TechPro Vision 16-Camera AI Recorder

Purpose-built 16-camera AI video recorder for ONVIF and RTSP IP cameras. Detects people, vehicles, license plates, and faces locally on dedicated graphics hardware, reviews every alarm with AI before anyone is notified, and searches all cameras in plain English.



Desktop cube chassis with brushed aluminum top ventilation and walnut-slatted front hot-swap drive access (14 × 13.8 × 15.9 in).

CAMERA CAPACITY **Up to 16 IP Cameras**	MAX PROTECTED STORAGE **64TB RAID 6 (6 Bays)**
PROCESSOR & MEMORY **Ryzen 7 9700X, 8-core · 32GB DDR5**	DEDICATED AI GRAPHICS **RTX 5060 Ti 16GB**

CORE CAPABILITIES

AI-Reviewed Alarms (Fail-Safe Delivery)

When a rule fires, AI inspects the event before anyone is notified and logs a written reason for every decision. Confident false alarms move to Dismissed; if a review cannot run, the alarm still goes out unreviewed.

Plain-English Video Search & Iris Assistant

Describe what you are looking for, such as a white van at the front gate yesterday afternoon, to pull matching clips across every camera. Follow a person or vehicle from camera to camera and save the result as a case file.

On-Recorder Detection That Works Offline

People, vehicle, license plate (LPR), face recognition, and thermal perimeter detection (verified past 700 ft) run on the recorder's own GPU. Local recording and detection continue without an internet connection.

Keep the IP Cameras You Already Own

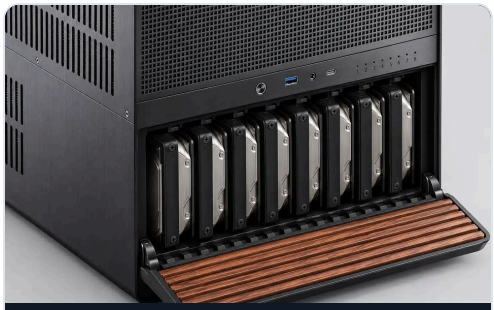
Supports ONVIF and RTSP IP cameras from Hikvision, Dahua, Axis, Hanwha, Uniview, Amcrest, and others mixed on one recorder. Replace an aging NVR or run alongside an existing system.

RAID 6 Protected Surveillance Storage

Configured with 16TB surveillance-class drives, pre-installed and burn-in tested. With four or more drives, RAID 6 protects recorded video against any two simultaneous drive failures.

Multi-Channel Alerts & Ownership Model

Deliver alerts by spoken phone call, SMS with snapshot and review link, email with AI verdict, or app push. Software is included with no activation fee; renewal of Vision Connect is optional after year one.



Tool-free front hot-swap bays behind the magnetic walnut door. Drives are installed, formatted, and RAID-initialized prior to shipment.

STANDARD VS. MAX ARCHITECTURE

Attribute	Standard Series	Max Series
Active Drive Bays	**6 bays (up to 64TB RAID 6)**	12 bays (up to 160TB RAID 6)
System OS Drive	**1TB NVMe SSD**	2 × 1TB NVMe SSD (Mirrored)
Network Interface	**5 Gigabit Ethernet**	10GbE + 2.5GbE or Dual 5GbE
Remote Management	**On-site console**	Out-of-band IPMI / Network KVM
AI Graphics Class	**RTX 5060 Ti 16GB (1× or 2×)**	RTX 5070 Ti / RTX 5080 16GB

This specification sheet covers NVR-TPV16AI (Standard Series). Every unit is built to order and burn-in tested by TechPro Security in Boca Raton, Florida.

HARDWARE & SYSTEM SPECIFICATIONS

COMPUTE & AI PROCESSING	
Model / SKU	NVR-TPV16AI (Ref: TPV-16)
Camera Capacity	Up to 16 IP cameras
Processor	AMD Ryzen 7 9700X, 8-core
System Memory	32GB DDR5
AI Graphics	NVIDIA GeForce RTX 5060 Ti 16GB
System Drive	1TB NVMe SSD
VIDEO, COMPATIBILITY & ANALYTICS	
Camera Protocols	ONVIF and RTSP IP cameras, mixed brands
Analog (Coax)	Not supported (IP cameras only)
On-Box Detection	People, vehicles, thermal perimeter (>700 ft)
LPR & Faces	Supported (licensed per camera)
AI Alarm Review	Optional, pay as used (fail-safe)
Client Access	Web portal (portal.techprovision.ai) & mobile app
NETWORK, MANAGEMENT & PHYSICAL	
Network Interface	5 Gigabit Ethernet
Remote Management	On-site
Power Supply	1000W
Chassis Dimensions	Desktop cube, 14 × 13.8 × 15.9 in (355 × 350 × 403 mm)
Base Weight / Carton	37 lb (+2 lb/drive) · 22 × 20 × 21 in
Build & Lead Time	Built to order. Ships in 5-7 business days.

FACTORY-INSTALLED STORAGE OPTIONS

Configuration	Drives	Protection	Usable
No Storage (Barebones)	0	None (user-supplied)	**0 TB**
16TB Surveillance Drive	1 × 16TB	Single drive (no redundancy)	**16 TB**
16TB Mirrored	2 × 16TB	Mirrored (RAID 1, 1-drive fault)	**16 TB**
32TB RAID 6	4 × 16TB	RAID 6 (2-drive fault tolerance)	**32 TB**
48TB RAID 6	5 × 16TB	RAID 6 (2-drive fault tolerance)	**48 TB**
64TB RAID 6	6 × 16TB	RAID 6 (2-drive fault tolerance)	**64 TB**

Storage Architecture: 6 active hot-swap bays supporting 16TB surveillance-class drives (16TB max per bay). Single drive has no redundancy; 2 drives are mirrored; 4 or more drives run RAID 6 (any two drives can fail without losing video). All listed capacities are usable after RAID overhead.
Retention Reference: Planning guide: 16 cameras at 4MP recording 24/7 retain ~55 days on 32TB RAID 6; 32 cameras at 8MP retain ~27 days on 64TB RAID 6. Actual retention varies by frame rate, bitrate, codec, and scene activity.

VISION CONNECT & OPTIONAL AI REVIEW

- **No activation fee:** TechPro Vision software is pre-installed and included with the recorder.
- **Vision Connect:** Per-camera service covering remote access, multi-site view, health alerts, cloud clip vault, updates, and support. Year 1 is required with hardware; Year 2+ renewal is optional.
- **No lockout if unrenewed:** Local recording, live view, playback, export, and on-box detection keep running; security patches stay free. Only cloud services pause after a 30-day grace period.
- **AI Reviews & Iris:** Optional and metered from a prepaid balance (a fraction of a cent per AI look); zero charge when unused.

IN THE BOX, BURN-IN & SUPPORT

- **Included hardware:** TechPro Vision 16-Camera AI Recorder, factory-installed surveillance drives (per selected option), AC power cord, and Quick Start documentation.
- **Built & tested in Florida:** Built to order by TechPro Security in Boca Raton, FL. Drives are installed, RAID initialized, and every recorder completes a burn-in test before shipping.
- **Custom integrations:** Gate controllers, access control systems, and alarm panels can be integrated and quoted per project.
- **Sales & sizing:** 561-288-5258 · info@techprosecurity.com · techprovision.ai

TECHPRO VISION AI RECORDER LINEUP

SKU	CAMERAS	PROCESSOR	RAM	AI GRAPHICS	STORAGE BAYS (MAX RAID 6)	MANAGEMENT
NVR-TPV16AI	**16 ch**	**Ryzen 7 9700X (8-core)**	**32GB DDR5**	**RTX 5060 Ti 16GB**	**6 bays (64TB)**	**On-site**
NVR-TPV32AI	32 ch	Ryzen 7 9700X (8-core)	64GB DDR5	RTX 5060 Ti 16GB	6 bays (64TB)	On-site
NVR-TPV64AI	64 ch	Ryzen 9 9900X (12-core)	64GB DDR5	2 × RTX 5060 Ti 16GB	6 bays (64TB)	On-site
NVR-TPV16AI-MAX	16 ch	Ryzen 9 9900X (12-core)	64GB DDR5	RTX 5070 Ti 16GB	12 bays (160TB)	IPMI (out-of-band)
NVR-TPV32AI-MAX	32 ch	Ryzen 9 9950X (16-core)	96GB DDR5	RTX 5080 16GB	12 bays (160TB)	IPMI (out-of-band)
NVR-TPV64AI-MAX	64 ch	Ryzen 9 9950X (16-core)	128GB DDR5	2 × RTX 5080 16GB	12 bays (160TB)	Network KVM