NOVUS

NOVUS MANAGEMENT SYSTEM VSS IP Recorder

NMS VSS NVR 3-T-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 10 IoT
- •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	$1 \times \text{HDMI } 2.0\text{b}, 1 \times \text{Display Port } 1.4, 1 \times \text{Dual link DVI-D (up to 3 monitors simultaneously)}$
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)

main streams)

main streams)

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



12MPX IP Camera

PERFORMANCE - H.265

NoVus

NOVUS MANAGEMENT SYSTEM VSS IP Recorder NMS VSS NVR 3-T-IV

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	
Recorded Data Search	D. Dalastina, E. anda W.T. Link
Necolded Data Sealch	By Date/Time, Events, "Text-in"
BACKUP	By Date/Time, Events, "Text-In"
	USB port (HDD lor Flash drive), Network
ВАСКИР	
BACKUP Backup Methods	USB port (HDD lor Flash drive), Network
BACKUP Backup Methods Backup File Format	USB port (HDD lor Flash drive), Network
BACKUP Backup Methods Backup File Format HDD	USB port (HDD lor Flash drive), Network JPEG, BMP, AVI, NMS
BACKUP Backup Methods Backup File Format HDD Internal storage for system Internal Storage for Recording	USB port (HDD lor Flash drive), Network JPEG, BMP, AVI, NMS 1 x SSD NVMe
BACKUP Backup Methods Backup File Format HDD Internal storage for system	USB port (HDD lor Flash drive), Network JPEG, BMP, AVI, NMS 1 x SSD NVMe
BACKUP Backup Methods Backup File Format HDD Internal storage for system Internal Storage for Recording ALARMS	USB port (HDD lor Flash drive), Network JPEG, BMP, AVI, NMS 1 x SSD NVMe 4 available bays for 3,5" HDD surveillance grade storage media
BACKUP Backup Methods Backup File Format HDD Internal storage for system Internal Storage for Recording ALARMS Alarm Input/output in cameras	USB port (HDD lor Flash drive), Network JPEG, BMP, AVI, NMS 1 x SSD NVMe 4 available bays for 3,5" HDD surveillance grade storage media support of alarm input and output built in cameras
BACKUP Backup Methods Backup File Format HDD Internal storage for system Internal Storage for Recording ALARMS Alarm Input/output in cameras Motion detection	USB port (HDD lor Flash drive), Network JPEG, BMP, AVI, NMS 1 x SSD NVMe 4 available bays for 3,5" HDD surveillance grade storage media support of alarm input and output built in cameras support of motion detection built in cameras
BACKUP Backup Methods Backup File Format HDD Internal storage for system Internal Storage for Recording ALARMS Alarm Input/output in cameras Motion detection Video Analytics	USB port (HDD lor Flash drive), Network JPEG, BMP, AVI, NMS 1 x SSD NVMe 4 available bays for 3,5" HDD surveillance grade storage media support of alarm input and output built in cameras support of motion detection built in cameras supported built in analytics in camera
BACKUP Backup Methods Backup File Format HDD Internal storage for system Internal Storage for Recording ALARMS Alarm Input/output in cameras Motion detection Video Analytics Temperature alarm	USB port (HDD lor Flash drive), Network JPEG, BMP, AVI, NMS 1 x SSD NVMe 4 available bays for 3,5" HDD surveillance grade storage media support of alarm input and output built in cameras support of motion detection built in cameras supported built in analytics in camera support of temperature alarm built in cameras
BACKUP Backup Methods Backup File Format HDD Internal storage for system Internal Storage for Recording ALARMS Alarm Input/output in cameras Motion detection Video Analytics Temperature alarm Licence plate recognition (LPR)	USB port (HDD lor Flash drive), Network JPEG, BMP, AVI, NMS 1 x SSD NVMe 4 available bays for 3,5" HDD surveillance grade storage media support of alarm input and output built in cameras support of motion detection built in cameras supported built in analytics in camera support of temperature alarm built in cameras support of selected image analysis functions available in the camera
BACKUP Backup Methods Backup File Format HDD Internal storage for system Internal Storage for Recording ALARMS Alarm Input/output in cameras Motion detection Video Analytics Temperature alarm Licence plate recognition (LPR) System Reactions to Alarm Events	USB port (HDD lor Flash drive), Network JPEG, BMP, AVI, NMS 1 x SSD NVMe 4 available bays for 3,5" HDD surveillance grade storage media support of alarm input and output built in cameras support of motion detection built in cameras supported built in analytics in camera support of temperature alarm built in cameras support of selected image analysis functions available in the camera
BACKUP Backup Methods Backup File Format HDD Internal storage for system Internal Storage for Recording ALARMS Alarm Input/output in cameras Motion detection Video Analytics Temperature alarm Licence plate recognition (LPR) System Reactions to Alarm Events NETWORK	USB port (HDD lor Flash drive), Network JPEG, BMP, AVI, NMS 1 x SSD NVMe 4 available bays for 3,5" HDD surveillance grade storage media support of alarm input and output built in cameras support of motion detection built in cameras supported built in analytics in camera support of temperature alarm built in cameras support of selected image analysis functions available in the camera e-mail, Screen Message, Recording Activation, PTZ 1 x Ethernet - RJ45 interface, 10/100/1000/2500 Mbit/s - maximum
BACKUP Backup Methods Backup File Format HDD Internal storage for system Internal Storage for Recording ALARMS Alarm Input/output in cameras Motion detection Video Analytics Temperature alarm Licence plate recognition (LPR) System Reactions to Alarm Events NETWORK Network Interface	USB port (HDD lor Flash drive), Network JPEG, BMP, AVI, NMS 1 x SSD NVMe 4 available bays for 3,5" HDD surveillance grade storage media support of alarm input and output built in cameras support of motion detection built in cameras supported built in analytics in camera support of temperature alarm built in cameras support of selected image analysis functions available in the camera e-mail, Screen Message, Recording Activation, PTZ 1 x Ethernet - RJ45 interface, 10/100/1000/2500 Mbit/s - maximum bandwidth 500 Mbit/s up to 500Mbit/s from all cameras • up to 500Mbit/s to all client







NOVUS MANAGEMENT SYSTEM VSS IP Recorder NMS VSS NVR 3-T-IV

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 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), NV-KBD/ACVSS keyl System Diagnostic automatic control of: HDDs, Temperature, Fan, Network, Came connection loss Security Password protection, IP filtering, MAC filtering, Limiting the nu connections INTEGRATION Integrated Devices Novus IP Cameras, Novus IP Recorders, Novus AHD Recorders, Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devic INSTALLATION PARAMETERS Dimensions (mm) 185 (W) x 420 (H) x 450 (D) Weight 10 kg (without HDDs for recording)	ompatible Mobile Applications	VSS WEB CLIENT functionality available from web browsers (Chrome, Edge, Firefox, Opera, Safari)
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 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), NV-KBD/ACVSS keyl System Diagnostic automatic control of: HDDs, Temperature, Fan, Network, Came connection loss Security Password protection, IP filtering, MAC filtering, Limiting the nu connections INTEGRATION Integrated Devices Novus IP Cameras, Novus IP Recorders, Novus AHD Recorders, Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devic INSTALLATION PARAMETERS Dimensions (mm) 185 (W) x 420 (H) x 450 (D) Weight 10 kg (without HDDs for recording)	TZ	
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 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), NV-KBD/ACVSS keyl System Diagnostic automatic control of: HDDs, Temperature, Fan, Network, Came connection loss Security Password protection, IP filtering, MAC filtering, Limiting the nu connections INTEGRATION Integrated Devices Novus IP Cameras, Novus IP Recorders, Novus AHD Recorders, Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devices INSTALLATION PARAMETERS Dimensions (mm) 185 (W) x 420 (H) x 450 (D) Weight 10 kg (without HDDs for recording)	FZ Functions	pan, tilt, zoom, preset commands, patterns, tours, auto-scans, focus, iris
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), NV-KBD/ACVSS keyl System Diagnostic automatic control of: HDDs, Temperature, Fan, Network, Came connection loss Security Password protection, IP filtering, MAC filtering, Limiting the nu connections INTEGRATION Integrated Devices Novus IP Cameras, Novus IP Recorders, Novus AHD Recorders, Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devices INSTALLATION PARAMETERS Dimensions (mm) 185 (W) x 420 (H) x 450 (D) Weight 10 kg (without HDDs for recording)	DDITIONAL INTERFACES	
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), NV-KBD/ACVSS keyl System Diagnostic automatic control of: HDDs, Temperature, Fan, Network, Came connection loss Security Password protection, IP filtering, MAC filtering, Limiting the nu connections INTEGRATION Integrated Devices Novus IP Cameras, Novus IP Recorders, Novus AHD Recorders, Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devic INSTALLATION PARAMETERS Dimensions (mm) 185 (W) x 420 (H) x 450 (D) Weight 10 kg (without HDDs for recording)	SB Ports	5 x USB 3.2, 2 x USB 2.0, 1 x USB 3.2 Type-C
Recording and Surveillance System Operation Mode Pentaplex OSD Polish, English, Russian, others Control PC mouse and keyboard (in-set included), NV-KBD/ACVSS keyl System Diagnostic automatic control of: HDDs, Temperature, Fan, Network, Came connection loss Security Password protection, IP filtering, MAC filtering, Limiting the nu connections INTEGRATION Integrated Devices Novus IP Cameras, Novus IP Recorders, Novus AHD Recorders, Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devic INSTALLATION PARAMETERS Dimensions (mm) 185 (W) x 420 (H) x 450 (D) Weight	PERATING SYSTEM	
Operation Mode Pentaplex OSD Polish, English, Russian, others Control PC mouse and keyboard (in-set included), NV-KBD/ACVSS keyl System Diagnostic automatic control of: HDDs, Temperature, Fan, Network, Came connection loss Security Password protection, IP filtering, MAC filtering, Limiting the nu connections INTEGRATION Integrated Devices Novus IP Cameras, Novus IP Recorders, Novus AHD Recorders, Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devic INSTALLATION PARAMETERS Dimensions (mm) 185 (W) x 420 (H) x 450 (D) Weight 10 kg (without HDDs for recording)	perating System	Microsoft Windows 10 IoT
OSD Polish, English, Russian, others Control PC mouse and keyboard (in-set included), NV-KBD/ACVSS keyl System Diagnostic automatic control of: HDDs, Temperature, Fan, Network, Came connection loss Security Password protection, IP filtering, MAC filtering, Limiting the nu connections INTEGRATION Integrated Devices Novus IP Cameras, Novus IP Recorders, Novus AHD Recorders, Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devices INSTALLATION PARAMETERS Dimensions (mm) 185 (W) x 420 (H) x 450 (D) Weight 10 kg (without HDDs for recording)	ecording and Surveillance System	NOVUS MANAGEMENT SYSTEM VSS
Control PC mouse and keyboard (in-set included), NV-KBD/ACVSS keyl System Diagnostic automatic control of: HDDs, Temperature, Fan, Network, Came connection loss Security Password protection, IP filtering, MAC filtering, Limiting the nu connections INTEGRATION Integrated Devices Novus IP Cameras, Novus IP Recorders, Novus AHD Recorders Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devices INSTALLATION PARAMETERS Dimensions (mm) 185 (W) x 420 (H) x 450 (D) Weight 10 kg (without HDDs for recording)	peration Mode	Pentaplex
System Diagnostic automatic control of: HDDs, Temperature, Fan, Network, Came connection loss Security Password protection, IP filtering, MAC filtering, Limiting the nu connections INTEGRATION Integrated Devices Novus IP Cameras, Novus IP Recorders, Novus AHD Recorders, Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devices INSTALLATION PARAMETERS Dimensions (mm) 185 (W) x 420 (H) x 450 (D) Weight 10 kg (without HDDs for recording)	SD	Polish, English, Russian, others
connection loss Security Password protection, IP filtering, MAC filtering, Limiting the nu connections INTEGRATION Integrated Devices Novus IP Cameras, Novus IP Recorders, Novus AHD Recorders, Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devic INSTALLATION PARAMETERS Dimensions (mm) 185 (W) x 420 (H) x 450 (D) Weight 10 kg (without HDDs for recording)	ontrol	PC mouse and keyboard (in-set included), NV-KBD/ACVSS keyboard
INTEGRATION Integrated Devices Novus IP Cameras, Novus IP Recorders, Novus AHD Recorders, Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devices INSTALLATION PARAMETERS Dimensions (mm) 185 (W) x 420 (H) x 450 (D) Weight 10 kg (without HDDs for recording)	ystem Diagnostic	automatic control of: HDDs, Temperature, Fan, Network, Camera connection loss
Integrated Devices Novus IP Cameras, Novus IP Recorders, Novus AHD Recorders, Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devices. INSTALLATION PARAMETERS Dimensions (mm) 185 (W) x 420 (H) x 450 (D) Weight 10 kg (without HDDs for recording)	ecurity	Password protection, IP filtering, MAC filtering, Limiting the number of connections
Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devices INSTALLATION PARAMETERS Dimensions (mm) 185 (W) x 420 (H) x 450 (D) Weight 10 kg (without HDDs for recording)	NTEGRATION	
Dimensions (mm) 185 (W) x 420 (H) x 450 (D) Weight 10 kg (without HDDs for recording)	itegrated Devices	Novus IP Cameras, Novus IP Recorders, Novus AHD Recorders, POS Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devices
Weight 10 kg (without HDDs for recording)	NSTALLATION PARAMETERS	
	imensions (mm)	185 (W) x 420 (H) x 450 (D)
Power Supply built in 700W, with 230VAC input • with Hot-Swap function (all	/eight	10 kg (without HDDs for recording)
to replace the power supply without turning off the unit)	ower 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	perating Temperature	5°C ~ 35°C

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. The device may be available in another housing variant, with dimensions $185 \, (W) \times 412 \, (H) \times 450 \, (D)$. Data presented in table above for substreams are given for $640 \times 480 \, \text{resolution}$.



