### NoVus

#### 4 MPX IP Camera with video content analysis based on **Deep Learning**

Image

NVIP-4H-6502M/F-II/7043

## 6000

#### FUNCTIONS



# **KEY FEATURES** •Resolution: 4 MPX •Lens: motorized, auto-focus function, f=2.8 ~ 12 mm/F1.3 •Human/Vehicle Object Classification •D/N function - IR cut filter •Video content analysis based on Deep • Video content unor, s.c. and Learning • microSD card support • Min. Illumination: 0.003 lx (0 lx, IR on) • IR LED, range up to 50 m DIMENSIONS 81 mm mm 220 mm



The camera is dedicated to work with NOVUS 6000 series recorders. Detailed data can be found in the compatibility table available in the DOWNLOADABLE FILES tab.

1.1	Image	
	Image Sensor	4 MPX CMOS sensor 1/3" SmartSens
	Number of Effective Pixels	2688 (H) x 1520 (V)
J	Min. Illumination	0.03 k/F1.3 - color mode, 0 k/(IR on) - B/W mode
<u> </u>	Electronic Shutter	auto: 1/2 s ~ 1/100000 s
	Digital Slow Shutter (DSS)	up to 1/2 s
1.1	Wide Dynamic Range (WDR)	yes 120dB
	Digital Noise Reduction (DNR)	2D, 3D
	Defog Function (F-DNR)	yes
l I	Highlight Compensation (HLC)	ves
	Back Light Compensation (BLC)	yes
	Reduction of image flicker (Antiflicker)	ves
J	Lens	,
	Lens Type	motorized, f=2.8 ~ 12 mm/F1.3
	DORI	
	DORI (Detection, Observation, Recognition, Identification)	for f = 2.8mm - D: 58.91m, O: 23.56m, R: 11.78m, I: 5.89m for f = 12mm - D: 205.99m, O: 82.4m, R: 41.2m, I: 20.6m
	Day/Night	
	Mode	day/night switching: mechanical IR cut filter
	Switching Mode	auto, manual, time
	Switching Level Adjustment	yes
	Switching Delay	2 ~ 120 s
	Switching Schedule	yes
	Visible Light Sensor	yes
	Network	
	Stream Resolution	2560 x 1440 (QHD), 2592 x 1520, 2304 x 1296, 1920 x 1080 (Full HD), 1280 x 720 (HD), 640 x 480 (VGA), 320 x 240 (QVGA), 480 x 240
	Multistreaming Mode	number of streams: 3
	Video/Audio Compression	H.264, H.264+, H.265, H.265+, MJPEG/G.711
	Number of Simultaneous Connections	max. 10
	Bandwidth	50 Mb/s in total
	Network Protocols Support	HTTP, TCP/IP, IPv4, IPv4/v6, UDP, HTTPS, FTP, DHCP, DDNS, NTP, RTSP, RTP, UPnP, SNMP, QoS, IEEE 802.1X, PPPoE, SMTP, RTCP, RTMP, HTTP POST
	Camera Configuration	from Internet Explorer, Chrome, Opera, Safari browser languages: Polish, English, Russian, and others
	Compatible Software	NOVUS MANAGEMENT SYSTEM VSS, NOVUS MANAGEMENT SYSTEM AC, N Control 6000
		SuperLive Plus (iPhone, Android)
	Mobile applications	Super Live Hus (in Hole, And Bud)
	Mobile applications Video Analytics	Supercive mus (minore, valuation)
		tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face detection', detection of people not wearing masks, pedestrian detection, cross counting, heat map, scene change, video blurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata
	Video Analytics	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face detection*, detection of people not wearing masks, pedestrian detection, cross counting, heat map, scene change, video burred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion
	Video Analytics Functions	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face detection*, detection of people not wearing masks, pedestrian detection, cross counting, heat map, scene change, video burred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion
	Video Analytics Functions Other functions	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face detection', detection of people not wearing masks, pedestrian detection, cross counting, heat map, scene change, video blurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata
	Video Analytics Functions Other functions Privacy Zones	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face detection*, detection of people not wearing masks, pedestrian detection, cross counting, heat map, scene change, video blurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata 4 video mask type: single color or 4 video mask type: mosalc
0	Video Analytics Functions Other functions Privacy Zones Motion Detection	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit: object counting, face detection*, detection of people not wearing masks, pedestrian detection, cross counting, heat map, scene change, video burred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata 4 video mask type: single color or 4 video mask type: mosaic yes
	Video Analytics Functions Other functions Privacy Zones Motion Detection Region of interest (ROI)	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face detection*, detection of people not wearing masks, pedestrian detection, cross counting, heat map, scene change, video blurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata 4 video mask type: single color or 4 video mask type: mosaic yes 8 90° image rotation, 180° image rotation, sharpening, mirror effect, corridor mode, vertical flip, horizontal flip, lend distoring correction up to 6 skpt to 120 s
	Video Analytics Functions Other functions Privacy Zones Motion Detection Region of interest (ROI) Image Processing	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face detection*, detection of people not wearing masks, pedestrian detection, cross counting, heat map, scene detection, video blurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata 4 video mask type: single color or 4 video mask type: mosaic yes 8 90° image rotation, 180° image rotation, sharpening, mirror effect, corridor mode, vertical flip, horizontal flip, lens distortion correction
	Video Analytics Functions Other functions Privacy Zones Motion Detection Region of interest (ROI) Image Processing Prealam/Postalarm	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face detection*, detection of people not wearing masks, pedestrian detection, cross counting, heat map, scene change, video blurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata 4 video mask type: single color or 4 video mask type: mosaic yes 8 90° image rotation, 180° image rotation, sharpening, mirror effect, corridor mode, vertical flip, horizontal flip, lend distoring correction up to 6 skpt to 120 s
	Video Analytics Functions Other functions Privacy Zones Motion Detection Region of interest (R0I) Image Processing Prealarm/Postalarm System Reaction to Alarm Events	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face detection <sup>4</sup> , detection of people not wearing masks, pedestrian detection, cross counting, heat map, scene change, video blurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata 4 video mask type: single color or 4 video mask type: mosaic yes 8 9 9 <sup>o</sup> image rotation, 180 <sup>°</sup> image rotation, sharpening, mirror effect, corridor mode, vertical flip, horizontal flip, lens distortion correction up to 6 slup to 120 s e-mail, e-mail with attachment, saving file on FTP server, saving file on SD card
	Video Analytics Functions Other functions Privacy Zones Motion Detection Region of interest (ROI) Image Processing Prealarm/Postalarm System Reaction to Alarm Events Restoring default settings	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face detection <sup>4</sup> , detection of people not wearing masks, pedestrian detection, cross counting, heat map, scene change, video blurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata 4 video mask type: single color or 4 video mask type: mosaic yes 8 9 9 <sup>o</sup> image rotation, 180 <sup>°</sup> image rotation, sharpening, mirror effect, corridor mode, vertical flip, horizontal flip, lens distortion correction up to 6 slup to 120 s e-mail, e-mail with attachment, saving file on FTP server, saving file on SD card
	Video Analytics Functions Other functions Privacy Zones Motion Detection Region of interest (ROI) Image Processing Prealarm/Postalarm System Reaction to Alarm Events Restoring default settings IR LED	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exil, object counting, face ethange, video blurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata 4 video mask type: single color or 4 video mask type: mosaic yes 8 90° image rotation, 180° image rotation, sharpening, mirror effect, corridor mode, vertical flip, horizontal flip, lens distortion correction up to 6 s/up to 120 s e-mail, e-mail with attachment, saving file on FTP server, saving file on SD card via web browser, using reset button, via NMS IPTool software
	Video Analytics Functions Other functions Privacy Zones Motion Detection Region of interest (ROI) Image Processing Prealarm/Postalarm System Reaction to Alarm Events Restoring default settings IE LED LED Number	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face detection*, detection of people not wearing masks, pedestrian detection, cross counting, heat map, scene detection*, video lurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, wideo mask type: single color or 4 video mask type: mosaic         4 video mask type: single color or 4 video mask type: mosaic         yes         8         90° image rotation, 180° image rotation, sharpening, miror effect, corridor mode, vertical flip, horizontal flip, lens distortion correction         up to 6 slup to 120 s         e-mail, e-mail with attachment, saving file on FTP server, saving file on SD card         via web browser, using reset button, via NMS IPTool software
	Video Analytics Functions Cother functions Privacy Zones Motion Detection Region of interest (ROI) Image Processing Prealam/Postalarm System Reaction to Alarm Events Restoring default settings IR LED LED Number Range	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face detection <sup>4</sup> , detection of people not wearing masks, pedestrian detection, cross counting, heat map, scene change, video blurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata 4 video mask type: single color or 4 video mask type: mosaic yes 8 90° image rotation, 180° image rotation, sharpening, mirror effect, corridor mode, vertical flip, horizontal flip, lens distortion correction up to 6 skypt to 120 s e-mail, e-mail with attachment, saving file on FTP server, saving file on SD card via web browser, using reset button, via NMS IPTool software 3 50 m
	Video Analytics Functions Cher functions Privacy Zones Motion Detection Region of interest (ROI) Image Processing Prealarm/Postalarm System Reaction to Alarm Events Restoring default settings IR LED LED Number Range Smart IR	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face detection <sup>4</sup> , detection of people not wearing masks, pedestrian detection, cross counting, heat map, scene change, video blurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata 4 video mask type: single color or 4 video mask type: mosaic yes 8 90° image rotation, 180° image rotation, sharpening, mirror effect, corridor mode, vertical flip, horizontal flip, lens distortion correction up to 6 skypt to 120 s e-mail, e-mail with attachment, saving file on FTP server, saving file on SD card via web browser, using reset button, via NMS IPTool software 3 50 m
	Video Analytics         Functions         Other functions         Privacy Zones         Motion Detection         Region of interest (ROI)         Image Processing         Prealarm/Postalarm         System Reaction to Alarm Events         Restoring default settings         IL ED         LED Number         Range         Smart IR         Interfaces	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face change, video blurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata 4 video mask type: single color or 4 video mask type: mosaic yes 8 90° image rotation, 180° image rotation, sharpening, mirror effect, corridor mode, vertical flip, horizontal flip, lens distortion correction up to 6 s/up to 120 s e-mail, e-mail with attachment, saving file on FTP server, saving file on SD card via web browser, using reset button, via NMS IPTool software 3 50 m
	Video Analytics         Functions         Other functions         Privacy Zones         Motion Detection         Region of interest (ROI)         Image Processing         Prealarm/Postalarm         System Reaction to Alarm Events         Restoring default settings         IE D         ILED Number         Range         Smart IR         Interfaces         Audio Input/Output	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exil, object counting, face detection, detection of people not wearing masks, pedestrian detection, cross counting, heat map, cace change, video blurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata 4 video mask type: single color or 4 video mask type: mosaic yes 8 90° image rotation, 180° image rotation, sharpening, mirror effect, corridor mode, vertical flip, horizontal flip, lens distortion correction up to 6 slop to 120 s e-mail, e-mail with attachment, saving file on FTP server, saving file on SD card via web browser, using reset button, via NMS IPTool software 3 50 m yes (software support) 1 x Jack (3.5 mm)/-
	Video Analytics       Functions       Other functions       Privacy Zones       Motion Detection       Region of interest (ROI)       Image Processing       Prealamt/Postalarm       System Reaction to Alarm Events       Restoring default settings       IR LED       LED Number       Range       Smart IR       Interfaces       Audo Input/Utotput       Network Interface	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face change, video blurred, video color cast, objects distinguishing, people counting, whicle counting, intrusion detection, video metadata 4 video mask type: single color or 4 video mask type: mosaic yes 8 90° image rotation, 10° image rotation, sharpening, mirror effect, corridor mode, vertical flip, horizontal flip, lens distortion correction up to 6 skypt to 20 s e-mail, e-mail with attachment, saving file on FTP server, saving file on SD card via web browser, using reset button, via NMS IPTool software 3 50 m yes (s0ftware support) i x jack (3.5 mm)/. 1 x jack (3.5 mm)/.
	Video Analytics         Functions         Other functions         Privacy Zones         Mation Detection         Region of interest (ROI)         Image Processing         Prealarm/Postalarm         System Reaction to Alarm Events         Restoring default settings         ILE D         LED Number         Range         Smart IR         Interfaces         Audio Input/Output         Network Interface         Memory Card Slot         Installation parameters	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, heat map, scene change, video blurred, video color cast, objects distinguishing, people counting, heat map, scene change, video blurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata 4 video mask type: single color or 4 video mask type: mosaic yes 9 90° image rotation, 180° image rotation, sharpening, mirror effect, corridor mode, vertical flip, horizontal flip, lens distortion correction up to 6 s(up to 120 s e-mail, e-mail with attachment, saving file on FTP server, saving file on SD card via web browser, using reset button, via NMS IPTool software 3 350 m yes (software support) 1 x jack (3.5 mm)/- 1 x Ethemet - R)-45 interface, 10/100 Mbit/s microSD - capacity up to 256GB
	Video Analytics         Functions         Other functions         Privacy Zones         Motion Detection         Region of interest (ROI)         Image Processing         Prealarm/Postalarm         System Reaction to Alarm Events         Restoring default settings         ILED         LED Number         Range         Smart IR         Interfaces         Audio Input/Output         Network Interface         Memory Card Slot	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face change, video blurred, video color cast, objects distinguishing, people counting, whicle counting, intrusion detection, video metadata 4 video mask type: single color or 4 video mask type: mosaic yes 8 90° image rotation, 10° image rotation, sharpening, mirror effect, corridor mode, vertical flip, horizontal flip, lens distortion correction up to 6 skypt to 20 s e-mail, e-mail with attachment, saving file on FTP server, saving file on SD card via web browser, using reset button, via NMS IPTool software 3 50 m yes (s0ftware support) i x jack (3.5 mm)/. 1 x jack (3.5 mm)/.
	Video Analytics         Functions         Other functions         Privacy Zones         Motion Detection         Region of interest (ROI)         Image Processing         Prealarm/Postalarm         System Reaction to Alarm Events         Restoring default settings         It ED         LED Number         Range         Smart IR         Motion Interfaces         Audio Input/Dutput         Network Interface         Memory Card Slot         Intensions (mm)	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exil, object counting, face change, video blurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata 4 video mask type: single color or 4 video mask type: mosaic yes 8 90° image rotation, 180° image rotation, sharpening, mirror effect, corridor mode, vertical flip, horizontal flip, lens distortion correction up to 6 s/up to 120 s e-mail, e-mail with attachment, saving file on FTP server, saving file on SD card via web browser, using reset button, via NMS IPTool software 3 50 m yes (software support) 1 x Jack (3.5 mm). 1 x Jack (3.5 mm). 1 x Ethernet - RJ-45 interface, 10/100 Mbit/s microSD - capacity up to 256GB with bracket: 81 (W) x 81 (H) x 220 (L)
	Video Analytics         Functions         Other functions         Privacy Zones         Motion Detection         Region of Interest (ROI)         Image Processing         Prealamt/Postalarm         System Reaction to Alarm Events         Restoring default settings         IR LED         LED Number         Range         Smart IR         Interfaces         Audio Input/Uputt         Network Interface         Memory Card Stot         Intensions (mm)         Weight	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, fixet change, video blurred, video color cast, objects distinguishing, people counting, inet map, scene change, video blurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata 4 video mask type: single color or 4 video mask type: mosaic yes 8 90° image rotation, 180° image rotation, sharpening, mirror effect, corridor mode, vertical flip, horizontal flip, lens distortion correction up to 6 s/up to 120 s e-mail, e-mail with attachment, saving file on FIP server, saving file on SD card via web browser, using reset button, via NMS IPTool software 3 50 m yes (slotarare support) 1 x jack (3.5 mm)/- 1 x Ethernet - RJ-45 interface, 10/100 Mbit/s microSD - capacity up to 256GB with bracket: 81 (W) x 81 (H) x 220 (L) 0.66 kg
81 mm	Video Analytics       Functions       Other functions       Privacy Zones       Motion Detection       Region of interest (ROI)       Image Processing       Prealamt/Postatarm       System Reaction to Alarm Events       Restoring default settings       IE D       LED Number       Range       Smart IR       Interfaces       Audio Input/Uduput       Network Interface       Memory Card Slot       Imensions (mm)       Weight       Degree of Protection	tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, heat map, scene change, video blurred, video color cast, objects distinguishing, people counting, vehicle counting, intrusion detection, video metadata           4 video mask type: single color or 4 video mask type: mosaic           yes           8           90° image rotation, 180° image rotation, sharpening, miror effect, corridor mode, vertical flip, horizontal flip, lend distortion correction           up to 6 s/up to 120 s           e-mail, e-mail with attachment, saving file on FTP server, saving file on SD card           via we browser, using reset button, via IMS IPTool software           3           50 m           yes (Ads 5 mm)/-           1 x jack (3.5 mm)/-           1 x Ethernet - Ri-45 interface, 10/100 Mbit/s           microsoft - capacity up to 2668           endum           ub th bracket: B1 (W) x 81 (H) x 220 (L)           0.66 kg           IP Of (details in the user's manual)           atuminium, white, fully cable managed wall mount bracket in-set included, IK10 impact rating

Power Consumption	6 \ 9 \
Operating Temperature	-30
Humidity	ma

6 W, 9 W (IR Illuminator on) -30°C ~ 60°C max. 95%, relative (non-condensing) The camera creates a fully functional face recognition system when used with selected NOVUS IP 6000 series recorders (models with "F" in the name). Video metadata - video analysis function available on cameras with software version newer or equal to 5.1.2(42545).