

# **NMS IP Recorder**

NMS NVR X-4U-III-R

## PRO SERIES

## FUNCTIONS



Video

### **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 •optional disk mounting: 8 x SATA 3,5" •RAID controller protects recordings •External arrays support

•External arrays support •Operating system: Microsoft Windows 10 IoT •Recording and surveillance system: NMS (Novus Management System) •Compatible with all NOVUS IP cameras

### DIMENSIONS



178 mm 648 mm

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
Dualstreaming Support	yes
Display	
Monitor Output	1 x HDMI 2.0b, 1 x Dual link-DVI, 1 x Display Port 1.2 (up to 3 monitors simultaneously)
Maximum Resolution	3 x 4K UltraHD
Audio	
Audio Output	1 x HDMI, 1 x Display Port
Performance - H.264	
	Recording up to: 160 main streams (while displaying: 8 sub streams)
2MPX IP Camera	Display up to: 60 sub streams or 20 main streams (while recording: 80 main streams) Playback up to: 20 main streams (while recording: 80 main streams)
4MPX IP Camera	Recording up to: 120 main streams (while displaying: 8 sub streams) Display up to: 50 sub streams or 13 main streams (while recording: 80 main streams) Playback up to: 13 main streams (while recording: 80 main streams)
5MPX IP Camera	Recording up to: 100 main streams (while displaying: 8 sub streams) Display up to: 40 sub streams or 8 main streams (while recording: 80 main streams) Playback up to: 8 main streams (while recording: 80 main streams)
8MPX IP Camera	Recording up to: 80 main streams (while displaying: 8 sub streams) Display up to: 30 sub streams or 5 main streams (while recording: 60 main streams) Playback up to: 5 main streams (while recording: 60 main streams)
12MPX IP Camera	Recording up to: 80 main streams (while displaying: 8 sub streams) Display up to: 25 sub streams or 4 main streams (while recording: 50 main streams)
Performance - H.265	Playback up to: 4 main streams (while recording: 50 main streams)
	Recording up to: 200 main streams (while displaying: 8 sub streams)
2MPX IP Camera	Display up to: 60 sub streams or 20 main streams (while recording: 80 main streams) Playback up to: 20 main streams (while recording: 80 main streams)
4MPX IP Camera	Recording up to: 160 main streams (while displaying: 8 sub streams) Display up to: 40 sub streams or 9 main streams (while recording: 80 main streams) Playback up to: 9 main streams (while recording: 80 main streams)
5MPX IP Camera	Recording up to: 120 main streams (while displaying: 8 sub streams) Display up to: 35 sub streams or 4 main streams (while recording: 70 main streams) Playback up to: 4 main streams (while recording: 70 main streams)
8MPX IP Camera	Recording up to: 90 main streams (while displaying: 8 sub streams) Display up to: 25 sub streams or 4 main streams (while recording: 70 main streams) Playback up to: 4 main streams (while recording: 70 main streams)
12MPX IP Camera	Recording up to: 90 main streams (while displaying: 8 sub streams) Display up to: 16 sub streams or 4 main streams (while recording: 50 main streams) Playback up to: 4 main streams (while recording: 50 main streams)
Recording	nayback up to 4 main securits (mine recording, so main securits)
	Continuous, Schedule, Panic, Triggered: manually, by alaram input, motion detection, video analysis, POS,
Recording Mode	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	By Date/Time, Events, "Text-in", Image Analysis Events
Backup	
Backup Methods	USB port (HDD lor Flash drive), Network
Backup File Format	JPEG, BMP, AVI, NMS
HDD	
Internal storage for system	1 x SSD NVMe
Internal Storage for Recording	8 available bays for 3,5" HDD surveillance grade storage media
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 Interface Network Throughput	up to 450Mbit/s from all cameras, up to 450Mbit/s to all client stations,
Network Throughput	up to 450Mbil/s from all cameras, up to 450Mbil/s to all client stations, Nax network throughput + 50Mbil/s for each network card
Network Throughput Network Protocols Support	up to 450Mbit/s from all cameras, up to 450Mbit/s to all client stations,
Network Throughput	up to 450Mbit/s from all cameras, up to 450Mbit/s to all client stations, Max network troughput: 450Mbit/s for each network card HTTP, TCP/IP, IPv4/v6, UDP, HTTPS, FTP, DHCP, DNS, DDNS, NTP, RTSP, SAMBA
Network Throughput Network Protocols Support Compatible Mobile Applications	up to 450Mbit/s from all cameras, up to 450Mbit/s to all client stations, Max network troughput: 450Mbit/s for each network card HTTP, TCP/IP, IPv4/v6, UDP, HTTPS, FTP, DHCP, DNS, DDNS, NTP, RTSP, SAMBA NMS Mobile
Network Throughput Network Protocols Support Compatible Mobile Applications <b>PTZ</b>	up to 450Mbit/s from all cameras, up to 450Mbit/s to all client stations, Max network troughput: 450Mbit/s for each network card HTTP, TCP/IP, IPv4/v6, UDP, HTTPS, FTP, DHCP, DNS, DDNS, NTP, RTSP, SAMBA
Network Throughput Network Protocols Support Compatible Mobile Applications PTZ PTZ Functions Additional interfaces	up to 450Mbits from all cameras, up to 450Mbits trail client claitons, Max network throughput: 450Mbit/s for each network card HTTP, TCP/IP, IIV4/v6, UDP, HTTPS, FTP, DHCP, DNS, DDNS, NTP, RTSP, SAMBA NMS Mobile pan, tilt, zoom, preset commands, patterns, tours, auto-scans, focus, iris
Network Throughput Network Protocols Support Compatible Mobile Applications PTZ PTZ Functions Additional Interfaces USB Ports	up to 450Mbit/s from all cameras, up to 450Mbit/s to all client stations, Max network troughput: 450Mbit/s for each network card HTTP, TCP/IP, IPv4/v6, UDP, HTTPS, FTP, DHCP, DNS, DDNS, NTP, RTSP, SAMBA NMS Mobile
Network Throughput Network Protocols Support Compabile Mobile Applications PTZ PTZ Functions Additional Interfaces USB Ports Operating System	up to 450Mbit/s fom all cameras, up to 450Mbit/s to all clent stations, Max network throughput: 450Mbit/s for each network card HTTP, TCP/IP, IPv4/v6, UDP, HTTPS, FTP, DHCP, DNS, DDNS, NTP, RTSP, SAMBA NMS Mobile pan, tilt, zoom, preset commands, patterns, tours, auto-scans, focus, iris 4 x USB 2.0, 4 x USB 3.2, 1 x USB 3.2 Type-C, 2 x USB 2.0
Network Throughput Network Protocols Support Compatible Mobile Applications PTZ PTZ Functions Additional Interfaces USB Ports Operating System Operating System	up to 450Mbit/s from all cameras, up to 450Mbit/s for all cameras, up to 450Mbit/s to all client stations, Max network throughput: 450Mbit/s for each network card HTTP, TCP/P, IPv4/v6, UDP, HTTPS, FTP, DHCP, DNS, DDNS, NTP, RTSP, SAMBA NMS Mobile pan, tilt, zoom, preset commands, patterns, tours, auto-scans, focus, iris 4 x USB 2.0, 4 x USB 3.2, 1 x USB 3.2 Type-C, 2 x USB 2.0 Microsoft Windows 10 IoT
Network Throughput Network Throughput Compatible Mobile Applications PT2 PT2 PT2 PT2 FUT2 FUT2 FUT2 FUT2 FUT2 FUT2 FUT2 FU	up to 450Mbits from all cameras. up to 450Mbits to all client stations; Max network throughput: 450Mbit/s for each network card HTTP, TCP/P, IPv4/v6, UDP, HTTPS, FTP, DHCP, DNS, DDNS, NTP, RTSP, SAMBA NMS Mobile pan, tilt, zoom, preset commands, patterns, tours, auto-scans, focus, iris 4 x USB 2.0, 4 x USB 3.2, 1 x USB 3.2 Type-C, 2 x USB 2.0 Microsoft Windows 10 IoT NMS (Novus Management System)
Network Throughput Network Protocols Support Compatible Mobile Applications PTZ PTZ Functions Additional Interfaces USB Ports Operating System Operating System Recording and Surveillance System Additional Software	up to 450Mbits from all cameras, up to 450Mbits from all cameras, up to 450Mbits all client clatatons, Max network throughput: 450Mbits for each network card HTTP, TCPIP, IIV4V6, UDP, HTTPS, FTP, DHCP, DNS, DDNS, NTP, RTSP, SAMBA NMS Mobile pan, tilt, zoom, preset commands, patterns, tours, auto-scans, focus, irris 4 x USB 2.0, 4 x USB 3.2, 1 x USB 3.2 Type-C, 2 x USB 2.0 Microsoft Windows 10 IoT NMS (Novus Management System) NMS, Internet Explorer
Network Throughput Network Throughput Compatible Mobile Applications PT2 PT2 PT2 PT2 FUT2 FUT2 FUT2 FUT2 FUT2 FUT2 FUT2 FU	up to 450Mbits from all cameras, up to 450Mbits to all client stations, Max network throughput: 450Mbits for each network card HTTP, TCPIP, IIPv4Vr6, UDP, HTTPS, FTP, DHCP, DNS, DDNS, NTP, RTSP, SAMBA NMS Mobile pan, tilt, zoom, preset commands, patterns, tours, auto-scans, focus, iris 4 × USB 2.0, 4 × USB 3.2, 1 × USB 3.2 Type-C, 2 × USB 2.0 Microsoft Windows 10 IoT NMS (Novus Management System) NMS, Internet Explorer Pentaplex
Network Throughput Network Throughput Network Protocols Support Compatible Mobile Applications PTZ PTZ Functions Additional Interfaces USB Ports Operating System Operating System Recording and Surveillance System Additional Sourveillance System Operation Mode	up to 450Mbit/s from all cameras. up to 450Mbit/s from all cameras. up to 450Mbit/s all client ctations, Max network throughput: 450Mbit/s for each network card HTTP, TCPI/P, IIV4/v6, UDP, HTTPS, FTP, DHCP, DNS, DDNS, NTP, RTSP, SAMBA NMS Mobile pan, tilt, zoom, preset commands, patterns, tours, auto-scans, focus, iris 4 x USB 2.0, 4 x USB 3.2, 1 x USB 3.2 Type-C, 2 x USB 2.0 Microsoft Windows 10 IoT NMS (Novus Management System) NMS, Internet Explorer



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, NMS-ANPR Software, DSC Systems, POS Systems (Posnet, Upos and other), ONVIF Devices, RTSP Devices
Installation Parameters	
Dimensions (mm)	178 (W) x 452 (H) x 648 (D)
Weight	28 kg (without HDD)
Power Supply	built in 700W, with 230VAC input
Power consumption/heatprint	350W/280W (without HDD for recording)
Operating Temperature	5°C ~ 35°C
RACK Mount 19"	4U

To support more than two monitors it is required to use Display Port output.
 \*\* Available with dual streaming mode.
 \*\* Function capability depends on used devices and communication protocols.
 \*\*\* List of compatible HDD models and maximum of their capacities is available in section DOWNLOADABLE FILES.