



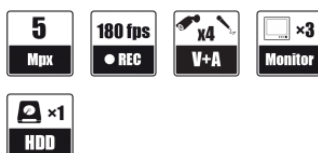
# Multistandard AHD Recorder

## NHDR-4104-H1



4000 VSS HYBRID

### FUNCTIONS



### COMPATIBILITY



### KEY FEATURES

- Video channels: 4, audio channels: 4
- Recording speed: up to 120 fps (AHD), up to 180 fps (IP)
- Internal HDDs mount: up to 1
- Monitor outputs: 3 (2 x main, 1 x spot)
- Supports HD analog cameras (720p, 1080p, 4MPX, 5MPX)
- Supports AHD, TVI, CVI cameras
- IP cameras support (hybrid mode)
- Intelligent image analysis
- PIR cameras support

### DIMENSIONS



Video	
Video Input	4 x BNC
Operating mode	AHD 5MPx, TVI 5MPx, CVI 4MPx, analog 960H
Monitor Output	main (split screen, full screen, sequence): 1 x HDMI (4K UltraHD), 1 x VGA (FullHD), spot: 1 x BNC
IP Streams	DVR mode: 4 x BNC + 0 x IP hybrid mode: 4 x BNC + 2 x IP IP mode: 0 x BNC + 6 x IP
Supported IP resolution	max. 2592 x 1944
Audio	
Audio Input/Output	4 x RCA (Line-in)/1 x HDMI, 1 x RCA
Recording	
Compression	H.264, H.265
Recording Speed	120 fps (960 x 576 - 960H) 120 fps (1280 x 720 - HD) 60 fps (1920 x 1080 - FullHD) 64 fps (1280 x 1440 - 4MPx Lite) 48 fps (1280 x 1944 - 5MPx Lite)
IP recording speed	hybrid mode: 60fps IP mode: 180fps
IP stream size	hybrid mode: 8 Mb/s in total from all IP cameras IP mode: 24 Mb/s in total from all IP cameras
Recording Mode	continuous, triggered by: REC/PANIC button, alarm input, motion detection, PIR alarm, image analysis
Schedule	individual settings for: each camera, each day of the week, configuration with an accuracy of: 30 min, possibility of combining individual recording modes
Prealarm/postalarm	up to 3 s/up to 5 min
Playback	
Playback speed	120 fps
IP playback speed	120 fps
Recorded Data Search	by date/time, events, image analysis events, motion in a defined area, tags
Backup	
Backup Methods	USB port (HDD or Flash memory), network
Backup File Format	JPG, BMP, PNG, MP4, AVI
Storage	
Internal storage	available mount: 1 x HDD 3.5" SATA
Total Internal Capacity	10 TB
External storage	Network HDD (NFS or SMB/CIFS)
Total External Capacity	64 TB
Alarm	
Alarm Input/Output	4/1 relay type
IP Camera Alarm Input/Output	supports IP camera's alarm input/output
Motion Detection	30 x 44 grid, individual settings of sensitivity, PIR cameras support
System Reaction to Alarm Events	buzzer, e-mail, alarm output activation, screen message, recording activation, PTZ, Full Screen, FTP picture upload, FTP video upload, picture to Cloud, video to Cloud
Intelligent image analysis	
Number of channels	4 x BNC, 6 x IP (4000 Serie)
Supported functions for analog cameras	Exception, Line cross, Zone entrance, Pedestrian detection, Sound detection
Supported functions for IP cameras	Exception, Line cross, Zone entrance, Abandoned object, Object disappearance, Face detection, Pedestrian detection, Cross counting, Sound detection
Network	
Network Interface	1 x Ethernet - RJ-45 interface, 10/100 Mbit/s
Network Protocols Support	HTTP, TCP/IP, IPv4/v6, HTTPS, FTP, DHCP, DNS, DDNS, NTP, SNTP, RTSP, UPnP, SNMP, SMTP, P2P, HTML5
PC/MAC Software	NOVUS MANAGEMENT SYSTEM VSS, NOVUS MANAGEMENT SYSTEM AC, NMS, Internet Explorer, NHDR-5000 Viewer, Firefox, Chrome, Opera, Edge, N Control 4000/Safari, NHDR-5000 Viewer, N Control 4000
Mobile applications	RxCamView (iPhone, Android)
Number of Simultaneous Connections	up to 32 users, each user up to 5 devices
Bandwidth	48 Mb/s in total to all client workstations
PTZ	
PTZ Ports	1 x RS-485
PTZ Protocols	Pelco-D, Pelco-P
PTZ Functions	pan/tilt/zoom, preset commands, patterns
COAX	
COAX Functions	menu, zoom, focus, PTZ
Auxiliary Interfaces	
USB Ports	2 x USB 2.0,
Operating system	
Operating System	Linux
OSD	languages: Polish, English, Russian, others
Control	PC mouse and IR remote controller (in-set included), network, NV-KBD50 keyboard
System Diagnostic	automatic control of HDDs, camera connection loss
Security	password protection, IP filtering
Installation parameters	
Dimensions (mm)	300 (W) x 53 (H) x 227 (D)
Weight	1.1 kg (without HDD)
Power Supply	12 VDC (100 ~ 240 VAC/12 VDC PSU in-set included)
Power Consumption	20 W (with 1 HDD)
Operating Temperature	-10°C ~ 55°C

*The recorder is dedicated to work with AHD cameras, Novus 4000 series IP cameras and achieves the best functionality with them. In case of work with IP cameras intelligent image analysis, dualstream mode, PTZ control, motion detection and alarm inputs / outputs functions depend on the functionality of the IP camera and the capabilities of the communication protocol. Detailed data on camera compatibility with recorders and compatible hard drives can be found in the compatibility tables available in the [DOWNLOADABLE FILES](#) tab.*

*Display and playback speeds are achieved using dual stream.*

*The recording speed of analog cameras may be limited during playback.*