

KNR-420

32-Channel 4-Bay RAID 1U Rackmount Standalone NVR



- 32 channels, 32 Free Licenses
- 4 Storage Bay(s)
- Hardware RAID (on Board) 0, 1, 5, 6, 10
- Rack Space: 1U, Rackmount Standalone NVR
- Embedded Linux
- ARM-based embedded SoC
- Audio, HDMI x 1, VGA x 1
- Built-in Core Analytics
- Forensic Search, Smart Search
- Object Visual Tracking
- Multi-Browser Support

► Specifications

Product Profile

Product Type	Standalone NVR
Maximum Number of Video Devices	32
Maximum Number of Clients	Local: 1, Remote: 128
Supported Screen Resolution	HDMI: 3840x2160 (30Hz), 1920x1080 (60Hz), 1600x1200 (60Hz), 1280x1024 (60Hz), 1280x720 (60Hz), 1024x768 (60Hz) VGA: 1920x1080 (60Hz), 1600x1200 (60Hz), 1280x1024 (60Hz), 1280x720 (60Hz), 1024x768 (60Hz)

Hardware

System Architecture	Embedded SoC-based (ARM platform)
CPU	ARM-based embedded SoC

License

License required	No
Free License	32

Live View

Display Layout Mode	1, 4, 6, 8, 9, 16, 25, 32
Fisheye Dewarping	Yes (Live View, Playback)

Local Live View performance	[Smart IVA On] 2ch (up to 30 fps at 4K 3840 x 2160) 4ch (up to 30 fps at 4MP) 8ch (up to 30 fps at 2MP 1920 x 1080) 16ch (up to 30 fps at 720p) 32ch (up to 30 fps at D1) [Smart IVA Off] 2ch (up to 30 fps at 12MP) 2ch (up to 30 fps at 4K 3840 x 2160) 4ch (up to 30 fps at 4MP) 10ch (up to 30 fps at 2MP 1920 x 1080) 20ch (up to 30 fps at 720p) 32ch (up to 30 fps at D1)
Event Status	Display event status upon alarm or upon connection loss or recovery between server and client
Instant Playback	Instant Playback in live view window

Analytics

NVR Built-in Analytics	Smart Motion Detection (detect when the people, vehicles or other objects move in the predefined area), Face Comparison, Face Detection
NVR Analytics Maximum Channels	Smart Intrusion Protection: 2 channels Smart Motion Detection: 4 channels
Object Recognition Database	Face Picture Capacity: 50,000 Vehicle Picture Capacity: 25,000
Maximum Snapshot Capacity	Captured Face Snapshots: 500,000 Captured Vehicle Snapshots: 500,000 Captured Object Snapshots via Smart Intrusion Protection: 500,000
Analytics from Camera	Receive analytics based events from the cameras and respond to the events:, Face Detection; Face Comparison; Smart Motion Detection (People Detection, Vehicle Detection); Smart Intrusion Protection (Intrusion Detection, Line Crossing Detection, Enter Area Detection, Exit Area Detection); Vehicle Detection (LPR); Traffic Monitoring

Audio

Audio Type	2-way, Line-in, Line-out
Audio Compression	G.711 A-law, G.711 u-law, AAC

Network

Network Protocol & Service	IPv4, IPv6, TCP, UDP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, NTP, RTSP, SMTP, UPnP, TLS 1.2, TLS 1.3, SNMP, IEEE 802.1X
Ethernet Port	2 x Ethernet (1000 Base-T), RJ-45 connector
Maximum Outgoing Throughput	128 Mbps
Security	TLS v1.2, TLS v1.3 encrypted communication

Recording

Maximum Recording Throughput	160 Mbps
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Search & Playback

Playback Control	Continuous forward and backward playback with speeds 1/8x, 1/4x, 1/2x, 1x, 2x, 4x, 8x, 16x, 32x, 64x, 128x, play, pause, stop
Synchronized Playback	16 channels
Smart Search	Set ROI and look for the people and vehicles appearing in the ROI in the past recordings (requires cameras with Smart Motion Detection feature)
Forensic Search	Select target object (people, vehicle) and search for the similar object through all the channels
Object Visual Tracking	Support, View thumbnails generated by Forensic Search and playback by time sequence

System

Server Operating System	Embedded Linux
Client PC Operating System	Windows 7, Windows 8, Windows 10, Windows 11
USB	2-Port USB 2.0, 1-Port USB 3.0

Integration

ONVIF Compliant	Yes, Profile S, Profile G, Profile T
Web Browser	IE 10 or newer, Google Chrome, Firefox, Microsoft Edge

Storage

Storage Bay	SATA, Max. 4 Disk(s) (without storage disks)
HDD Size	3.5"
Maximum Recording Capacity	26TB x4
RAID Level	Hardware RAID (on Board) 0, 1, 5, 6, 10

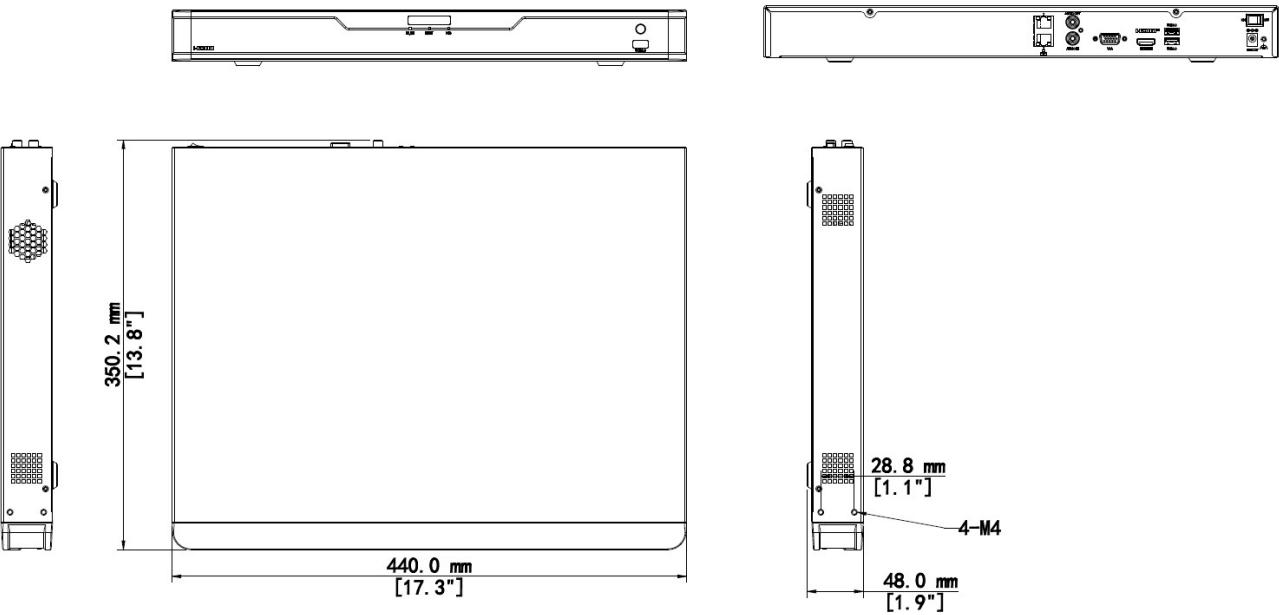
Interface

Audio Interface	1/1, RCA Jack
Local Access	USB Mouse
Local Display Interface	HDMI x 1, VGA x 1

General

Power Source	DC 12V
Dimensions	(W x H x D): 440mm x 48mm x 350mm (17.3" x 1.9" x 13.8") Rack Space: 1U
Bundled Accessories	USB Mouse, Power Adapter
Fan	Yes
Operating Temperature	-10°C ~ 55°C (14°F ~ 131°F)
Operating Humidity	10% - 90% RH, non-condensing
Approvals	CE, FCC, BSMI, UL Listed
Color	Black
Warranty	2 Year(s). For extended warranty offering, see http://www.acti.com/support/warranty

► Dimension Diagram



Unit: mm [inch]

► Related Products

Network & Storage Peripherals - Hard Disk

PHDD-2202		WD Purple 1TB 3.5" SATA Hard Disk Drive, 5400 RPM 64 MB Cache (for ZNR-126, ZNR-127, ZNR-129, ZNR-221P, ZNR-222P, ZNR-224, ZNR-423, ZNR-424, ZNR-425, ZNR-429, ZNR-431, KNR-120, KNR-121, KNR-220P, KNR-420, KNR-421)
PHDD-2303		WD Purple 2TB 3.5" SATA Hard Disk Drive, 5400 RPM 64 MB Cache (for ZNR-126, ZNR-127, ZNR-129, ZNR-221P, ZNR-222P, ZNR-224, ZNR-423, ZNR-424, ZNR-425, ZNR-429, ZNR-431, KNR-120, KNR-121, KNR-220P, KNR-420, KNR-421)
PHDD-2504		WD Purple 4TB 3.5" SATA Hard Disk Drive, 5400 RPM 128 MB Cache (for ZNR-126, ZNR-127, ZNR-129, ZNR-221P, ZNR-222P, ZNR-224, ZNR-423, ZNR-424, ZNR-425, ZNR-429, ZNR-431, KNR-120, KNR-121, KNR-220P, KNR-420, KNR-421)
PHDD-2703		WD Purple 6TB 3.5" SATA Hard Disk Drive, 5400 RPM 256 MB Cache (for ZNR-126, ZNR-127, ZNR-129, ZNR-221P, ZNR-222P, ZNR-224, ZNR-423, ZNR-424, ZNR-425, ZNR-429, ZNR-431, KNR-120, KNR-121, KNR-220P, KNR-420, KNR-421)
PHDD-2N00		

Controllers - Joystick

PJSK-0102		Joystick for PTZ Control (for ZNR Series, YVR Series, KNR Series)
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