IP CAMERA

6MP IP Dome Camera

The 6MP IP Dome Camera by NIRIKHON (Model NKN746FADB97RA / N716FADB97SA) delivers ultra-sharp 3072×2048 resolution with a Sony IMX335 sensor for forensic-grade clarity. Its compact, vandal-resistant dome structure withstands demanding institutional environments while Smart Color Night ensures full-color visibility after dark. Powered by Smart VCA AI features, it enables precise, AI-driven threat detection — built for reliable 24/7 indoor and outdoor deployment.



6MP IP Dome Camera | Best Selling | Official Brochure

SOLUTION SNAPSHOT

6MP Ultra-High Resolution (3072×2048 @ 25fps)	**Sony IMX335 High-Sensitivity Sensor**	**Smart VCA AI Detection Features**
Smart Color Night Vision	**Built-in Microphone with High-Capacity Storage**	**Compact Dome-Form Tactical Design**

OVERVIEW

Built for Real Operations 01

The 6MP IP Dome Camera by NIRIKHON (Model NKN746FADB97RA / N716FADB97SA) delivers ultra-sharp 3072×2048 resolution with a Sony IMX335 sensor for forensic-grade clarity. Its compact, vandal-resistant dome structure withstands demanding institutional environments while Smart Color Night ensures full-color visibility after dark. Powered by Smart VCA AI features, it enables precise, AI-driven threat detection — built for reliable 24/7 indoor and outdoor deployment.

CAPABILITIES

Key Features & Product Modules 02

High-Precision Optical Lens Assembly

Engineered for accurate, consistent framing, this lens assembly is optimized to complement the sensor's full 4K resolving power. It ensures sharp, distortion-free imagery across the camera's full field of view.

6MP Ultra-HD CMOS Image Sensor Board

Built on the Sony IMX415 sensor, this board delivers true 4K clarity at 3840×2160 resolution. Every frame captures sharp, forensic-grade detail suited for institutional-grade review.

Smart VCA & AI Video Processing Core

Powered by Smart VCA AI features, this processing core drives intelligent, automated video analytics for faster, more reliable monitoring. It reduces manual oversight while enhancing detection accuracy across every feed.

Dual-Spectrum Warmlight & IR LED Array

Equipped with dual Warmlight and IR LEDs delivering up to 30 meters of night-range coverage, paired with Smart Color Night technology for full-color visibility after dark.

Acoustic Audio & MicroSD Expansion Storage Module

Combines a built-in microphone with onboard MicroSD storage of up to 512GB, ensuring synchronized audio-video capture and extended, uninterrupted local recording.

High-Speed PoE & Network Interface Card

Enables high-speed data transmission alongside simplified single-cable power delivery, streamlining installation and connectivity. This reduces on-site cabling complexity for large-scale deployments.

Industrial Power Regulation & Surge Protection Unit

Regulates and stabilizes power delivery to safeguard consistent performance under fluctuating field conditions. This robust design supports dependable operation in demanding, unattended installations.

Vandal-Resistant Weatherproof Dome Enclosure

Engineered for resistance against dust, moisture, and physical stress, supporting long-term durability across indoor and covered outdoor deployment.

APPLICATIONS

Where This Product Fits 03

Airport Check In & Gate Security Control

Corporate Office Access & Attendance Control

Public Reception Identity Verification

High Security Investigation Room Monitoring

Restricted Laboratory Access Protection

OPERATIONAL VALUE

Software, Benefits & Outcomes

04

Real-Time Live Monitoring & Ultra HD Streaming

Delivers real-time 6MP visual command over every connected dome camera from a single, unified interface.

- Multi-camera live grid view for simultaneous 6MP monitoring
- Instant digital zoom and pan for closer visual inspection
- Adjustable stream quality between 6MP and 5MP modes for bandwidth control
- Customizable layout views by zone, site, or priority level
- One-click switch between live and recorded feed states

Smart VCA & AI Video Analytics

Powers intelligent, automated scene analysis to reduce manual monitoring workload.

- AI-assisted object and motion classification via Smart VCA
- Automated event tagging for faster review
- Configurable analytics zones per camera
- Reduced false-trigger filtering for accurate detection
- Behavioral pattern flagging for unusual activity

Motion & Intrusion Detection Alerts

Provides configurable perimeter awareness to flag unauthorized activity instantly.

- Custom motion and intrusion zone configuration
- Adjustable sensitivity thresholds to minimize false alarms
- Instant push notifications for detected intrusions
- Scheduled detection windows for time-based monitoring
- Snapshot capture attached to every triggered alert

Two-Way Audio & Live Audio Monitoring

Enables synchronized audio oversight alongside video for complete situational context.

- Built-in microphone for live audio capture
- Synchronized audio-video playback for full contextual review
- Audio-triggered event flagging alongside motion alerts
- Audio log retention linked to recorded footage
- Remote audio monitoring from the command interface

Smart Night Vision & Illumination Control

Maintains full-color visibility after dark through intelligent illumination management.

- Smart Color Night mode toggle for low-light clarity
- Dual Warmlight and IR LED control up to 30M range
- Automatic day/night mode switching
- Illumination intensity adjustment per deployment zone
- Consistent night-time detection accuracy across monitored areas

Local & Cloud Storage Management (MicroSD & NVR

Ensures footage is captured, stored, and retrievable through flexible storage architecture.

- Onboard MicroSD storage support up to 512GB
- NVR-compatible recording integration
- Storage capacity monitoring and alerts
- Configurable recording modes (continuous or event-triggered)
- Centralized storage overview across connected devices

Remote Video Playback & Timeline Search

Delivers fast, precise footage retrieval for institutional review from anywhere.

- Timestamp-based timeline search for rapid incident retrieval
- Fast-forward, rewind, and frame-by-frame playback controls
- Remote playback access from authorized devices
- Multi-camera synchronized playback view
- Exportable playback clips for case documentation

Multi-Channel & Multi-Location Camera Management

Centralizes oversight across distributed dome camera deployments from one platform.

- Unified dashboard for multi-site camera management
- Site-based grouping and zone segmentation
- Centralized configuration push across multiple devices
- Cross-location live feed switching
- Consolidated reporting across all connected sites

User Access Control & Role Management

Maintains strict operational accountability through structured permission tiers.

- Role-based access levels for different personnel
- Individual user activity logging and audit trails
- Configurable camera and zone-level access restrictions
- Secure login credential management
- Active session monitoring for oversight

Automated System Health & Connectivity Monitoring

Keeps every camera in the network operating at full readiness, proactively.

- Real-time device uptime and connectivity monitoring
- Instant alerts for offline or malfunctioning units
- Storage health diagnostics across connected devices
- Scheduled firmware and system health checks
- Network status overview across all deployment sites

ANPR Technology Instant vehicle identification and record keeping.	**Blacklist Detection** Real-time alerts for suspicious or stolen vehicles.
AI Vehicle Classification Identifies cars, buses, trucks, and motorcycles automatically.	**High-Speed Capture** Accurate plate recognition even at high vehicle speeds.
Night Vision Reliable monitoring in darkness and poor weather conditions.	

SPECIFICATION

Technical Details

05

6MP ULTRA-HIGH RESOLUTION (3072×2048 @ 25FPS)
✓ Included

SONY IMX335 HIGH-SENSITIVITY SENSOR
✓ Included

SMART VCA AI DETECTION FEATURES
✓ Included

SMART COLOR NIGHT VISION
✓ Included

BUILT-IN MICROPHONE WITH HIGH-CAPACITY STORAGE
✓ Included

COMPACT DOME-FORM TACTICAL DESIGN
✓ Included

1/2.8" CMOS SENSOR ARCHITECTURE
✓ Included

DUAL-RESOLUTION STREAMING FLEXIBILITY (5MP MODE)
✓ Included

SSC377D ADVANCED PROCESSING CHIPSET
✓ Included

ADAPTIVE FRAME RATE CONTROL
✓ Included

30M DUAL WARMLIGHT & IR ILLUMINATION
✓ Included

PRECISION OPTICAL ENGINEERING (4MM F1.6 LENS)
✓ Included

DUAL-LED ILLUMINATION ARRAY DESIGN
✓ Included

ONBOARD LOCAL STORAGE INDEPENDENCE
✓ Included

PROOF

Case Studies & Client Feedback 06

"Accuracy exceeded 99.7% during our 90-day highway pilot — even in heavy rain and at night. Integration with our tolling back-end was seamless."

Tariq Al-Rashid
Head of ITS, National Highway Authority

QUESTIONS

Frequently Asked Questions 07

Q. Is the dome camera architecture suitable for both indoor and covered outdoor deployment?

A. The compact dome-form design is engineered for flexible ceiling and wall-mounted installation across indoor and covered outdoor environments. Its discreet housing supports consistent operational reliability across varied institutional deployment settings.

Q. How is bandwidth managed during continuous 6MP video streaming across the network?

A. The platform supports flexible resolution and frame-rate configuration, including a 5MP streaming mode, allowing operators to balance image quality against available network capacity. This ensures stable performance even across bandwidth-constrained institutional networks.

Q. How is captured audio evidence protected and managed within the system?

A. Audio captured via the built-in microphone is synchronized directly with video recordings and stored within the same structured, timestamped case file. This ensures audio evidence remains linked, traceable, and available for institutional review alongside corresponding footage.

Q. What redundancy exists for onboard storage in the event of network disruption?

A. nboard MicroSD storage of up to 512GB enables continuous local recording independent of network connectivity, ensuring no footage or audio is lost during outages. Once connectivity is restored, all locally stored data remains fully accessible for review and export.

Q. Can the platform support centralized monitoring across multiple institutional locations?

A. Yes. The management platform supports multi-channel, multi-location camera administration from a single unified dashboard, enabling centralized oversight, configuration, and reporting across distributed deployment sites.

Ready to deploy 6MP IP Dome Camera?

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

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