



# NOVUS MANAGEMENT SYSTEM VSS IP Recorder

NMS VSS NVR 7-4U-IV



## FUNCTIONS



## KEY FEATURES

- Video and audio channels: 180
- Recording speed up to 4500 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 10 IoT
- Recording and surveillance system: NOVUS MANAGEMENT SYSTEM VSS
- Compatible with all NOVUS IP cameras

## DIMENSIONS



|                                     |  |
|-------------------------------------|--|
| RACK Mount 19"                      | 4U   |
| <b>Video</b>                        |  |
| IP Camera Recording                 | 160 channels at 1920x1080 (video+audio) using H.264 codec<br>180 channels at 1920x1080 (video+audio) using H.265 codec   |
| Maximum Supported Camera Resolution | 4000x3000  |
| Supported Codes                     | H.264, H.264+, H.265, H.265+, MPEG   |
| Supported Cameras and Protocols     | Novus, Novus fisheye, ONVIF, ONVIF fisheye, RTSP, RTSP fisheye (purchase of the appropriate license is required)   |
| Dualstreaming Support               | yes  |
| <b>Display</b>                      |  |
| 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   |
| <b>Audio</b>                        |  |
| 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   |
| <b>Performance - H.264</b>          |  |
| 2MPX IP Camera                      | Recording up to: 160 main streams (while displaying: 8 sub streams)<br>Display up to: 80 sub streams or 25 main streams (while recording: 80 main streams)<br>Playback up to: 25 main streams (while recording: 80 main streams) |
| 4MPX IP Camera                      | Recording up to: 100 main streams (while displaying: 8 sub streams)<br>Display up to: 76 sub streams or 14 main streams (while recording: 76 main streams)<br>Playback up to: 14 main streams (while recording: 76 main streams) |
| 5MPX IP Camera                      | Recording up to: 85 main streams (while displaying: 8 sub streams)<br>Display up to: 76 sub streams or 14 main streams (while recording: 76 main streams)<br>Playback up to: 14 main streams (while recording: 76 main streams)  |
| 8MPX IP Camera                      | Recording up to: 70 main streams (while displaying: 8 sub streams)<br>Display up to: 60 sub streams or 9 main streams (while recording: 60 main streams)<br>Playback up to: 9 main streams (while recording: 60 main streams)    |
| 12MPX IP Camera                     | Recording up to: 50 main streams (while displaying: 8 sub streams)<br>Display up to: 44 sub streams or 3 main streams (while recording: 44 main streams)<br>Playback up to: 3 main streams (while recording: 44 main streams)    |
| <b>Performance - H.265</b>          |  |
| 2MPX IP Camera                      | Recording up to: 180 main streams (while displaying: 8 sub streams)<br>Display up to: 76 sub streams or 21 main streams (while recording: 76 main streams)<br>Playback up to: 21 main streams (while recording: 76 main streams) |
| 4MPX IP Camera                      | Recording up to: 140 main streams (while displaying: 8 sub streams)<br>Display up to: 64 sub streams or 13 main streams (while recording: 64 main streams)<br>Playback up to: 13 main streams (while recording: 64 main streams) |
| 5MPX IP Camera                      | Recording up to: 110 main streams (while displaying: 8 sub streams)<br>Display up to: 64 sub streams or 11 main streams (while recording: 64 main streams)<br>Playback up to: 11 main streams (while recording: 64 main streams) |
| 8MPX IP Camera                      | Recording up to: 90 main streams (while displaying: 8 sub streams)<br>Display up to: 54 sub streams or 6 main streams (while recording: 54 main streams)<br>Playback up to: 6 main streams (while recording: 54 main streams)    |
| 12MPX IP Camera                     | Recording up to: 75 main streams (while displaying: 8 sub streams)<br>Display up to: 40 sub streams or 4 main streams (while recording: 40 main streams)<br>Playback up to: 4 main streams (while recording: 40 main streams)    |
| <b>Recording</b>                    |  |
| Recording Mode                      | Continuous, Schedule, Panic, Triggered: manually, by alarm input, motion detection, video analysis, POS, temperature 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   |
| <b>Playback</b>                     |  |
| Recorded Data Search                | By Date/Time, Events, "Text-in"  |
| <b>Backup</b>                       |  |
| Backup Methods                      | USB port (HDD for Flash drive), Network  |
| Backup File Format                  | JPEG, BMP, AVI, NMS  |
| <b>HDD</b>                          |  |
| Internal storage for system         | 1 x SSD NVMe   |
| Internal Storage for Recording      | 4 available bays for 3.5" HDD surveillance grade storage media   |
| <b>Alarms</b>                       |  |
| 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  |
| <b>Network</b>                      |  |
| Network Interface                   | 1 x Ethernet - RJ45 interface 10/100/1000 Mbit/s<br>1 x Ethernet - złącze RJ45, 10/100/1000/2500 Mbit/s  |
| Network Throughput                  | up to 500Mbit/s from all cameras,<br>up to 500Mbit/s to all client stations,<br>Max total network throughput: 850Mbit/s  |
| Network Protocols Support           | HTTP, TCP/IP, IPV4/IPv6, UDP, HTTPS, FTP, DHCP, DNS, NTP, RTSP, SNMP, QoS, IEEE 802.1X, SMTP, SAMBA, HTML5   |
| Compatible Mobile Applications      | NMS Mobile   |
| <b>PTZ</b>                          |  |
| PTZ Functions                       | pan, tilt, zoom, preset commands, patterns, tours, auto-scans, focus, iris   |
| <b>Additional interfaces</b>        |  |

|                                   |  |
|-----------------------------------|--|
| USB Ports                         | 5 x USB 3.2, 2 x USB 2.0, 1 x USB 3.2 Type-C   |
| <b>Operating System</b>           |  |
| Operating System                  | Microsoft Windows 10 IoT   |
| Recording and Surveillance System | NOVUS MANAGEMENT SYSTEM VSS  |
| 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   |
| <b>Integration</b>                |  |
| Integrated Devices                | Novus IP Cameras, Novus IP Recorders, Novus AHD Recorders, POS Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devices |
| <b>Installation Parameters</b>    |  |
| Dimensions (mm)                   | 482 (W) x 178 (H) x 505 (D)  |
| Weight                            | 24 kg (without HDDs for recording)   |
| Power Supply                      | built in 700W, with 230VAC input   |
| 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.*