NIRIKHON

SECURITY & DEFENCE TECHNOLOGY

PRODUCT BROCHURE

DVR

DVR 32 Channels HD 4-5 MP

The DVR 32 Channels HD 4-5 MP by NIRIKHON (Model NKXVR3232Q3) delivers command-grade 5MP decoding across 32 BNC channels, built on a heavy-duty metal chassis for superior heat dissipation during 24/7 operation. Dual SATA bays provide up to 20TB total storage, while auto system recovery ensures uninterrupted recording after power loss. Backed by a 1-year service warranty — engineered for mission-critical institutional deployments.



DVR 32 Channels HD 4-5 MP

Official Brochure

SOLUTION SNAPSHOT

32-Channel High-Density BNC Video Input	**True 5MP High-Definition Recording & Decoding**	**Heavy-Duty Heat-Dissipating Industrial Metal Chassis**
H.265+ / H.265 / H.264 High-Efficiency Compression	**Dual SATA HDD Storage — Up to 20TB Total Capacity**	**1-Year Service Warranty**

OVERVIEW

Built for Real Operations 01

The DVR 32 Channels HD 4-5 MP by NIRIKHON (Model NKXVR3232Q3) delivers command-grade 5MP decoding across 32 BNC channels, built on a heavy-duty metal chassis for superior heat dissipation during 24/7 operation. Dual SATA bays provide up to 20TB total storage, while auto system recovery ensures uninterrupted recording after power loss. Backed by a 1-year service warranty — engineered for mission-critical institutional deployments.

CAPABILITIES

Key Features & Product Modules 02

High-Density 32-Channel 5MP Video Processing SoC Core

The processing core is engineered to simultaneously manage 32 independent video channels at full 5MP resolution—handling real-time decoding and live display without frame loss. This is the system's operational brain, built to sustain command-level visibility across large-scale, high-density surveillance networks.

32-Channel 75Ω BNC Analog Signal Matrix Module

Thirty-two dedicated BNC ports, calibrated to 1.0Vp-p at 75-ohm impedance, form the physical intake matrix for all incoming camera feeds. This module ensures stable, loss-minimized signal transmission across long cable runs — essential for expansive, multi-zone institutional deployments spanning entire facility perimeters.

Hardware H.265+ / H.265 / H.264 Triple-Codec Compression Engine

This dedicated encoding engine compresses incoming 5MP video across all 32 channels using H.265+, H.265, or H.264 formats before it reaches storage. By handling compression at the hardware level, it manages the significantly higher data throughput of a 32-channel system while conserving storage capacity and extending retention windows.

Heavy-Duty Heat-Dissipating Industrial Metal Enclosure

Built from reinforced metal, the enclosure shields internal components from physical stress while channeling heat away from the processing core during continuous 24/7 runtime. This structural design is critical at the 32-channel scale, allowing the unit to run reliably in dense server-room and command-center environments without thermal throttling.

Dual SATA Interface Architecture & High-Capacity Storage Controller

Two independent SATA interfaces connect to dual hard drives, each supporting capacity up to 10TB — delivering up to 20TB combined storage under unified controller management. This dual-bay architecture is the system's expanded memory backbone, built to handle the higher data volume generated by 32 simultaneous recording channels.

10/100 Mbps RJ45 Fast Ethernet Network Interface Unit

The RJ45 port bridges the DVR to the broader institutional network, enabling remote access and centralized data retrieval at up to 100Mbps. This interface turns a standalone 32-channel recorder into a networked command asset—accessible from a central monitoring point across the wider facility infrastructure.

Stabilized DC 12V/3A Power Delivery & Auto-Recovery Circuit

A stabilized 12V/3A power circuit maintains consistent voltage delivery under the sustained load of a 32-channel system, while the auto-recovery function automatically restores full operation after any power interruption. Together, these ensure recording never silently stops across the entire channel array during unstable power conditions.

Multi-Channel Synchronous Video Decoding & Smart Event Board

This board coordinates synchronous decoding and four recording modes — manual, timer, motion, and smart event — deciding in real time how and when footage is captured across all 32 channels. This is the operational control layer, giving procurement teams the flexibility to configure recording behavior at scale around specific security priorities.

OPERATIONAL VALUE

Software, Benefits & Outcomes 04

32-Channel Synchronous Real-Time Live Monitoring & Multi-Grid Layout

Delivers unified, simultaneous live viewing of all 32 connected channels across a flexible command-center display grid.

- Switch between single, quad, 16-way, and full 32-channel grid views
- Monitor all zones from one centralized operator screen
- Instantly identify the exact feed and channel number during an incident
- Maintain continuous visual coverage across a large-scale channel array
- Support multi-operator viewing across distributed command stations

5MP Ultra-HD Multi-Channel Video Decoding & Display Management

Processes true 5MP live video streams across all 32 channels without compromising image clarity or frame stability.

- View high-resolution 5MP footage in real time across all channels
- Zoom into live feeds for detail verification during active monitoring
- Maintain consistent decoding performance under full 32-channel load
- Adjust display stream quality per operational priority
- Preserve visual evidence integrity from the point of capture

Automated NTSC/PAL Video Standard Auto-Detection & Calibration

Automatically identifies and calibrates each incoming channel to the correct video standard without manual configuration.

- Auto-detect NTSC or PAL signal per connected camera
- Eliminate manual calibration across a 32-channel installation
- Ensure interoperability with mixed camera fleets
- Reduce field technician setup time during deployment
- Maintain signal consistency across all input channels

Multi-Mode Recording Scheduler (Manual, Timer, Motion & Smart Event)

Gives operators full control over how and when each of the 32 channels records, based on defined institutional protocols.

- Configure manual recording for designated high-priority zones
- Set timer-based recording windows for scheduled operational hours
- Enable motion-triggered recording to conserve storage
- Activate smart event recording for defined trigger conditions
- Apply different recording modes independently per channel

Intelligent Motion Detection & Smart Event Trigger Alerting System

Monitors defined zones across all channels for motion-based activity and flags events for immediate operator attention.

- Define motion-sensitive zones within each channel's field of view
- Trigger automatic recording upon detected movement
- Reduce continuous-recording storage load through event-based capture
- Flag time-stamped motion events for rapid review
- Support faster response coordination across a large-scale deployment

Multi-Channel Synchronous Playback, Smart Search & Timeline Navigation

Enables retrospective review of recorded footage across multiple channels on a single synchronized timeline.

- Search recorded footage by date, time, and channel number
- Play back multiple channels simultaneously for cross-verification
- Navigate directly to specific timestamps during evidence review
- Compare footage across zones for incident reconstruction
- Support structured, audit-ready playback sessions at scale

Video Compression Optimization

Manages video compression settings across all 32 channels to balance storage efficiency with recording quality.

- Select compression format per operational storage requirement
- Extend effective retention period through H.265+ efficiency
- Maintain 5MP image quality while reducing file size
- Reduce network bandwidth load during remote access sessions
- Standardize compression settings across all 32 channels

torage Health Monitoring & Auto-Overwrite Control

Monitors both connected SATA drives' status and manages combined storage capacity across the full recording cycle.

- Track available and consumed storage across the 20TB combined capacity
- Configure auto-overwrite behavior for continuous long-term recording
- Receive status visibility on both drives' health and capacity thresholds
- Plan retention cycles based on real storage consumption data
- Prevent unplanned recording interruption from storage exhaustion

Remote Network Surveillance & Multi-Device Access

Extends command-center visibility beyond the physical installation site through the unit's dedicated network interface.

- Access live and recorded footage from networked monitoring stations
- Connect the DVR into the broader institutional network infrastructure
- Enable authorized remote viewing without on-site presence
- Support centralized oversight across a distributed 32-channel network
- Maintain consistent access at up to 100Mbps network speed

Fast Evidentiary Video Export & Backup System

Provides operators with structured tools to extract and preserve footage for review, reporting, or investigation.

- Export selected footage segments directly for evidentiary use
- Back up critical recordings via USB or network transfer
- Maintain original resolution and timestamp integrity on export
- Support rapid turnaround for time-sensitive review requests
- Preserve chain-of-custody-ready file exports

SPECIFICATION

Technical Details

05

32-CHANNEL HIGH-DENSITY BNC VIDEO INPUT
✓ Included

TRUE 5MP HIGH-DEFINITION RECORDING & DECODING
✓ Included

HEAVY-DUTY HEAT-DISSIPATING INDUSTRIAL METAL CHASSIS
✓ Included

H.265+ / H.265 / H.264 HIGH-EFFICIENCY COMPRESSION
✓ Included

DUAL SATA HDD STORAGE — UP TO 20TB TOTAL CAPACITY
✓ Included

1-YEAR SERVICE WARRANTY
✓ Included

NTSC/PAL AUTO-DETECTION VIDEO SYSTEM
✓ Included

MULTI-MODE RECORDING
Manual, Timer, Motion & Smart Event

RJ45 100MBPS ETHERNET NETWORK CONNECTIVITY
✓ Included

DC 12V/3A STABILIZED POWER SUPPLY
✓ Included

HIGH-FIDELITY 75-OHM BNC SIGNAL TRANSMISSION
✓ Included

DUAL-BAY STORAGE ARCHITECTURE FOR HIGH-VOLUME WORKLOADS
✓ Included

AUTO SYSTEM RECOVERY AFTER POWER INTERRUPTION
✓ Included

QUESTIONS

Frequently Asked Questions

07

Q. Can the system sustain simultaneous 5MP recording throughput across all 32 channels without performance degradation?

A. Yes. The unit's processing architecture is purpose-built to handle 32 independent channels at full 5MP resolution concurrently, for both live decoding and recording. Combined with H.265+/H.265/H.264 compression, the system maintains consistent frame integrity across the full channel array without requiring resolution downgrade under full operational load.

Q. How does the metal chassis manage thermal load with 32 channels running continuously, 24/7?

A. The unit is housed in an industrial-grade, heat-dissipating metal chassis specifically engineered for sustained continuous operation at high channel density. The metal body structure supports passive heat dissipation away from internal processing components, reducing thermal stress risk even under the elevated processing demand of a 32-channel workload.

Q. How does the dual-HDD architecture support storage redundancy and capacity planning up to 20TB?

A. The unit's two independent SATA bays each support drive capacity up to 10TB, for a combined total of up to 20TB. This dual-bay architecture distributes storage load across two drives rather than relying on a single point of storage, supporting more resilient data management for the higher recording volume generated by continuous 32-channel operation.

Q. What happens to recording continuity across all 32 channels in the event of sudden power failure?

A. The system is equipped with an auto system recovery function that automatically restores full recording operation across all 32 channels once power is restored — without requiring manual restart or reconfiguration by on-site personnel. This closes potential system-wide surveillance gaps that would otherwise result from unplanned power interruption.

Ready to deploy DVR 32 Channels HD 4-5 MP?

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

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