# **ZNR-429**



## 64-Channel RAID Rackmount Standalone NVR

- 8-bay 2U Rackmount Standalone NVR
- Maximum Number of Video Devices: 64
- Hardware RAID support
- Event trigger, response and notification
- Forensic Search

### Specifications

#### **Device**

Product Type	Standalone NVR
Maximum Resolution	32MP
Maximum Number of Video Devices	64
Maximum Number of Clients	Local: 1, Remote: 128
Supported Screen Resolution	HDMI: 3840x2160 (60Hz/30Hz), 1920x1080 (60Hz/50Hz), 1600x1200 (60Hz), 1280x1024 (60Hz), 1280x720 (60Hz), 1024x768 (60Hz)

#### License

License required	No
Free License	64

#### **Live View**

Display Layout Mode	1, 4, 6, 8, 9, 16, 25, 36, 64
Local Live View performance	[Smart IVA Off] 64ch (up to 30 fps at 720P) 32ch (up to 30 fps at 1080p) 20ch (up to 30 fps at 3MP) 16ch (up to 30 fps at 4MP) 12ch (up to 30 fps at 5MP) 10ch (up to 30 fps at 6MP) 8ch (up to 30 fps at 4K) 5ch (up to 30 fps at 12MP) 4ch (up to 30 fps at 16MP) 2ch (up to 30 fps at 32MP)
Digital Zoom	Yes

#### Standalone NVR

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
PTZ	
PTZ Control	PTZ Control, Speed Control
Video	
Compression	H.265 Adaptive Stream (equivalent to Zip or Smart Stream or H.265+), H.264 Adaptive Stream (equivalent to Zip or Smart Stream or H.264+)
Analytics	
NVR Built-in Analytics	Smart Intrusion Protection (detect people, vehicles entering/ exiting area or crossing the line), Smart Motion Detection (detect when the people, vehicles or other objects move in the predefined area), Face Recognition, Face Detection, Object Metadata
NVR Analytics Maximum Channels	Smart Intrusion Protection: 8 channels Other analytics: 16 channels
NVR Object Metadata	Gender, Age, Glasses, Mask, Vehicle type, Vehicle color, Vehicle brand, Vehicle direction, License plate type, License plate color, License plate number
Deep Learning AI	2.0
Object Recognition Database	Face Picture Capacity: 40,000 Vehicle Picture Capacity: 25,000
Maximum Snapshot Capacity	Captured Face Snapshots: 3,000,000 Captured Vehicle Snapshots: 2,000,000 Captured Object Snapshots via Smart Intrusion Protection: 2,000,000 Object Metadata Snapshots: 2,000,000
Analytics from Camera	Receive analytics based events from the cameras and respond to the events: Face Detection; Smart Motion Detection (People Detection, Vehicle Detection); Smart Intrusion Protection (Intrusion Detection, Line Crossing Detection, Enter Area Detection, Exit Area Detection); People Counting (People Line Counting, People Area Counting, People Flow Counting, Crowd Detection); Object Metadata; Object Recognition; Temperature Detection
Audio	
Audio Type	2-way, Line-in, Line-out
Network	
Network Protocol & Service	IPv4/v6, TCP, UDP, DHCP Client, HTTP, HTTPS, DNS, DDNS, NTP, RTSP, SMTP, FTP, ICMP, ARP, UPnP, SNMP
Ethernet Port	2 x Ethernet (10/100/1000 Base-T), RJ-45 connector
Maximum Outgoing Throughput	384 Mbps
Recording	
Scheduled Recording	Yes
Event Recording	Yes
Manual Recording	Yes
Maximum Recording Throughput	384 Mbps
Search & Playback	
Playback Control	Continuous forward and backward playback with speeds 0.125x/0.25x/0.5x/1x/2x/4x/8x/16x, play, pause, stop

#### Standalone NVR

Standalone NVR	
Event Search	Search within previously recorded AI events
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
Metadata Search	Select attribute filters (color, gender, age, etc) and find thumbnails matching the criteria
Object Visual Tracking	View thumbnails generated by Forensic Search and playback by time sequence
Event	
Event Trigger	[NVR]: IP address conflict, Disk full, Disk not found, Disk abnormal, Low disk space, Illegal access, Recording or Snapshot abnormal, Crowd detection with three different concurrent thresholds with priority, Smart Intrusion Protection, Smart Motion Detection, Face Recognition [Video Device]: Video motion detection, Tampering detection, Defocus detection, External device through digital input, Sound detection, Video loss, Smart Intrusion Protection, Smart Motion Detection, Face Recognition, Face Detection, People Detection, Vehicle Detection, People Line Crossing Detection, People Enter Area Detection, People Exit Area Detection, Vehicle Line Crossing Detection, Vehicle Enter Area Detection, Vehicle Exit Area Detection, Temperature Detection, Fire Detection, Smoke Detection, Missing Object Detection, Unattended Object Detection, PTZ Auto Tracking, People Counting, Crowd Detection, Automatic License Plate Recognition, Traffic Monitoring
Event Response	E-mail notification with snapshots, Play alert sound, Pop-up window, Activate external device through digital output
System	
Server Operating System	Linux
USB	2-Port USB 2.0, 2-Port USB 3.0
Integration	
ONVIF Compliant	Yes, Profile S, Profile T
Web Browser	IE 10 or newer, Google Chrome, Microsoft Edge, Firefox
Storage	
Storage Bay	SATA, Max. 8 Disk(s) (without storage disks)
Maximum Recording Capacity	24TB x8
RAID Level	Hardware RAID (on Board) 0, 1, 5, 6, 10
Interface	
Serial Port	1 x RS-485, 1 x RS-232
Audio Interface	1/2, RCA Jack

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Audio Interface	1/2, RCA Jack
Digital Input/Output	16/10
External Storage Interface	eSATA
Local Display Interface	HDMI x 2, VGA x 2

#### General

Power Source	AC 100-240V
Power Consumption	20 W (AC, without HDD)

#### Standalone NVR

Dimensions	(W x H x D): 442mm x 86mm x 432mm (17.4" x 3.4" x 17.0") Rack Space: 2U
Bundled Accessories	Rack Bracket
Operating Temperature	-10°C ~ 60°C (14°F ~ 140°F)
Operating Humidity	10% - 90% RH, non-condensing
Approvals	BSMI
Color	Black
Warranty	2 Year(s). For extended warranty offering, see http://www.acti.com/support/warranty