NIRIKHON

SECURITY & DEFENCE TECHNOLOGY

PRODUCT BROCHURE

NVR

32 Channel Enterprise NVR with 40TB Storage

The 32 Channel NVR by NIRIKHON (Model NKNVR3432 - V3-IQ) delivers high-density, stable video decoding across 32 simultaneous channels supporting up to 12MP feeds, engineered for institutional recording and command & control operations. Its heavy-duty metal body ensures superior heat dissipation for continuous 24/7 reliability, while H.265+ compression optimizes bandwidth efficiency. With quad SATA bays up to 40TB storage and Auto System Recovery, it delivers mission-critical central command performance.



32 Channel Enterprise NVR with 40TB Storage

Official Brochure

SOLUTION SNAPSHOT

32-Channel High-Density Video Recording Core	**Up to 12MP HD Camera Decoding Support**	**Heavy-Duty Heat-Dissipating Metal Body**
H.265+/H.265/H.264 Video Compression	**4 SATA HDD Storage — Up to 40TB Total Capacity**	**1-Year Service Warranty Coverage**

OVERVIEW

Built for Real Operations 01

The 32 Channel NVR by NIRIKHON (Model NKNVR3432 -V3-IQ) delivers high-density, stable video decoding across 32 simultaneous channels supporting up to 12MP feeds, engineered for institutional recording and command & control operations. Its heavy-duty metal body ensures superior heat dissipation for continuous 24/7 reliability, while H.265+ compression optimizes bandwidth efficiency. With quad SATA bays up to 40TB storage and Auto System Recovery, it delivers mission-critical central command performance.

CAPABILITIES

Key Features & Product Modules 02

High-Performance 32-Channel SoC Processing Motherboard

The central processing core manages simultaneous decoding across all 32 channels, coordinating video, storage, and network functions in real time. Engineered to sustain stable, high-density performance under continuous institutional recording loads.

Multi-Stream Ultra-HD Video Decoding Engine

Handles real-time decoding of up to 32 concurrent HD video streams, supporting camera feeds up to 12MP. Built to process high-resolution feeds without compromising system responsiveness during full-channel operation.

4-Bay SATA Enterprise Hard Drive Backplane Controller

Manages four independent SATA hard drive bays, supporting up to 40TB of total storage capacity across all drives. Provides the structural data pathway for continuous, high-volume institutional video archiving at enterprise scale.

H.265+ Advanced Hardware Video Compression Chipset

Executes advanced H.265+/H.265/H.264 compression at the hardware level, significantly reducing storage consumption and network bandwidth. Ensures high-resolution footage is preserved efficiently across extended recording periods.

Network & System Input/Output Interface Board

Serves as the primary data pathway connecting the NVR to command center infrastructure, enabling centralized access and control. Supports stable, uninterrupted connectivity for real-time institutional monitoring.

Smart Regulated DC Power Management with Auto-Recovery Circuitry

Delivers stable DC 12V/3A power distribution while automatically restoring full system operation following power interruption. Minimizes surveillance gaps and ensures rapid return to continuous recording after outages.

OPERATIONAL VALUE

Software, Benefits & Outcomes 04

Real-Time Ultra-HD Monitoring

Renders live 32-channel feeds up to 12MP in a unified command interface, giving operators immediate full-facility situational visibility.

- Configurable grid layouts (1/4/9/16/32-channel views)
- Instant channel switching and full-screen focus mode
- Live status indicators for feed connectivity per channel
- Customizable channel arrangement by operational priority
- Synchronized live timestamp display across all channels

Storage & HDD Health Monitoring

Manages up to 40TB of total storage across four SATA bays, giving operators full visibility and control over institutional data retention.

- Real-time storage capacity monitoring per drive
- Individual HDD health status and diagnostics
- Configurable overwrite and retention policies
- Manual drive formatting and allocation control
- Low-storage automated alert notifications

Multi-Mode Adaptive Recording Schedule

Enables operators to configure Manual, Timer, Motion, and Smart Event recording modes tailored to institutional monitoring requirements.

- Per-channel recording mode assignment
- Time-block scheduling for automated recording windows
- Motion-triggered recording sensitivity configuration
- Smart Event rule-based recording setup
- Schedule templates for rapid multi-channel deployment

Smart Event Analytics & Motion-Triggered Instant Alarm Linkage

Applies intelligent motion-based detection across all 32 channels, triggering instant alerts with linked automated response actions.

- Configurable motion-sensitivity zones per channel
- Real-time alarm notification on the command dashboard
- Alarm-linked automated recording activation
- Event log with timestamp and channel reference
- Scheduled detection sensitivity by time-of-day

Synchronized 32-Channel Playback & Forensic Video Search

Enables rapid, timestamp-accurate retrieval of recorded footage across all 32 channels for efficient forensic review and investigation.

- Calendar and timeline-based footage navigation
- Multi-channel synchronized playback
- Event-tagged bookmarking for rapid recall
- Variable-speed scrubbing for frame-level review
- Exportable footage segments with timestamp metadata

Bandwidth-Optimized H.265+ High-Efficiency Stream Control

Manages H.265+ compression settings across all 32 channels, balancing high-resolution clarity with efficient bandwidth and storage utilization.

- Configurable bitrate control per channel (VBR/CBR)
- Compression standard selection (H.265+/H.265/H.264)
- Stream quality adjustment for bandwidth-constrained environments
- Real-time bandwidth utilization monitoring
- Storage-saving preset configurations

Enterprise Role-Based Access Control (RBAC) & Multi-User Security

Enforces hierarchical access permissions, ensuring only authorized personnel can access sensitive recording and system functions.

- Administrator, operator, and viewer privilege tiers
- Per-channel access permission assignment
- Session-based access logging per user
- Time-restricted access provisioning
- Instant access revocation for compromised credentials

SPECIFICATION

Technical Details 05

32-CHANNEL HIGH-DENSITY VIDEO RECORDING CORE
✓ Included

UP TO 12MP HD CAMERA DECODING SUPPORT
✓ Included

HEAVY-DUTY HEAT-DISSIPATING METAL BODY
✓ Included

H.265+/H.265/H.264 VIDEO COMPRESSION
✓ Included

4 SATA HDD STORAGE — UP TO 40TB TOTAL CAPACITY
✓ Included

1-YEAR SERVICE WARRANTY COVERAGE
✓ Included

SMART EVENT, MOTION, TIMER & MANUAL RECORDING MODES
✓ Included

PAL/NTSC AUTO-DETECTION VIDEO SYSTEM
✓ Included

DC 12V/3A POWER EFFICIENCY
✓ Included

1-YEAR SERVICE WARRANTY COVERAGE
✓ Included

CENTRALIZED MANAGEMENT SOFTWARE COMPATIBILITY
✓ Included

NETWORK-BASED REMOTE STREAMING CAPABILITY
✓ Included

MULTI-HDD STORAGE SCALABILITY
✓ Included

CONTINUOUS 24/7 OPERATIONAL STABILITY
✓ Included

QUESTIONS

Frequently Asked Questions 07

Q. How does the system manage bandwidth during simultaneous 32-channel recording?

A. The NVR is engineered with a dedicated processing core designed to manage 32 concurrent HD video channels supporting feeds up to 12MP, supported by H.265+ hardware compression to optimize bandwidth and storage efficiency during simultaneous multi-channel operation. Procurement teams requiring specific throughput benchmarks (e.g., total Mbps input capacity) should request supplementary confirmation during technical evaluation, as this figure was not explicitly detailed in the confirmed specification set.

Q. How does the metal body chassis manage thermal performance during continuous 24/7 operation across 32 channels?

A. The heavy-duty metal chassis provides structural heat dissipation, working alongside internal thermal management to support sustained performance during continuous high-density, 32-channel recording. This construction is designed for long-term durability in demanding institutional command environments requiring uninterrupted operation.

Q. What storage redundancy does the 4-bay HDD configuration provide, and does it support RAID protection?

A. The system supports four independent SATA HDD bays, each accommodating up to 10TB, for a combined total of 40TB storage capacity. RAID configuration was not part of the confirmed specification set for this unit; procurement officers requiring RAID-based redundancy should request formal confirmation of supported RAID levels during technical evaluation to ensure alignment with institutional data-resilience requirements.

Ready to deploy 32 Channel Enterprise NVR with 40TB Storage?

Talk to Nirikhon for product consultation, installation planning, integration support, and enterprise deployment.

Hotline: 09647 120 120 | Website: www.nirikhon.com