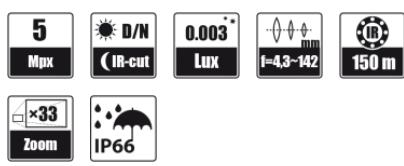# NOVUS

High-Speed Dome IP Camera with Face Recognition, License Plate Recognition and Object Tracking

NVIP-5SD-4550/33/F

4000 VSS IP

KEY FEATURES

INGENIUS PLUS   FACE RECOGNITION

LPR LICENCE PLATE RECOGNITION   H·265+

5 Mpx   D/N IR-cut   0.003 Lux   f=4,3~142   IR 150 m

×33 Zoom   IP66

- Resolution: 5 MPX
- Lens: motorized varifocal, AI and AF function, optical zoom 33x, f=4.3 ~ 142 mm/F1.6 ~ 4.3
- D/N function - IR cut filter
- Auto Tracking
- Video content analysis based on Deep Learning
- Licence plate recognition (LPR)
- microSD card support
- WDR with double scan sensor
- two-way audio
- Min. Illumination from 0.003 lx (0 lx, IR on)
- IR LED, range up to 150 m (depends on current optical zoom value)

COMPLIANCE

NDAA

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	5 MPX CMOS sensor 1/2.7" OmniVision
Number of Effective Pixels	2688 (H) x 1944 (V)
Min. Illumination	0.003 lx/F1.6 - 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), 120dB
Digital Noise Reduction (DNR)	2D, 3D
Highlight Compensation (HLC)	yes
Back Light Compensation (BLC)	yes
Digital zoom	16x

LENS

Optical Zoom	33x
Lens Type	motorized, auto-iris function, f=4.3 ~ 142 mm/F1.6 ~ F4.3
Auto-focus	zoom trigger, day/night mode trigger, manual trigger

DORI

DORI (Detection, Observation, Recognition, Identification)	for f = 4.3mm - D: 86m, O: 34.4m, R: 17m, I: 8.6m • for f = 142mm - D: 2840m, O: 1136m, R: 568m, I: 284m

DAY/NIGHT

Mode	day/night switching: mechanical IR cut filter
Switching Mode	auto, manual, time
Switching Level Adjustment	yes
Visible Light Sensor	yes

NETWORK

Stream Resolution	2592 x 1520, 2592 x 1944, 2304 x 1296, 1920 x 1080 (Full HD), 2048 x 1536 (QXGA), 1280 x 960, 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+, MJPEG/G.711
Number of Simultaneous Connections	max. 3 connections, (max. 14 streams in total)
Bandwidth	40 Mb/s in total

High-Speed Dome IP Camera with Face Recognition, License Plate Recognition and Object Tracking
NVIP-5SD-4550/33/F

Network Protocols Support	HTTP, TCP/IP, IPv4/v6, UDP, HTTPS, FTP, DHCP, DNS, DDNS, NTP, RTSP, UPnP, SNMP, PPPoE, SMTP, HTML5, RTMP
ONVIF Protocol Support	Profile G/S/T/M
Camera Configuration	from Edge, Firefox, Chrome, Opera browser • languages: Polish, English, and others
Compatible Software	NOVUS MANAGEMENT SYSTEM VSS, NOVUS MANAGEMENT SYSTEM AC, N Control 4000
Mobile applications	ipGO 4 (iPhone, Android)

PTZ

Preset Commands	255
Tours	4 (up to 32 presets per tour)
Patterns	4 (max. 512 commands for each pattern)
Tilt/Pan Range	-10° ~ 90°/360° (continuous)
Pan/Tilt Speed	up to 200°/s (proportional to zoom)
Preset Speed	up to 200°/s

VIDEO ANALYTICS

Functions	auto tracking linked to Video Content Analysis (VCA) functions, tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, zone violation, multi loiter, pedestrian detection, cross counting, heat map, queue length detection, objects distinguishing, vehicle detection, comparing faces, 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	6 video mask type: single color
Motion Detection	yes
Audio Detection	decline detection, rise detection, rare sound detection
Image Processing	180˚ image rotation, sharpening, mirror effect
Prealarm/Postalarm	up to 6 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, object tracking
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
Recommended maximum speed of the vehicle	up to 60 km/h
Data recorded in the camera base	number of recognised licence plate
Reactions for the licence plate recognition	e-mail with attachment, saving file on FTP server, alarm output activation

IR LED

LED Number	10
Range	up to 150 m (depends on current optical zoom value)

Smart IR	yes (hardware support)

INTERFACES

Video Output	BNC, 1.0 Vp-p, 75 Ohm
Audio Input/Output	1/1
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)	207 (Φ) x 329 (H) with bracket: 207 (W) x 398 (H) x 374 (L)
Weight	3.7 kg with bracket: 4.7 kg
Degree of Protection	IP 66 (details in the user's manual)
Enclosure	aluminium, white, In set: outdoor housing (integrated with the camera), wall mount bracket • Enclosure type: 4SD
Power Supply	12 VDC, PoE+ (IEEE 802.3at,Class 4)
Power Consumption	14 W • 25 W (IR illuminator on)
Operating Temperature	-30°C ~ 60°C
Cold start temperature	-35°C
Humidity	max. 90%, relative (non-condensing)

The camera has the ability to autonomously recognize and compare faces, but it can also be part of the face recognition system, working with selected NOVUS 4000 series IP recorders (models with "F" in the name).