

## NOVUS MANAGEMENT SYSTEM VSS IP Recorder

### NMS VSS NVR X-2U-III-48TB



#### PRO SERIES

#### KEY FEATURES

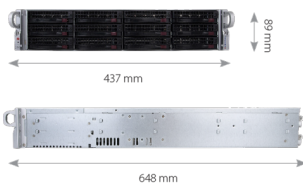


- Video and audio channels: 200
- Supports resolution up to 4000 x 3000
- Recorded stream size: 450 Mb/s in total from all cameras
- Supports up to 3 monitors simultaneously
- Built-in HDDs: 12 x 4 TB server-dedicated SAS for 24/7 recording
- RAID controller protects recordings
- External arrays support
- Operating system: Microsoft Windows 10 IoT
- Compatible with all NOVUS IP cameras
- Redundant PSUs: 2

#### COMPLIANCE



#### DIMENSIONS



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

#### VIDEO

IP Camera Recording	160 channels at 1920x1080 (video+audio) using H.264 codec • 200 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	3 x Mini Display Port 1.2, (up to 3 monitors simultaneously)
Maximum Resolution	3 x 4K UltraHD

#### AUDIO

Audio Output	3 x Mini Display Port 1.2
--------------	---------------------------

#### PERFORMANCE - H.264

2MPX IP Camera	Recording up to: 160 main streams (while displaying: 8 sub streams) • Display up to: 8 sub streams or 8 main streams (while recording: 160 main streams) • Playback up to: 8 main streams (while recording: 160 main streams)
4MPX IP Camera	Recording up to: 120 main streams (while displaying: 8 sub streams) • Display up to: 8 sub streams or 8 main streams (while recording: 120 main streams) • Playback up to: 8 main streams (while recording: 120 main streams)
5MPX IP Camera	Recording up to: 100 main streams (while displaying: 8 sub streams) • Display up to: 8 sub streams or 8 main streams (while recording: 100 main streams) • Playback up to: 8 main streams (while recording: 8 main streams)
8MPX IP Camera	Recording up to: 80 main streams (while displaying: 8 sub streams) • Display up to: 8 sub streams or 6 main streams (while recording: 80 main streams) • Playback up to: 6 main streams (while recording: 80 main streams)
12MPX IP Camera	Recording up to: 80 main streams (while displaying: 8 sub streams) • Display up to: 8 sub streams or 4 main streams (while recording: 80 main streams) • Playback up to: 4 main streams (while recording: 80 main streams)

#### PERFORMANCE - H.265

2MPX IP Camera	Recording up to: 200 main streams (while displaying: 8 sub streams) • Display up to: 8 sub streams or 8 main streams (while recording: 200 main streams) • Playback up to: 8 main streams (while recording: 200 main streams)
----------------	---

4MPX IP Camera	Recording up to: 160 main streams (while displaying: 8 sub streams) • Display up to: 8 sub streams or 8 main streams (while recording: 160 main streams) • Playback up to: 8 main streams (while recording: 160 main streams)
5MPX IP Camera	Recording up to: 120 main streams (while displaying: 8 sub streams) • Display up to: 8 sub streams or 4 main streams (while recording: 120 main streams) • Playback up to: 4 main streams (while recording: 120 main streams)
8MPX IP Camera	Recording up to: 90 main streams (while displaying: 8 sub streams) • Display up to: 8 sub streams or 4 main streams (while recording: 90 main streams) • Playback up to: 4 main streams (while recording: 90 main streams)
12MPX IP Camera	Recording up to: 90 main streams (while displaying: 8 sub streams) • Display up to: 8 sub streams or 4 main streams (while recording: 90 main streams) • Playback up to: 4 main streams (while recording: 90 main streams)

### RECORDING

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

### PLAYBACK

Recorded Data Search	By Date/Time, Events, "Text-in", Image Analysis Events
----------------------	--

### BACKUP

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

### HDD

Internal storage for system	1 x SSD NVMe
Internal Storage for Recording	12 x 4TB SAS 3,5" surveillance grade server storage media in Hot-Swap bays
RAID Redundancy	RAID types: RAID 0, RAID 1, RAID 5, RAID 6

### ALARMS

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

### NETWORK

Network Interface	2 x Ethernet - RJ45 interface, 10/100/1000 Mbit/s
Network Throughput	up to 450Mbit/s from all cameras • up to 450Mbit/s to all client stations • Max network throughput: 450Mbit/s for each network card
Network Protocols Support	HTTP, TCP/IP, IPv4/v6, UDP, HTTPS, Multicast, FTP, DHCP, DNS, DDNS, NTP, RTSP, SAMBA
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 4 x USB 2.0, 4 x USB 3.2, 1 x USB 3.2 Type-C, 2 x USB 2.0

**OPERATING SYSTEM**

Operating System	Microsoft Windows 10 IoT
Recording and Surveillance System	NOVUS MANAGEMENT SYSTEM VSS
Operation Mode	Pentaplex
OSD	Polish, English, Russian, others
Control	PC mouse and keyboard (in-set included), DCZ 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**

Integrated Devices Novus IP Cameras, Novus IP Recorders, Novus AHD Recorders, POS Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devices

**INSTALLATION PARAMETERS**

Dimensions (mm)	437 (W) x 89 (H) x 648 (D)
Weight	24 kg (with HDDs)
Power Supply	built in 2 x redundant power supply 230VAC input with 960W power each • with Hot-Swap function (allowing to replace the power supply without turning off the unit)
Power consumption/heatprint	490W/400W (without HDD for recording)
Operating Temperature	5°C ~ 35°C
RACK Mount 19"	2U

*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.*