

# TDNVR64-K-AIL

## 64 Channel 2U 8HDDs Network Video Recorder



- Smart H.265+/H.265/Smart H.264+/H.264/MJPEG
- Up to 4 Channel video metadata
- Up to 12 Channel perimeter protection,SMD Plus
- Up to 4 Channel video stream face recognition
- Up to 16 face pictures/sec processing
- Up to 20 face databases with 200,000 face images in total

### Functions

#### SMD Plus

With intelligent algorithm, Smart Motion Detection technology can categorize the targets that trigger motion detection and filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.

#### Video Metadata

With deep learning algorithm, Video Metadata technology can detect, track, capture vehicle, non-motor vehicle and people, and select the best images, and extract attributes.

#### ANPR by Camera

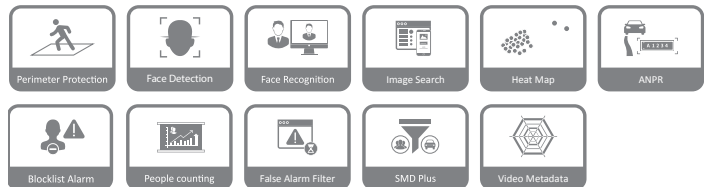
With deep learning algorithm, ANPR technology can recognize the number plate information of vehicles in the image with ANPR cameras. Support block/allow list mode, searching target vehicles from recorded video.

#### People Counting by Camera

With deep learning algorithm, People Counting technology can track and process moving human body targets to realize the accurate statistics of enter No., leave No., and In Area No. Working with management platform, it outputs yearly/monthly/weekly/daily reports to meet your requirements.

#### Stereo Analysis by Camera

With deep learning algorithm and scene 3-dimensional information, Stereo Analysis technology can recognize people's behaviors, such as fall detection, violence detection, strand detection, and space exception, and then generates alarm signals and triggers linkage.



#### Perimeter Protection

Automatically filtering out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets. Improving alarm accuracy.

#### Face Recognition

ToughDog's Face Recognition technology extracts the features of captured faces and compares them with that in face database to recognize the person identity.

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## Technical Specification

### System

Main Processor	Multi-core embedded processor
Operating System	Embedded LINUX

### Perimeter Protection

Performance	12 channel, 10 IVS rules for each channel
Object classification	Human/Vehicle secondary recognition for tripwire and intrusion
AI Search	Search by target classification (Human, Vehicle)

### Face Recognition

Performance	Max 16 face pictures/sec processing (modeling and comparing) 4 channel video stream face recognition/16 channel picture stream face recognition (with FD camera)
Stranger Mode	Detect strangers' faces (not in device's face database). Similarity threshold can be set manually.
AI Search	Up to 8 target face images search at same time, similarity threshold can be set for each target face image.
Database Management	Up to 20 face databases with 200,000 face images in total. Name, gender, birthday, nationality, address, ID information can be added to each face picture.
Database Application	Each database can be applied to video channels independently.
Trigger Events	Buzzer, Voice Prompts, Email, Snapshot, Recording, Alarm Out, PTZ Activation, etc.

### Metadata

Face	Gender, age, glasses, beard, mouth mask, expression.
Vehicle	Plate No., type, color, vehicle type, logo, plate color, ornament, calling, seatbelt, region.
Human Body	Top, top color, bottom, bottom color, hat, bag, gender, age, umbrella.
Non-motor Vehicle	Type, color, number of passengers, helmet.
AI Search	Support search target video by metadata.

### Audio and Video

IP Camera Input	64 Channel
Two-way Talk	1 Channel Input, 1 Channel Output, RCA

### Display

Interface	2 HDMI, 1 VGA
Resolution	HDMI1/VGA: 1920 × 1080, 1280 × 1024, 1280 × 720 HDMI2: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720
Decoding Capability	4-ch@8MP (30fps), 16-ch@1080P (30fps)
Multi-screen Display	1st Screen: 1/4/8/9/16/25/36 2nd Screen: 1/4/8/9/16

### Recording

Bandwidth	320 Mbps (160 Mbps when AI function enabled)
Compression	Smart H.265+/H.265/Smart H.264+/H.264/MJPEG

Resolution	24MP, 16MP, 12MP, 8MP, 6MP, 5MP, 4MP, 3MP, 1080P, 1.3MP, 720P, D1 etc.
Record Mode	Manual, Schedule (Continuous, MD (Motion Detection), Alarm, IVS)
Record Interval	1–120 min (default: 60 min), Pre-record: 1–30 sec, Post-record: 10–300 sec
Raid Support	Raid0,Raid1,Raid5,Raid10

### Video Detection and Alarm

Trigger Events	Alarm Out, Video Push, Email, Recording, PTZ, Tour, Snapshot, Voice Prompt, Buzzer and Screen Tips
Video Detection	Motion Detection, MD Zones: 396 (22 × 18), Video Loss, Tampering and Scene Change
Alarm input	16 Channel
Relay Output	6 Channel

### Playback and Backup

Sync Playback	1/4/9/16
Search Mode	Time/Date, Alarm, MD and Exact Search (accurate to second)
Backup Mode	USB Device/Network

### Third-party Support

Third-party Support	Panasonic, Sony, Samsung, Axis, Pelco, Arecont, Onvif, Canon and more
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### Network

Interface	2 RJ-45 Ports (10/100/1000 Mbps)
PoE	N/A
Network Protocol	HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, SNMP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search (Support Dahua IP camera, DVR, NVS, etc.), P2P
Max. User Access	128 users
Mobile App	iPhone, iPad, Android
Interoperability	ONVIF 2.4, SDK, CGI

### Storage

Internal HDD	8 SATA III ports, up to 10 TB for a single HDD. The maximum HDD capacity varies with environment temperature
eSATA	1 eSATA

### Auxiliary Interface

USB	4 USB Ports (2 Rear USB 3.0, 2 Front USB 2.0)
RS232	1 Port, for PC Communication and Keyboard
RS485	1 Port, for PTZ Control

### Electrical

Power Supply	Single, AC100V–240V, 50–60 Hz
Power Consumption	NVR: <16.1W (Without HDD)
Fan	Smart fan, automatically adjust running speed

### Environmental

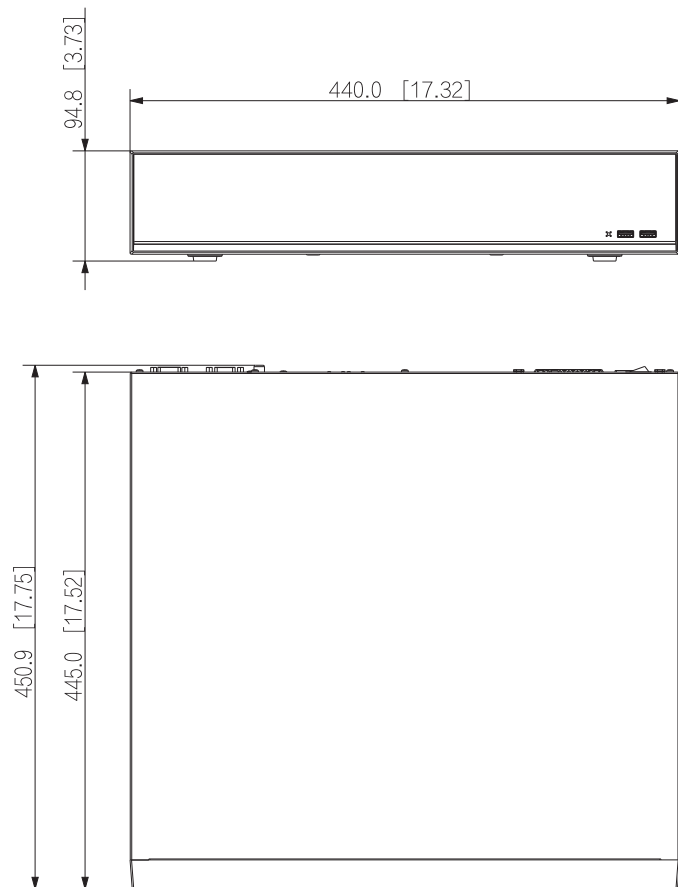
Operating Conditions	-10°C to +55°C (+14°F to +131°F), 86–106kpa
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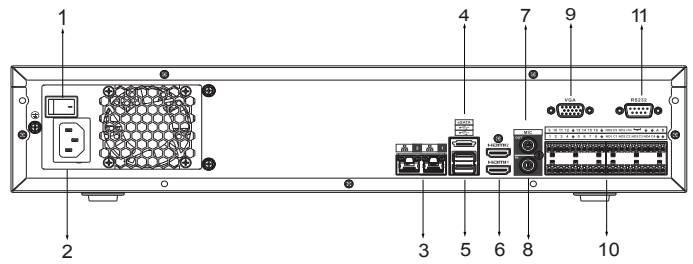
Storage Conditions	0°C to +40°C (+32°F to +104°F), 30–85% RH
<b>Construction</b>	
Dimensions	2U, 439.7 mm × 451.0 mm × 94.9 mm (17.31" × 17.75" × 3.73")
Net Weight	6.70 kg (14.8 lb) (without HDD)
Gross Weight	9.30 kg (20.5 lb) (without HDD)
<b>Certifications</b>	
CE	EN55032, EN55024, EN50130-4, EN62368-1
FCC	Part 15 Subpart B, ANSI C63.4-2014

Ordering Information		
Type	Model	Description
64 Channel NVR	TDNVR64-K-AIL	64 Channel 2U 8HDDs Network Video Recorder

## Dimensions (mm[inch])



## Panels



- |                            |                           |
|----------------------------|---------------------------|
| 1 Power Switch             | 2 Power Input             |
| 3 Network Ports            | 4 eSATA Port              |
| 5 USB Ports                | 6 HDMI Ports              |
| 7 AUDIO OUT, RCA Connector | 8 AUDIO IN, RCA Connector |
| 9 VGA Port                 | 10 Alarm In/Out           |
| 11 RS-232 Port             |                           |