# NOVUS MANAGEMENT SYSTEM VSS IP Recorder

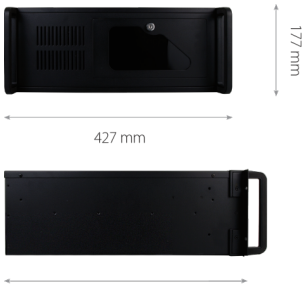
## NMS VSS NVR 3-4U-IV



### KEY FEATURES

- Video and audio channels: 170
- Recording speed up to 4250 fps at 1920 x 1080
- Supports resolution up to 4000 x 3000
- Recorded stream size: 500 Mb/s in total from all cameras
- Supports up to 3 monitors simultaneously
- optional disk mounting: 4 x SATA 3,5"
- Operating system: Microsoft Windows 11 IoT
- Recording and surveillance system: NMS (Novus Management System)
- Compatible with all NOVUS IP cameras

### DIMENSIONS




Unit with the NOVUS MANAGEMENT SYSTEM VSS software installed adapted to 24/7 operation.

### VIDEO

| | |
|---|---|
| IP Camera Recording | 140 channels at 1920x1080 (video+audio) using H.264 codec • 170 channels at 1920x1080 (video+audio) using H.265 codec |
| Maximum Supported Camera Resolution | 4000x3000 |
| Supported Codes | H.264, H.264+, H.265, H.265+, MJPEG |
| Supported Cameras and Protocols | Novus, Novus fisheye, ONVIF, ONVIF fisheye, RTSP, RTSP fisheye • (purchase of the appropriate license is required) |
| Dualstreaming Support | yes |

### DISPLAY

| | |
|---|---|
| Monitor Output | 1 x HDMI 2.0b, 1 x Display Port 1.4, 1 x Dual link DVI-D (up to 3 monitors simultaneously) |
| Maximum Resolution | 3 x 4K UltraHD |

### AUDIO

| | |
|---|---|
| Audio input | 1 x Line in (3,5mm), 1 x Mic in(3,5mm) |
| Audio Output | 1 x Line (3,5mm), 1 x HDMI, 1 x Display Port |
| Audio Input/Output in Cameras | Supports audio input/output build in cameras |

### PERFORMANCE - H.264

| | |
|---|---|
| 2MPX IP Camera | Recording up to: 140 main streams (while displaying: 8 sub streams) • Display up to: 48 sub streams or 17 main streams (while recording: 48 main streams) • Playback up to: 17 main streams (while recording: 48 main streams) |
| 4MPX IP Camera | Recording up to: 90 main streams (while displaying: 8 sub streams) • Display up to: 40 sub streams or 9 main streams (while recording: 40 main streams) • Playback up to: 9 main streams (while recording: 40 main streams) |
| 5MPX IP Camera | Recording up to: 80 main streams (while displaying: 8 sub streams) • Display up to: 40 sub streams or 6 main streams (while recording: 40 main streams) • Playback up to: 6 main streams (while recording: 40 main streams) |
| 8MPX IP Camera | Recording up to: 60 main streams (while displaying: 8 sub streams) • Display up to: 34 sub streams or 4 main streams (while recording: 34 main streams) • Playback up to: 4 main streams (while recording: 34 main streams) |
| 12MPX IP Camera | Recording up to: 48 main streams (while displaying: 8 sub streams) • Display up to: 28 sub streams or 2 main streams (while recording: 28 main streams) • Playback up to: 2 main streams (while recording: 28 main streams) |

### PERFORMANCE - H.265

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| | |
|---|---|
| 2MPX IP Camera | Recording up to: 170 main streams (while displaying: 8 sub streams) • Display up to: 40 sub streams or 14 main streams (while recording: 40 main streams) • Playback up to: 14 main streams (while recording: 40 main streams) |
| 4MPX IP Camera | Recording up to: 128 main streams (while displaying: 8 sub streams) • Display up to: 40 sub streams or 6 main streams (while recording: 40 main streams) • Playback up to: 6 main streams (while recording: 40 main streams) |
| 5MPX IP Camera | Recording up to: 100 main streams (while displaying: 8 sub streams) • Display up to: 34 sub streams or 5 main streams (while recording: 34 main streams) • Playback up to: 5 main streams (while recording: 34 main streams) |
| 8MPX IP Camera | Recording up to: 80 main streams (while displaying: 8 sub streams) • Display up to: 32 sub streams or 3 main streams (while recording: 32 main streams) • Playback up to: 3 main streams (while recording: 32 main streams) |
| 12MPX IP Camera | Recording up to: 65 main streams (while displaying: 8 sub streams) • Display up to: 28 sub streams or 2 main streams (while recording: 28 main streams) • Playback up to: 2 main streams (while recording: 28 main streams) |

### RECORDING

| | |
|---|---|
| Recording Mode | Continuous, Schedule, Panic, Triggered: manually, by alaram input, motion detection, video analysis, POS, temerature alarm |
| Schedule | individual settings for: each camera, each day of the week, specific days (holidays etc.), configuration with an accuracy of: 15 min, possibility of combining individual recording modes |
| Prealarm/Postalarm | Up to: 30s / Up to: 600s |

### PLAYBACK

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|---|---|
| Recorded Data Search | By Date/Time, Events, “Text-in” |

### BACKUP

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|---|---|
| Backup Methods | USB port (HDD lor Flash drive), Network |
| Backup File Format | JPEG, BMP, AVI, NMS |

### HDD

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|---|---|
| Internal storage for system | 1 x SSD NVMe |
| Internal Storage for Recording | 4 available bays for 3,5" HDD surveillance grade storage media |

### ALARMS

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|---|---|
| Alarm Input/output in cameras | support of alarm input and output built in cameras |
| Motion detection | support of motion detection built in cameras |
| Video Analytics | supported built in analytics in camera |
| Temperature alarm | support of temperature alarm built in cameras |
| Licence plate recognition (LPR) | support of selected image analysis functions available in the camera |
| System Reactions to Alarm Events | e-mail, Screen Message, Recording Activation, PTZ |

### NETWORK

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|---|---|
| Network Interface | 1 x Ethernet - RJ45 interface, 10/100/1000/2500 Mbit/s - maximum bandwidth 500 Mbit/s |
| Network Throughput | up to 500Mbit/s from all cameras • up to 500Mbit/s to all client stations • Max total network throughput: 500Mbit/s |
| Network Protocols Support | HTTP, TCP/IP, IPv4/v6, UDP, HTTPS, FTP, DHCP, DNS, NTP, RTSP, SNMP, QoS, IEEE 802.1X, SMTP, SAMBA, HTML5 |

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| | |
|---|---|
| Compatible Mobile Applications | VSS WEB CLIENT functionality available from web browsers (Chrome, Edge, Firefox, Opera, Safari) |

### PTZ

| | |
|---|---|
| PTZ Functions | pan, tilt, zoom, preset commands, patterns, tours, auto-scans, focus, iris |

### ADDITIONAL INTERFACES

| | |
|---|---|
| USB Ports | 5 x USB 3.2, 2 x USB 2.0, 1 x USB 3.2 Type-C |

### OPERATING SYSTEM

| | |
|---|---|
| Operating System | Microsoft Windows 11 IoT |
| Recording and Surveillance System | NOVUS MANAGEMENT SYSTEM VSS |
| Additional Software | Internet Explorer |
| Operation Mode | Pentaplex |
| OSD | Polish, English, others |
| Control | PC mouse and keyboard (in-set included), NV-KBD/ACVSS keyboard |
| System Diagnostic | automatic control of: HDDs, Temperature, Fan, Network, Camera connection loss |
| Security | Password protection, IP filtering, MAC filtering, Limiting the number of connections |

### INTEGRATION

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|---|---|
| Integrated Devices | Novus IP Cameras, Novus IP Recorders, Novus AHD Recorders, NMS-ANPR Software, DSC Systems, POS Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devices |

### INSTALLATION PARAMETERS

| | |
|---|---|
| Dimensions (mm) | 427 (W) x 177 (H) x 500 (D) |
| Weight | 20 kg (without HDDs for recording) |
| Power Supply | built in 700W, with 230VAC input • with Hot-Swap function (allowing to replace the power supply without turning off the unit) |
| Operating Temperature | 5°C ~ 35°C |
| RACK Mount 19" | 4U |

*Note: The device requires registration and license activation. There is an option to activate a 60-day trial license. After this period, the purchase of a NOVUS MANAGEMENT SYSTEM VSS software license specific to the application is required. To choose the appropriate license, please contact the sales department. Data presented in table above for substreams are given for 640x480 resolution. Windows 11 IoT is available on devices starting with serial number xxx269276.*