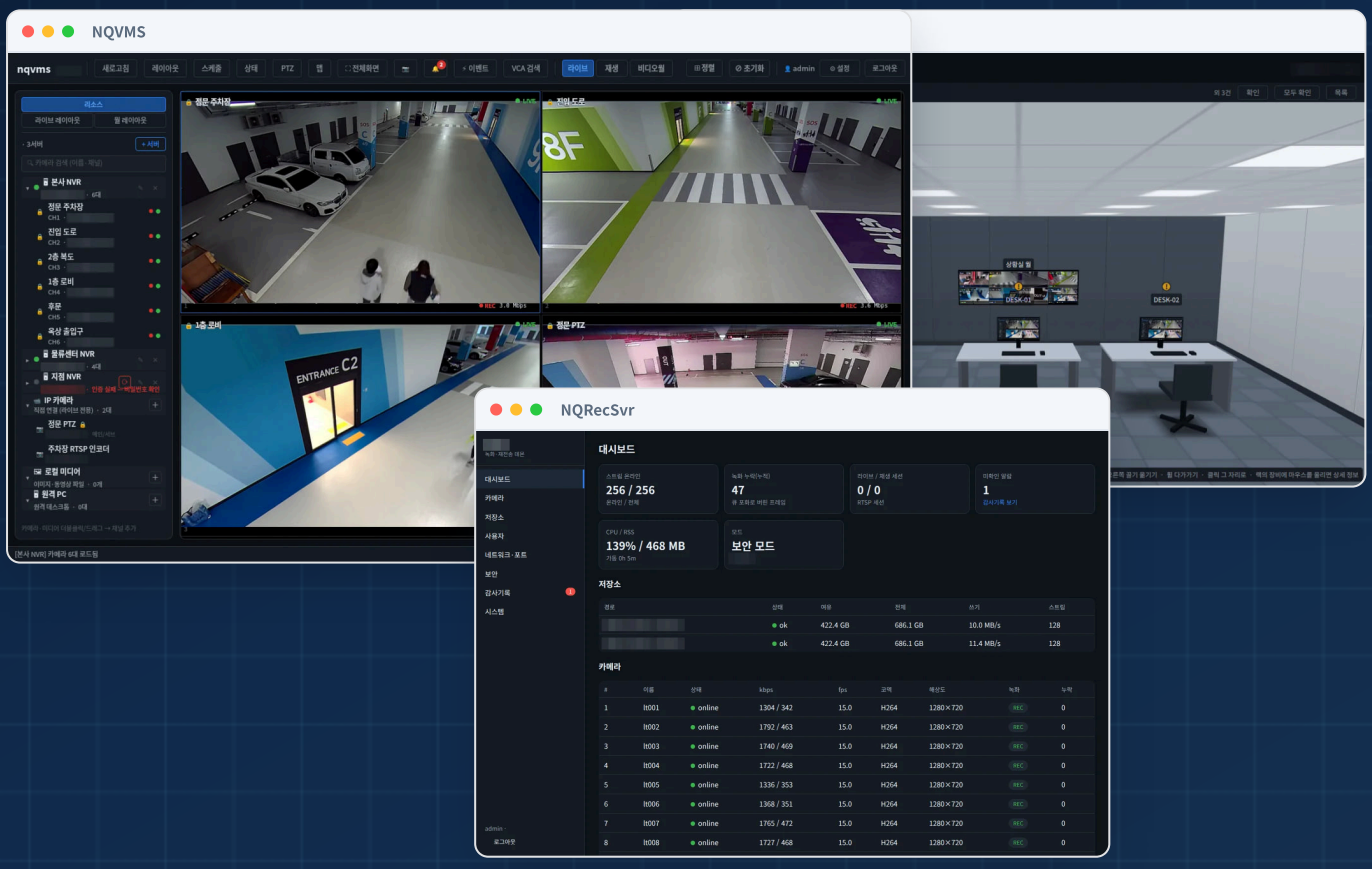
TOVITECH
VIDEO SECURITY

Product Catalog 2026

NQ SERIES · VIDEO SECURITY SOFTWARE

From recording to AI and monitoring. One connected video security system.

NVR, a 256-channel recording server, AI analytics, monitoring and mobile, all built in-house by Tovitech. No cloud needed, so your video and data never leave your control.



256 ch	128 ch	AES-256	0
Channels per recording server	Channels on one screen	Recorded-video encryption	Cloud services required

NQNVR · NQRecSvr · NQVCA · NQVLM · NQVMS · NQControlRoom · NQMobile · NQAgent · NQCallCenter · NQNMS · NQAutoBackup · NQBackupViewer · NQPlateExtractor · NQVehicleTracker · NQParkingEnforcer

OVERVIEW

The NQ series at a glance

Tovitech develops and supplies the NQ series of video security software: NVR, recording server, AI video analytics, VMS, 3D control room, mobile and operations tools.

Lineup

Recording & AI

NQNVR
Recording, AI and security in one box

NQRecSvr
256 channels, one server

NQVCA
AI that detects, alerts and speaks up

NQVLM
AI looks first, flags what's real

Monitoring & mobile

NQVMS
Every server on one screen

NQControlRoom
Your control room, operated in 3D

NQMobile
Your NVR in your pocket, with AI alerts

NQAgent
One install: wall, remote PC, health

NQCallCenter
When the call comes, you see the site

Operations

NQNMS
Know about NVR faults first

NQAutoBackup
Backs up everything, even across outages

NQBackupViewer
Play any backup on any PC

Applications

NQPlateExtractor
Every plate in your recordings, in one pass

NQVehicleTracker
Find the vehicle on the floor plan

NQParkingEnforcer
Overstays caught, with evidence

What you can do

AI object detection
People, vehicles, faces, fire, plates, helmets

Instant alerts
Phone alerts, voice announcements, pop-ups

Unified monitoring
Many servers, video walls, e-maps

360° fisheye dewarping
Record the original, dewarp when viewing

Plate recognition
Live recognition and batch extraction

Emergency call desk
Site camera pops up with every call

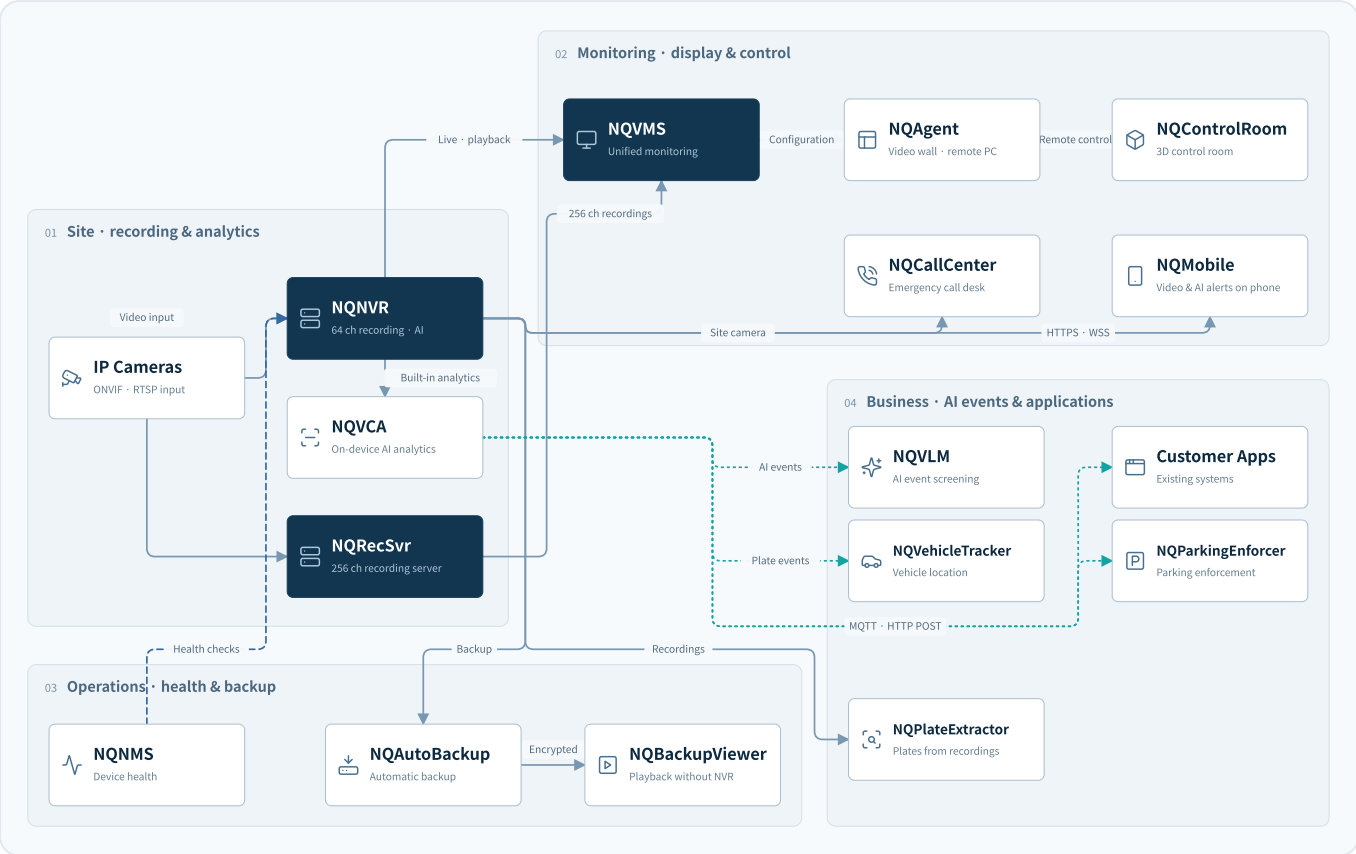
Encrypted video
Encrypted at rest and in transit, with audit logs

Built for uptime
N+1 failover, self-healing, disk failover

ARCHITECTURE

One connected NQ series

From on-site recording and analytics to monitoring, mobile, operations and business systems, every product has a clear role.



Video / files Control / health AI events Device counts and configurations vary by site.

01 Site · recording & analytics

IP Cameras ONVIF · RTSP input
NQNVR 64 ch recording · AI
NQVCA On-device AI analytics
NQRecSvr 256 ch recording server

02 Monitoring · display & control

NQVMS Unified monitoring
NQAgent Video wall · remote PC
NQControlRoom 3D control room
NQCallCenter Emergency call desk
NQMobile Video & AI alerts on phone

03 Operations · health & backup

NQNMS Device health
NQAutoBackup Automatic backup
NQBackupViewer Playback without NVR

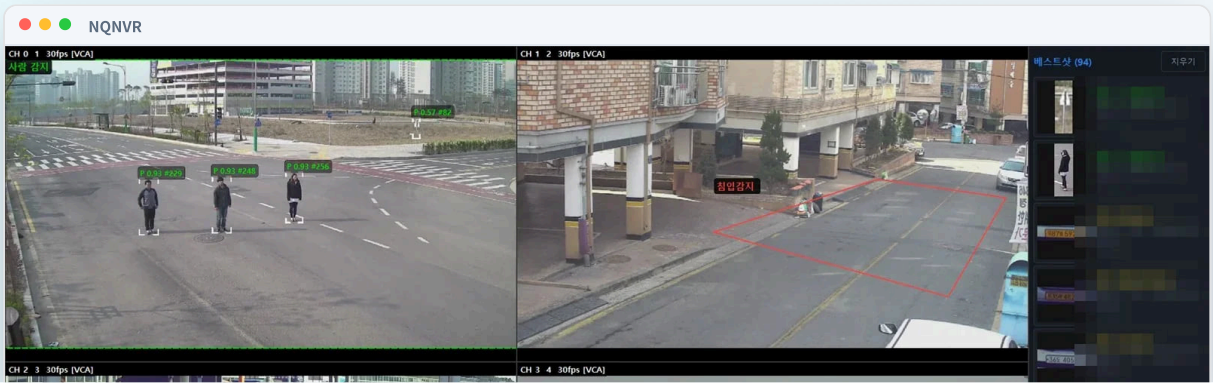
04 Business · AI events & applications

NQVLM AI event screening
Customer Apps Existing systems
NQVehicleTracker Vehicle location
NQParkingEnforcer Parking enforcement
NQPlateExtractor Plates from recordings

01 · RECORD

From a 64-channel NVR to a 256-channel recording server

NQNVR records and analyzes in one device. NQRecSvr records hundreds of channels on a single server.



NQNVR

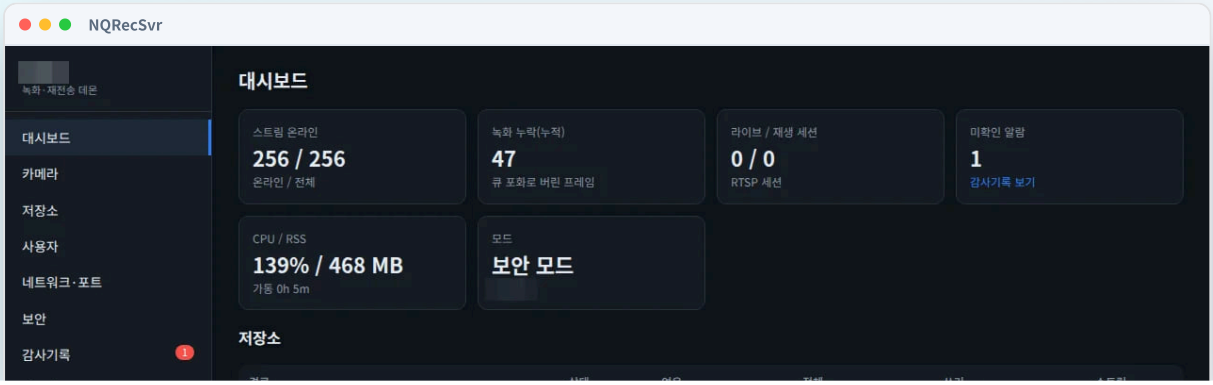
AI-powered, security-hardened NVR

Recording, AI and security in one box

An NVR that records up to 64 channels, finds incidents with on-device AI and protects every step with AES-256-GCM.

64 ch	7	256 bit
Max camera channels	AI event rule types	AES-GCM encryption

- **AI spots it first** — People, vehicles, faces, fire and plates are detected on the device in real time, and moments like intrusion, missing hard hats or wrong-way driving are saved as best shots. No cloud needed.
- **64 channels on one screen** — Watch up to 64 channels live and play several back at once.
- **One fisheye, every direction** — Ceiling fisheye cameras are recorded as-is and dewarped when viewed: panorama, 2×180°, quad or PTZ. In PTZ, drag to turn and scroll to zoom, or click the fisheye minimap in the corner to jump to a spot.
- **Search by AI event** — Filter AI events by type, such as intrusion, missing hard hat or wrong-way, and jump straight to the recording.



NQRecSvr

High-channel recording server

256 channels, one server

A recording-only server that records up to 256 channels and streams them to NQVMS, managed entirely from a web browser.

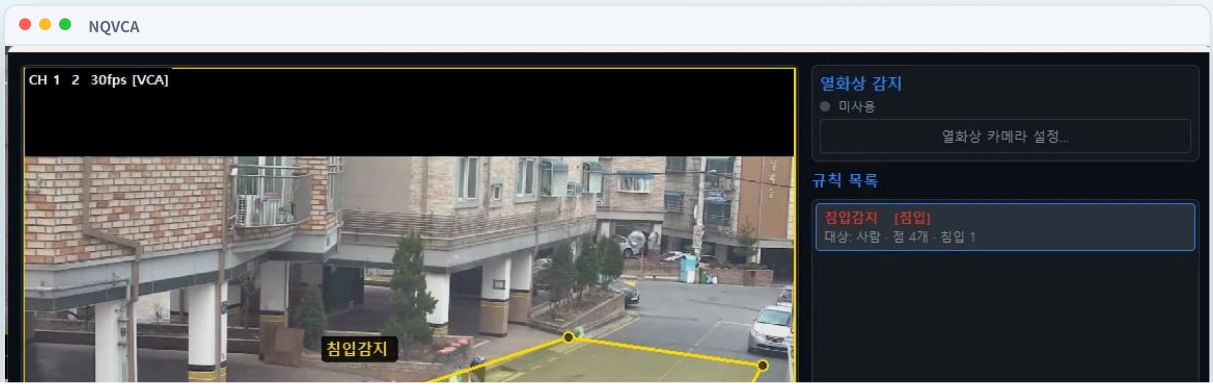
256 ch	16 split	Hot
Max channels	Web live view	Hot add/remove storage

- **Run it from a browser** — No monitor or keyboard needed: everything is set up in the web console, and the dashboard shows streams, drops, storage, cameras and alarms live.
- **Live view in the browser** — Watch live video in up to 16-split layouts right in the browser, using shared layouts that the administrator prepares for everyone.
- **Recording survives disk failure** — Channels are spread across disks in proportion to capacity; a failing disk's channels move instantly to another disk and return once it recovers.
- **NVR-grade security** — Recording encryption, IP allow-list, account lockout and integrity checks come standard, and every admin action is written to the audit log.

02 · ANALYZE

People, vehicles, plates, fire, helmets. Found on the device itself.

NQVCA detects in real time inside the NVR, and NQVLM double-checks each event with AI to filter false alarms.



NQVCA

On-device AI video analytics for NQNVR

AI that detects, alerts and speaks up

AI analytics inside the NVR that finds people, vehicles, fire and plates and instantly flags intrusion, missing hard hats and wrong-way driving.

5	7	360°
Detection targets	Event rule types	Fisheye dewarped for analysis

- **Down to hard hats and wrong-way** — Draw a zone or line and monitoring for intrusion, falls, wrong-way driving or missing hard hats starts right away. Each rule can also speak an announcement through the NVR speaker.
- **People, vehicles and fire, live** — Detects and tracks people, vehicles, faces, fire and plates on the device, and saves the moment a rule fires as a best shot.
- **Find it, play it** — Find best shots by type, channel or plate number and play the recording from that moment.
- **Straight to the control room** — Events go out over HTTP and MQTT to the NQVMS e-map, NQMobile alerts and external control systems.



NQVLM

AI event screening

AI looks first, flags what's real

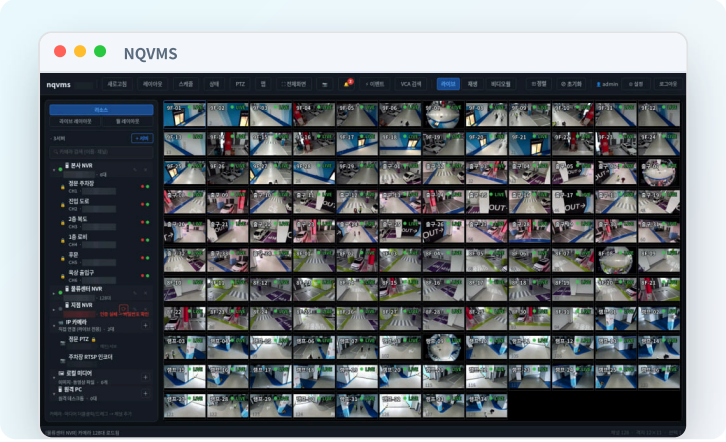
A vision-language AI takes a second look at every NVR AI event, separates real incidents from false alarms and suggests a description, risk score and response.

3	0-100	7
Verdicts (confirmed, false, uncertain)	Risk score	Event types

- **A second look by AI** — Each NVR event is re-examined from the best shot and the full frame of the same moment, then judged confirmed, false alarm or uncertain. Clothing, belongings and behaviour are described in a sentence, with tags.
- **It reads the context** — Scenes that trip an intrusion rule but pose no threat, such as a worker carrying cleaning tools, are marked uncertain with a lower risk. In the pilot a rule risk of 70 came down to 46.
- **Screening dashboard** — Review events by risk, mark them confirmed or false with notes, and track verdict mix, false-alarm rate and analysis time by day, channel and type.

Hundreds of cameras on one screen. The whole control room in 3D.

Monitor every server from NQVMS, drive video walls with NQAgent and run the whole room with NQControlRoom.



NQVMS

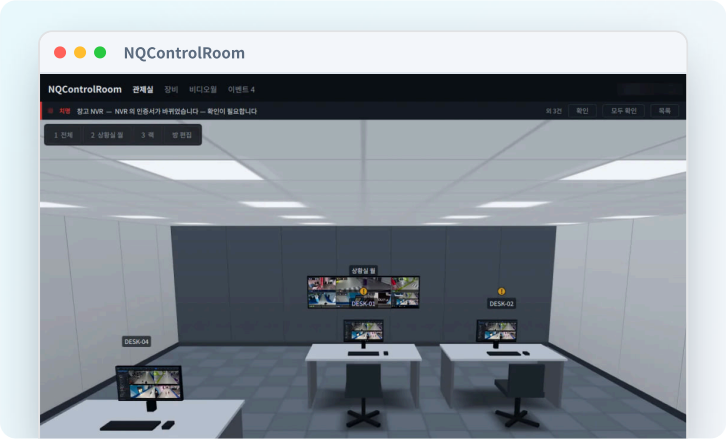
Multi-server desktop VMS

Every server on one screen

A Windows control-room client that brings multiple NQNVRs, NQRecSvrs and IP cameras together, up to 128 channels on one screen.

- **128 channels on one screen**
- **The map blinks on events**
- **Remote AI best-shot search**

128 ch	N	AI
Max channels per screen	Simultaneous servers	Events and best-shot search



NQControlRoom

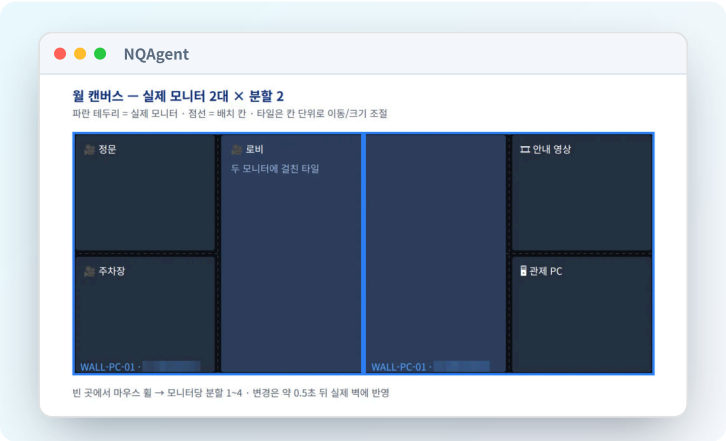
3D control-room console

Your control room, operated in 3D

A control console that recreates your real control room in 3D, so you operate video walls, operator PCs and rack equipment right where they are.

- **Your room, rebuilt in 3D**
- **Drag and drop to the wall**
- **Operate PCs from the desk**

3D	0	Live
Control-room replica	Extra servers	Device status and beacons



NQAgent

Unified host agent

One install: wall, remote PC, health

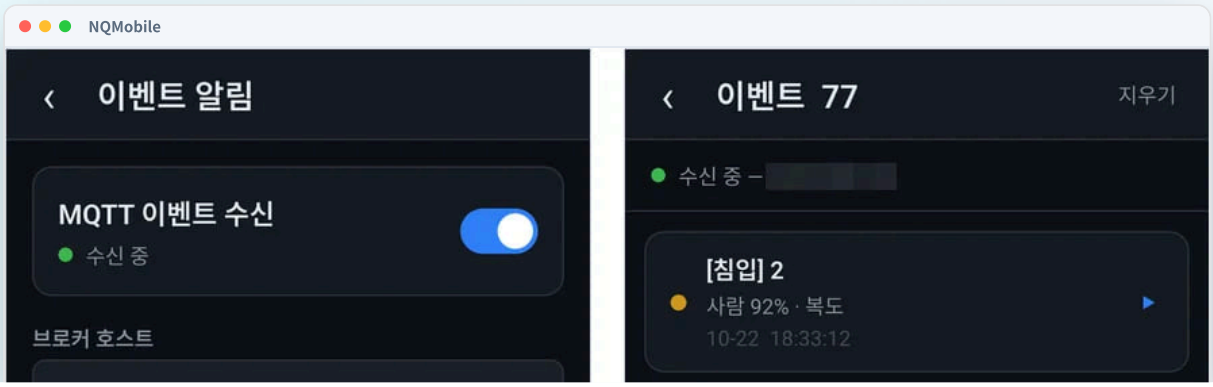
Install it once on a PC and one resident service handles video-wall output, remote PC control and health reporting to NQNMS.

- **Monitors become a video wall**
- **See and control the PC**
- **Files, back and forth**

3 roles	24/7	Sync
Wall, remote PC, health	Runs as an OS service	Frame-locked screens

AI events on your phone. Emergency calls straight to the screen.

NQMobile alerts you with a snapshot of each event, and NQCallCenter pops up the site camera the moment an emergency bell rings.



NQMobile

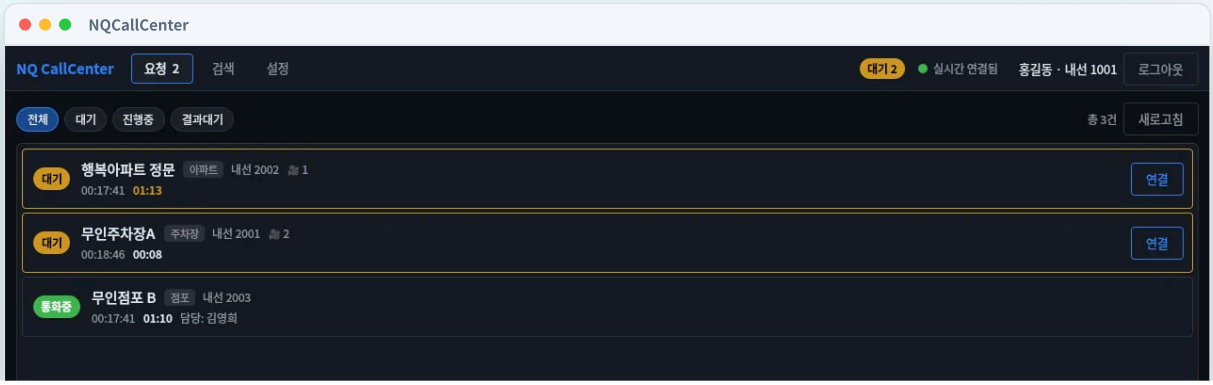
Multi-NVR mobile client

Your NVR in your pocket, with AI alerts

An Android app for live and recorded video from multiple NQNVRs, with AI event alerts.

AI Event alerts with best shots	**30s** MP4 clip saving	**3×3** Split view across NVRs

- **Never miss an AI event** — AI events such as intrusion, plate reads or temperature alarms arrive as alerts and in a list; tap one to play that moment. Even with the app in the background, the notification shows the best shot.
- **Live video anywhere** — Swipe between channels, pinch to zoom and go full-screen landscape with one tap.
- **Several NVRs on one screen** — Mix channels from different NVRs in 2×2 or 3×3 splits.
- **Find, save and share** — Seek to the second on the timeline, then save a 30-second MP4 or a snapshot to the gallery.



NQCallCenter

Emergency call and intercom console

When the call comes, you see the site

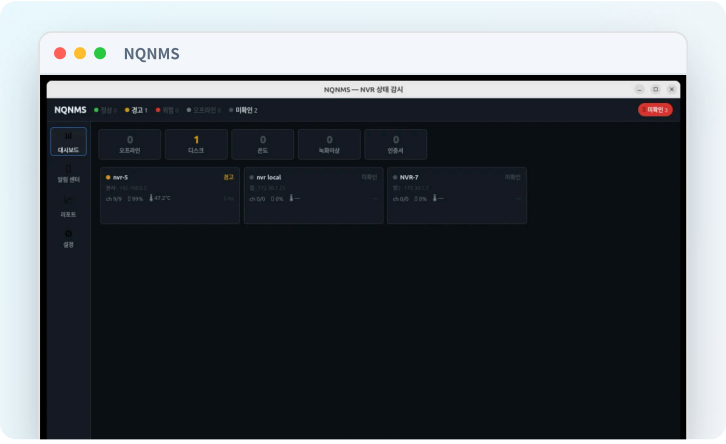
A console that puts every emergency-bell and intercom call on all operators' screens and opens the call and site cameras with one Connect.

Live Real-time request sync	**1 click** Call plus site video	**4** Simultaneous camera pop-ups

- **Every call, on every screen** — A button press at the site sounds an alert and shows the request on every operator's screen, along with who has taken it.
- **One click to connect** — Press Connect and your phone rings, straight through to the site. Call status and elapsed time stay in the side panel.
- **Site video, automatically** — Once connected, up to four camera pop-ups for that call point open on their own, ready to zoom and pan.
- **Search history with recordings** — Find past requests by period, call point, operator or outcome, and play call audio and site video on the spot.

Watched so it never stops.
Backed up so nothing is lost.

NQNMS watches device health and NQAutoBackup backs up recordings automatically. Play backups anywhere with NQBackupViewer.



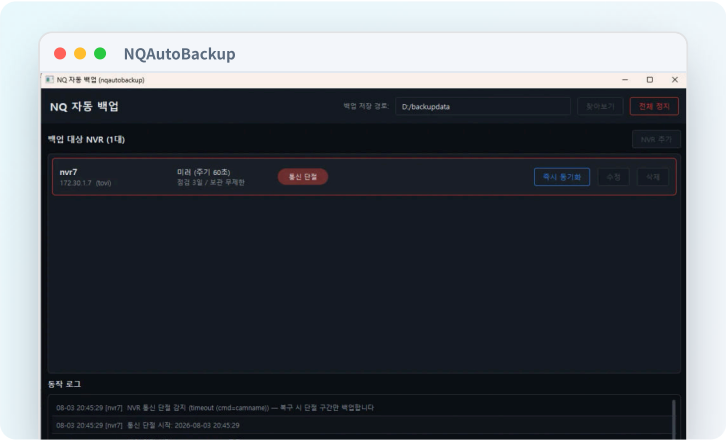
NQNMS
NVR health monitoring

Know about NVR faults first

Watches connectivity, disks, recording and temperature of many NQNVRs from one PC and alerts you the moment something goes wrong.

- **Every NVR on one dashboard**
- **Per-NVR diagnostics**
- **Only real faults**

64 NVRs Monitored at once (about 4,096 ch)	**6** Health states	**3** Alert channels (desktop, e-mail, Telegram)



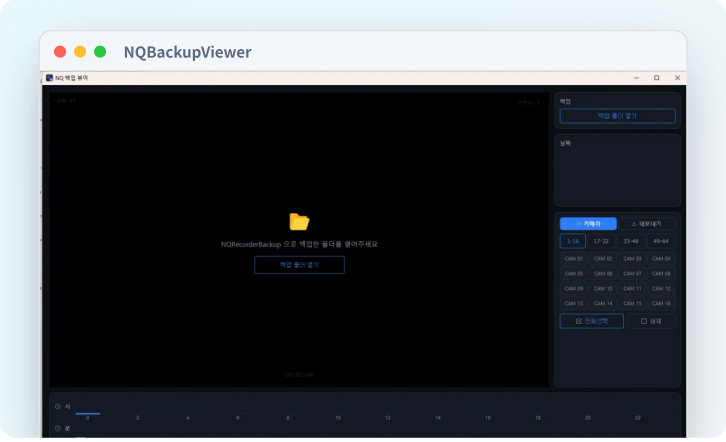
NQAutoBackup
Automatic multi-NVR backup

Backs up everything, even across outages

Automatically backs up recordings from multiple NQNVRs to a separate PC and fills in any gaps left by network outages.

- **Recovers after outages**
- **Three modes for any site**
- **Encrypted, and ready to play**

Auto Automatic gap recovery	**3** Backup modes	**256** bit AES-GCM encryption



NQBackupViewer
Backup playback viewer

Play any backup on any PC

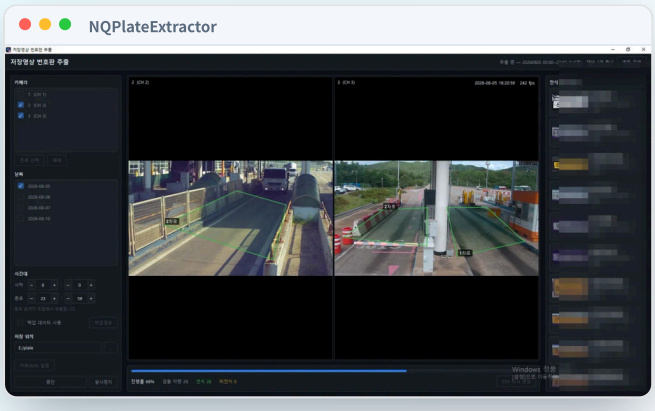
Plays encrypted backups on any Windows PC without an NVR, with just the folder and the password.

- **Just a folder and a password**
- **Find it on the timeline**
- **Export just what you need**

0 Extra installs (DB, NVR)	**2** Inputs: folder + password	**AVI** Video export

Plates, vehicles and parking, turned into daily operations

Apps that turn NQVCA recognition results into on-site workflows.



NQPlateExtractor

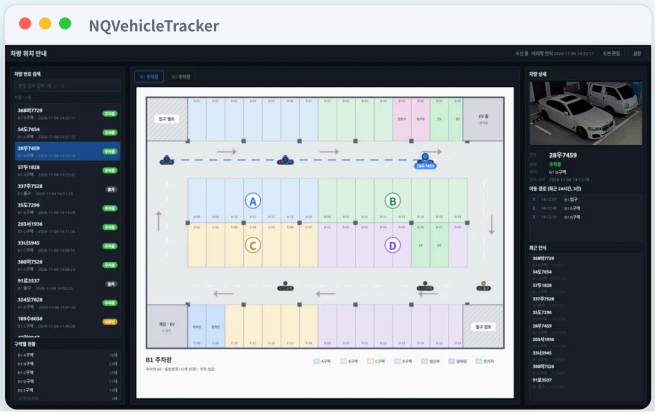
License plate extraction from recordings

Every plate in your recordings, in one pass

A batch tool that rescans stored recordings to extract vehicle plates and saves them as images, a database and CSV.

- Many channels at once
- Sorted by lane
- Results become data

N	ROI	CSV
Channels in parallel	Per-lane regions	Result export



NQVehicleTracker

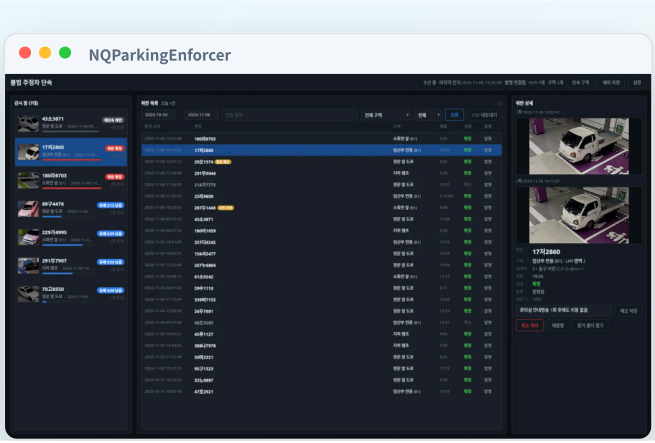
Vehicle location and tracking

Find the vehicle on the floor plan

Shows each vehicle's current position and path on a floor plan, driven by plate-recognition events.

- Live position on the plan
- The whole route
- Confirm with a photo

MQTT	N	Map
Real-time event input	NVRs on one plan	Plan-based guidance



NQParkingEnforcer

Illegal parking enforcement

Overstays caught, with evidence

An app that uses NQVCA plate recognition to find vehicles staying in an enforcement zone past the grace period and records each violation with two-photo evidence.

- Dwell time, tracked for you
- Two-photo evidence
- Warnings and violations, sent out

2 shots	Auto	CSV
First and second evidence photos	Dwell-time judgement	Violation export

SOLUTIONS

Where it works

NQVCA's person, vehicle, plate, face, fire, hard-hat and thermal events are delivered in real time over MQTT and HTTP POST, and video, best shots and recordings are available through the NQNVR HTTPS REST API. Your existing control or business applications connect to these interfaces as they are. If you already run a solution like the ones below, MQTT and the REST API are all you need to use it with NQVCA; if the solution you need is not listed, ask us — we can build it together.

Car parks & toll plazas

Plate recognition for access, settlement, locating and enforcement

- **Plate extraction from recordings** Batch-rescans recordings and saves plate, time and image per lane to CSV and DB.
- **Parking control and vehicle locator** Shows each vehicle's position and path on a floor plan from plate events.
- **Illegal parking enforcement** Confirms violations by reading a parked vehicle twice in the enforcement zone and keeps evidence photos and records.
- **Automatic gate control** Matches plates against a registered list to open the barrier and alerts staff to unknown vehicles.
- **Real-time toll plaza plate recognition** Reads plates of fast-moving vehicles per lane in real time and forwards them to the tolling system.

NQVCA · NQPlateExtractor · NQVehicleTracker · NQParkingEnforcer

Factories & construction

Missing helmets, danger-zone entry and falls, detected instantly

- **Industrial safety — hard-hat detection** Finds people without hard hats in work zones and triggers on-site voice announcements and control-room alerts.
- **Danger-zone approach and machine stop** When someone enters a danger zone, sends a stop signal to the PLC gateway and sounds an alarm.
- **Fall and accident detection** Alerts the moment a fall is detected and secures video from before and after.
- **Thermal temperature monitoring** Watches the temperature of transformers, switchboards and equipment with thermal cameras and alarms on overheating.

NQVCA · NQVLM · NQMobile

Government & military

Sites that need encryption, audit trails and closed networks

- **Intrusion alarm integration** After-hours intrusion triggers strobes, sirens and control-room alerts and pops up the channel.
- **Face-based access and watch-list alerts** Logs registered people with face recognition and alerts operators on watch-list matches.
- **Integration with existing control and business apps** Connects events and video to the VMS, PSIM, ERP or access-control systems you already run.

NQNVR · NQRecSvr · NQVMS

Roads & tunnels

Wrong-way driving, stopped vehicles and pedestrians, in real time

- **Wrong-way and road incident detection** Detects wrong-way vehicles and pedestrians on the road and notifies signage and operators at once.

NQVCA · NQVMS · NQControlRoom

Schools & banks

Loitering and intrusion detection with emergency-call integration

- **Loitering detection** Alerts when a person or vehicle lingers in an area too long.
- **People counting and crowding alerts** Counts entries, exits and occupancy on doorway lines and warns when it gets crowded.

NQVCA · NQCallCenter · NQMobile

Logistics & warehouses

Vehicle flow analysis and early fire alarms

- **Logistics yard vehicle flow** Combines gate plate reads and zone detection to analyze dwell time and throughput per vehicle.
- **Early fire alarm** Turns fire and thermal alarms into instant sirens, PA announcements and control-room pop-ups.

NQVCA · NQVehicleTracker · NQNMS

Integrates with existing systems over MQTT, HTTP POST and the REST API.

SPECIFICATIONS

Key specifications

Product	Platform	Highlights
Recording & AI		
NQNVR AI-powered, security-hardened NVR	Ubuntu 24.04 LTS · Windows 10 / 11 · RK3588 (ARM)	Max camera channels 64ch · AI event rule types 7 · AES-GCM encryption 256bit
NQRecSvr High-channel recording server	Ubuntu 24.04 LTS	Max channels 256ch · Web live view 16split · Hot add/remove storage Hot
NQVCA On-device AI video analytics for NQNVR	Ubuntu 24.04 LTS · Windows 10 / 11 · RK3588 (ARM)	Detection targets 5 · Event rule types 7 · Fisheye dewarped for analysis 360°
NQVLM AI event screening	Ubuntu 24.04 LTS	Verdicts (confirmed, false, uncertain) 3 · Risk score 0-100 · Event types 7
Monitoring & mobile		
NQVMS Multi-server desktop VMS	Windows 10 / 11	Max channels per screen 128ch · Simultaneous servers N · Events and best-shot search AI
NQControlRoom 3D control-room console	Windows 10 / 11 · Ubuntu 24.04 LTS	Control-room replica 3D · Extra servers 0 · Device status and beacons Live
NQMobile Multi-NVR mobile client	Android	Event alerts with best shots AI · MP4 clip saving 30s · Split view across NVRs 3×3
NQAgent Unified host agent	Windows 10 / 11 · Ubuntu 24.04 LTS	Wall, remote PC, health 3roles · Runs as an OS service 24/7 · Frame-locked screens Sync
NQCallCenter Emergency call and intercom console	Windows 10 / 11 · Ubuntu 24.04 LTS	Real-time request sync Live · Call plus site video 1click · Simultaneous camera pop-ups 4
Operations		
NQNMS NVR health monitoring	Windows 10 / 11 · Ubuntu 24.04 LTS	Monitored at once (about 4,096 ch) 64NVRs · Health states 6 · Alert channels (desktop, e-mail, Telegram) 3
NQAutoBackup Automatic multi-NVR backup	Windows 10 / 11	Automatic gap recovery Auto · Backup modes 3 · AES-GCM encryption 256bit
NQBackupViewer Backup playback viewer	Windows 10 / 11	Extra installs (DB, NVR) 0 · Inputs: folder + password 2 · Video export AVI
Applications		
NQPlateExtractor License plate extraction from recordings	Windows 10 / 11	Channels in parallel N · Per-lane regions ROI · Result export CSV
NQVehicleTracker Vehicle location and tracking	Windows 10 / 11 · Ubuntu 24.04 LTS	Real-time event input MQTT · NVRs on one plan N · Plan-based guidance Map
NQParkingEnforcer Illegal parking enforcement	Windows 10 / 11 · Ubuntu 24.04 LTS	First and second evidence photos 2shots · Dwell-time judgement Auto · Violation export CSV

Specifications and screens in this catalog may change without notice as products improve. Actual performance, including channel counts, depends on license, hardware and camera settings.

TOVITECH
VIDEO SECURITY

From recording to AI analytics and monitoring.

Contact

Sales	**sales@tovitech.com**
Technical support	**support@tovitech.com**
Web	**www.tovitech.com**

© 2026 TOVITECH Co., Ltd. · Specifications and screens in this catalog may change without notice as products improve. Actual performance, including channel counts, depends on license, hardware and camera settings.