, steady/flashing light, red and blue LEDs, flashing light, audio signaling device (siren)  via web browser, using reset button
Other functions Privacy Zones Motion Detection Region of interest (ROI)  Endul Detection Image Processing Prealam/Postalarm  System Reaction to Alarm Events  Determent Restoring default settings  IR LED  LED Number  Range	vehicle detection, intrusion detection  6 video mask type: single color  yes  8  yes  180" image rotation, corridor mode, vertical filip, horizontal filip  up to 5 s/up to 3 0 s  e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions  white LEDs, steady/flashing light, red and blue LEDs, flashing light, audio signaling device (siren)  via web browser, using reset button
Other functions Privacy Zones Motion Detection Region of interest (ROI)  Audio Detection Image Processing Prealarm/Postalarm  System Reaction to Alarm Events  Determent Restoring default settings IR LED  LED Number Range Smart IR	vehicle detection, intrusion detection  6 video mask type: single color  yes  8  yes  180' image rotation, corridor mode, vertical flip, horizontal flip  up to 5 slup to 30 s  e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions  white LEDs, steady/flashing light, red and blue LEDs, flashing light, audio signaling device (siren)  via web browser, using reset button
Other functions Privacy Zones Motion Detection Region of interest (ROI)  Endul Detection Image Processing Prealam/Postalarm  System Reaction to Alarm Events  Determent Restoring default settings  IR LED  LED Number  Range	vehicle detection, intrusion detection  6 video mask type: single color  yes  8  yes  180" image rotation, corridor mode, vertical filip, horizontal filip  up to 5 s/up to 3 0 s  e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions  white LEDs, steady/flashing light, red and blue LEDs, flashing light, audio signaling device (siren)  via web browser, using reset button
Other functions Privacy Zones Motion Detection Region of interest (ROI)  Audio Detection Image Processing Prealarm/Postalarm  System Reaction to Alarm Events  Determent Restoring default settings IR LED  LED Number Range Smart IR	vehicle detection, intrusion detection  6 video mask type: single color  yes  8  yes  180" image rotation, corridor mode, vertical filip, horizontal filip  up to 5 s/up to 3 0 s  e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions  white LEDs, steady/flashing light, red and blue LEDs, flashing light, audio signaling device (siren)  via web browser, using reset button
Other functions Privacy Zones Motion Detection Region of interest (ROI)  Audio Detection Image Processing Prealarm/Postalarm  System Reaction to Alarm Events  Determent Restoring default settings IR LED  LED Number Range Smart IR  White light Illuminator	vehicle detection, intrusion detection  6 video mask type: single color yes 8 yes 180' image rotation, corridor mode, vertical flip, horizontal flip up to 5 s/up to 30 s e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions white LEDs, steady/flashing light, red and blue LEDs, flashing light, audio signaling device (siren) via web browser, using reset button  2 25 m yes (hardware support)
Other functions Privacy Zones Motion Detection Region of interest (ROI)  Audio Detection Image Processing Prealarm/Postalarm  System Reaction to Alarm Events  Determent Restoring default settings  IR LED LED Number  Range Smart IR  White light illuminator  LED Number	vehicle detection, intrusion detection  6 video mask type: single color  yes  8  yes  180' image rotation, corridor mode, vertical filp, horizontal filp  up to 5 s/up to 30 s  e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions  white LEDs, steady/flashing light, red and blue LEDs, flashing light, audio signaling device (siren)  via web browser, using reset button  2  25 m  yes (hardware support)
Other functions Privacy Zones Motion Detection Region of interest (ROI)  Audio Detection Image Processing Prealarm/Postalarm  System Reaction to Alarm Events  Determent  Restoring default settings  IR LED  LED Number  Range  Smart IR  White light illuminator  LED Number  Range	vehicle detection, intrusion detection  6 video mask type: single color  yes  8  yes  180' image rotation, corridor mode, vertical flip, horizontal flip  up to 5 slup to 30 s  e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions  white LEDs, steady/flashing light, red and blue LEDs, flashing light, audio signaling device (siren)  via web browser, using reset button  2  25 m  yes (hardware support)  2, warm white color  15 m
Other functions Privacy Zones Motion Detection Region of interest (ROI) Audio Detection Image Processing Prealarm/Postalarm System Reaction to Alarm Events  Determent Restoring default settings IR LED LED Number Range Smart IR White light illuminator LED Number Range Smart LED Smart IR White Sight Illuminator LED Number Range Smart Light Interfaces	vehicle detection, intrusion detection  6 video mask type: single color yes 8 yes 180' image rotation, corridor mode, vertical flip, horizontal flip up to 5 s/up to 30 s e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions white LEDs, steady/flashing light, red and blue LEDs, flashing light, audio signaling device (siren) via web browser, using reset button  2 25 m yes (hardware support)  2, warm white color 15 m yes (hardware support)
Other functions Privacy Zones Motion Detection Region of interest (ROI)  Audio Detection Image Processing Prealarm/Postalarm  System Reaction to Alarm Events  Determent Restoring default settings  IR LED  LED Number Range Smart IR  White light illuminator  LED Number Range Smart Light	vehicle detection, intrusion detection  6 video mask type: single color  yes  8  yes  180' image rotation, corridor mode, vertical flip, horizontal flip  up to 5 s/up to 30 s  e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions  white LEDs, steady/fisshing light, red and blue LEDs, flashing light, audio signaling device (siren)  via web browser, using reset button  2  25 m  yes (hardware support)  2, warm white color  15 m  yes (hardware support)  built-in microphone/speaker
Other functions Privacy Zones Motion Detection Region of interest (ROI) Audio Detection Image Processing Prealarm/Postalarm System Reaction to Alarm Events  Determent Restoring default settings IR LED LED Number Range Smart IR White light illuminator  LED Number Range Smart Light Interfaces Audio input/Output Network interface	vehicle detection, intrusion detection  6 video mask type: single color  yes  8  yes  180' image rotation, corridor mode, vertical flip, horizontal flip  up to 5 s/up to 30 s  e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions  white LEDs, steady/flashing light, red and blue LEDs, flashing light, addio signaling device (siren)  via web browser, using reset button  2  25 m  yes (hardware support)  2, warm white color  15 m  yes (hardware support)  built-in microphone/speaker  1 x Ethernet - R)-45 interface, 10/100 Mbit/s
Other functions Privacy Zones Motion Detection Region of interest (ROI) Audio Detection Image Processing Prealarm/Postalarm System Reaction to Alarm Events  Determent Restoring default settings IR LED LED Number Range Smart IR White light illuminator LED Number Range Smart Ught Interfaces Audio Input/Output Network Interface Memory Card Slot	vehicle detection, intrusion detection  6 video mask type: single color  yes  8  yes  180' image rotation, corridor mode, vertical flip, horizontal flip  up to 5 s/up to 30 s  e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions  white LEDs, steady/fisshing light, red and blue LEDs, flashing light, audio signaling device (siren)  via web browser, using reset button  2  25 m  yes (hardware support)  2, warm white color  15 m  yes (hardware support)  built-in microphone/speaker
Other functions Privacy Zones Motion Detection Region of interest (ROI) Audio Detection Image Processing Prealarm/Postalarm System Reaction to Alarm Events  Determent Restoring default settings IR LED LED Number Range Smart IR White light Illuminator LED Number Range Smart LUB LED Number Range Smart IR White light Illuminator LED Number Range Smart LUB Interfaces Audio Input/Output Network Interface Memony Card Siot Installation parameters	vehicle detection, intrusion detection  6 video mask type: single color yes 8 yes 180' image rotation, corridor mode, vertical flip, horizontal flip up to 5 s/up to 30 s e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions white LEDs, steady/flashing light, red and blue LEDs, flashing light, audio signaling device (siren) via web browser, using reset button  2 25 m yes (hardware support)  2, warm white color 15 m yes (hardware support)  built-in microphone/speaker 1 x Ethernet - RJ-45 interface, 10/100 Mblt/s microSD - capacity up to 256GB
Other functions Privacy Zones Motion Detection Region of interest (ROI) Audio Detection Image Processing Prealarm/Postalarm System Reaction to Alarm Events Determent Restoring default settings IR LED LED Number Range Smart IR White light illuminator LED Number Range Smart Ught Interfaces Audio Input/Output Network Interface Memory Card Slot	vehicle detection, intrusion detection  6 video mask type: single color  yes  8  yes  180' image rotation, corridor mode, vertical flip, horizontal flip  up to 5 s/up to 30 s  e-mail with attachment, saving file on FTP server, saving file on SD card, push notification, active deterrent functions  white LEDs, steady/flashing light, red and blue LEDs, flashing light, addio signaling device (siren)  via web browser, using reset button  2  25 m  yes (hardware support)  2, warm white color  15 m  yes (hardware support)  built-in microphone/speaker  1 x Ethernet - R)-45 interface, 10/100 Mbit/s



	Weight	0.6 kg
	Degree of Protection	IP 67 (details in the user's manual)
	Enclosure	vandalproof, aluminium, white enclosure type: 4VE-M
	Power Supply	12 VDC, PoE (IEEE 802.3af, Klasa 3)
	Surge protection	TVS 4000 V
98 mm	Power Consumption	3 W, 5 W (IR illuminator on), 5 W (white light illuminator on), 7 W (active deterrence functions enabled)
	Operating Temperature	-35°C ~ 60°C
	Humidity	max. 95%, relative (non-condensing)

116 mm (Ø)

