

# BNR-300

## 100-Channel 4-Bay Tower Standalone NVR



- 100 channels, 32 Free Licenses
- 4 Storage Bay(s)
- Software RAID 0, 1, 5, 10
- Tower Standalone NVR
- Windows 11 IoT Enterprise Value, NVR 3 Business
- Intel Pentium Gold G7400, 16GB
- Audio, HDMI x 1, VGA x 1, Display Port x 1
- Workstation, Web Client, Mobile Client
- Forensic Search, Event Search, Smart Search, Metadata Search
- Object Visual Tracking
- Multi-Browser Support

### ► Specifications

#### Product Profile

Product Type	Standalone NVR
Maximum Resolution	Support all ACTi cameras in all resolutions
NVR Edition	NVR 3 Business
Maximum Number of Video Devices	100
Maximum Number of Clients	Local: 1, Remote: 4

#### Hardware

System Architecture	x86-based (Intel platform)
CPU	Intel Pentium Gold G7400
RAM	16GB, DDR4, 3200MT/s

#### License

License required	Yes
Free License	32 (32 channels for ACTi and 1 channel for third-party video device)

## Live View

Display Layout Mode	Local: 1, 3, 4, 5, 6, 8, 9, 10, 12, 16 Remote (IE client): 1, 3, 4, 5, 6, 8, 9, 10, 12, 16, 18, 24, 25, 35, 36, 48, 49, 64 Remote (Lite web client): 1, 3, 4, 5, 6, 8, 9, 10, 12, 16 Remote (Workstation): 1, 3, 4, 5, 6, 8, 9, 10, 12, 16, 18, 24, 25, 35, 36, 48, 49, 64, 81, 100, 121 (11x11), 144 (12x12), 169 (13x13), 196 (14x14), 225 (15x15) ** NVR 3 display grid cells can be merged into different shape and size.
Fisheye Dewarping	Yes (Live View, Playback, Export)
Local Live View performance	16ch (Max. 3Mbps at 1920x1080)
Digital Zoom	Yes
Visual Tracking	Yes (Cross-camera tracking via pre-defined regions)
Event Status	Display event status upon alarm or upon connection loss or recovery between server and client or when the allocated disk space is full
Instant Playback	Instant Playback in live view window
Embedded websites in Live View	No

## Map

e-Map	Yes
Google Map	No
Layout	Area maps with camera icons, small live view windows, hyperlinked
Setup	e-Map image upload, camera positioning, vision angle and pointed direction of camera, view positioning, source positioning
PTZ Mode	Mouse PTZ mode to control e-Map video streams

## PTZ

PTZ Control	PTZ Control, Speed Control, 32 preset points
Joystick	USB based joystick supported

## Backup

Automatic Recording Backup	Yes, Pre-scheduled recording backups using the Backup Server.
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## Video

Compression	H.265, H.264, MPEG-4, MJPEG
Hardware Accelerated Decoding	Yes (for workstation PC only), H.264, H.264

## Analytics

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 (Fire Detection, Smoking Detection, Smoke Detection, Temperature Measurement); Traffic Monitoring
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## Audio

Audio Type	2-way, Line-in, Line-out
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## Network

Network Protocol & Service	IPv4/v6, TCP, UDP, DHCP Client, HTTP, HTTPS, DNS, NTP, RTP, RTSP, SMTP, FTP, ICMP, ARP, Bonjour, UPnP, LDAP (client), iSCSi
Ethernet Port	1 x Ethernet (10/100/1000 Base-T), RJ-45 connector
Maximum Outgoing Throughput	384 Mbps
Security	Support Trusted Platform Module 2.0 (TPM 2.0), Microsoft Defender for anti-malware protection, TLS v1.2, TLS v1.3

## Recording

Scheduled Recording	Yes
Event Recording	Yes
Manual Recording	Yes
Event Speed-up Recording	Yes
Dual Stream Management	Yes
Maximum Recording Throughput	384 Mbps

## Search & Playback

Playback Control	Continuous forward and backward playback with speeds (1/64, 1/32, 1/16, 1/8, 1/4, 1/2, 1, 2, 4, 8, 16, 32, 64, 128, 256) or frame-by-frame, pause, stop
Synchronized Playback	225 channels
Recording Search	Search video recordings by time, events, channels, bookmarks and listed as clickable time-based thumbnails for full-size view and snapshot download
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
Video Export	RAW, AVI, MP4, EXE, GPU Hardware accelerated video export supported with AVI format
Snapshot Export	BMP, JPEG, PNG
Embedded Media Player	Yes, supports up to 64 channels view

## Event

Video Push	No
Event Trigger	<p>[NVR]: Disk full, Disk not found, Disk is available, S.M.A.R.T. Failure and Normal, Schedule service start and stop, Time Backward, CPU limit exceeded for NVR services, GPU Loading Detection for workstation only, Memory limit exceeded for Server PC and NVR services, Network Send/Receive Limit Exceeded for Server PC.</p> <p>[Video Device]: Video motion detection, Passive IR sensor, External device through digital input, Sound detection, Intelligent event detection, Video loss and recovery, Disk Write Failure and Available</p>

Event Response	Pop-up window with live video and event confirmation activation, Switch to hotspot window, Switch to customize view, Command a PTZ device to go to a preset point, Play alert sound, Activate external device through digital output, Execute system command to activate other programs, Upload video or snapshot to FTP server, E-mail notification with snapshots
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### Redundancy Server

Redundancy Service	Yes, N-to-N, N+1 (With limited functions when NVR 3 server acts as Redundancy server)
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### System

Permission control	Unlimited number of users, Active Directory, Customizable permissions for user groups, Account lockout, Automatic logout after idle, Playback password protected, Password validity period, Password Expiration Notification
Watchdog	Support
Server Operating System	Windows 11 IoT Enterprise Value
Client PC Operating System	Windows 7 SP1, Windows 8.1, Windows 10, Windows 11, Windows Server 2008 R2 SP1, Windows Server 2012 R2, Windows Server 2016, Windows Server 2019
Mobile Client Program	Mobile device application (ACTi Mobile Client) supports Live View, PTZ Control, Event/time based search and playback, Supported device(s) iOS, Android device
USB	6-Port USB 2.0, 3-Port USB 3.0, 1-Port USB Type C
Language	Multi-Language

### Integration

Unified Solution	Fully compatible with ACTi cameras and encoders
CMS Support	No
GPS Position	Manual setting
Edge Recording	Automatically restore the lost videos from the memory card of camera to NVR server via ONVIF (Profile G) or proprietary protocol integrations after network connection recovery.
ONVIF Compliant	Profile S, Profile G, Profile T (officially listed as ONVIF conformant at <a href="http://www.onvif.org">www.onvif.org</a> )
Web Browser	IE 11 (Please verify that your computer meets the minimum system requirements for Internet Explorer from Microsoft website.), Lite web client: Microsoft Edge 80.0.361.66 (Normal mode) or newer, Google Chrome 71.0.3578 or newer, Firefox 64.0.2 or newer, Apple Safari 12.0.2 or newer
Third-party Integration	No

### Storage

Supported Storage Technology	NAS, SAN
System Drive	M.2 NVMe SSD, 500GB
Storage Bay	SATA, Max. 4 Disk(s) (without storage disks)
HDD Size	3.5"
Maximum Recording Capacity	24TB x4
RAID Level	Software RAID 0, 1, 5, 10

### Interface

Audio Interface	1/1, 3.5mm Phone Jack
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Expansion Slots Available	2 x PCIe 4.0 (x1) 1 x PCIe 4.0 (x16)
Local Display Interface	HDMI x 1, VGA x 1, Display Port x 1










**General**






Power Source	AC 100-240V
Power Supply	400W
Weight	5210g (11.49lb)
Dimensions	(W x H x D): 190mm x 426mm x 491.5mm (7.48" x 16.77" x 19.35")
Fan	Yes, 1 fan(s)
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)
Operating Humidity	10% - 85% RH, non-condensing
Remote Access	Workstation, Web Client, Mobile Client
Color	Black
Warranty	3 Year(s). For extended warranty offering, see <a href="http://www.acti.com/support/warranty">http://www.acti.com/support/warranty</a>

\*\* The actual maximum number of channels may vary depending on the server/client PC performance and network throughput.

**▶ Related Products**

**Network & Storage Peripherals - Hard Disk**

PHDD-2200		WD WD1005FBYZ 1TB 3.5" Hard Disk Drive, 7200 RPM 128 MB Cache (for ENR-0x0P, ENR-110, ENR-120, ENR-130, ENR-22x, ENR-22xP, GNR-310, GNR-320, INR-100, INR-340, INR-430, INR-440, INR-450, INR-460)
PHDD-2301		HGST ULTRASTAR 7K6000 2TB 3.5" Hard Disk Drive, 7200 RPM 128MB Cache (for ENR-1xx, ENR- 0x0P, ENR-22x, ENR-22xP)
PHDD-2501		HGST ULTRASTAR 7K6000 4TB 3.5" Hard Disk Drive, 7200 RPM 128MB Cache (for ENR-1xx, ENR-0x0P, ENR-22x, ENR-22xP)
PHDD-2702		WD Ultrastar 6TB 3.5" Hard Disk Drive, 7200 RPM 256MB Cache
PHDD-2900		WD WD8002FRYZ 8 TB 3.5" Hard Disk Drive, 7200 RPM 128 MB Cache (for GNR-310, GNR-320, INR-100, INR-340, INR-410, INR-430, INR-440, INR-450, INR-460)
PHDD-2A00		WD WD101KRYZ 10TB 3.5" Hard Disk Drive, 7200 RPM 256MB Cache (for ENR-xxx, ENR-xxxP, GNR-330, GNR-410, INR-100, INR-340, INR-410, INR-430, INR-440, INR-450, INR-460, INR-470)
PHDD-2B01		HGST ULTRASTAR 7K6000 12TB 3.5" Hard Disk Drive, 7200 RPM 256MB Cache
PHDD-2E01		HGST ULTRASTAR 7K6000 14TB 3.5" Hard Disk Drive, 7200 RPM 512MB Cache
PHDD-2G00		WD Ultrastar 18TB 3.5" Hard Disk Drive, 7200 RPM 512MB Cache

PHDD-2H00		WD Ultrastar 16TB 3.5" Hard Disk Drive, 7200 RPM 512MB Cache
PHDD-2I00		WD Ultrastar 20TB 3.5" Hard Disk Drive, 7200 RPM 512MB Cache
PHDD-2J00		WD Ultrastar 22TB 3.5" Hard Disk Drive, 7200 RPM 512MB Cache
PHDD-2M00		WD Ultrastar 24TB 3.5" Hard Disk Drive, 7200 RPM 512MB Cache
PHDD-4K10		500G M.2 SSD Solid State Drive Win11 for BNR-300