

DHI-ITSE1200-TA-N16

Dahua Edge Storage Terminal



System Overview

Highly intelligent and intuitive, the Dahua Edge Storage Terminal is a high-performance device that offers both video and data management, performs real-time storage, image composition, network exchange, and more. It also supports multiple storage options, including device storage, FTP storage and platform storage.

Functions

Image Composition and Matching

Supports matching and developing composite images through 2 channels, 3 channels and multiple channels. It uses 3 strategies for matching: ID matching, plate matching, and a combination of matching the ID first, and then the plate. It also supports fuzzy match by vehicle type, vehicle lane, plate color, and vehicle color. Multiple matching schemes can be set, with support to set each scheme independently. The input channel number and image type to be matched can be set, and the output channel number and image type can also be set after the image is matched.

Average Speed Measurement

The average speed can be measured through one to many, many to one, or multiple channels. Multiple sections can also be set, and each section can be independently configured. The device can distinguish between large and small-sized vehicles, and the maximum and minimum speed limit. Speeds that fall above or below the limit can be filtered out, and a corresponding violation name and code can be set based on the different ratios of the speeds that vehicles travel at.

Fast Download

Videos can be downloaded at up to 100 MB/s, and images can be downloaded at up to 30 MB/s.

Main-sub Device Management

Attributes can be set for the main and sub devices, and up to 4 sub-devices can be connected to the main device. The main device can also log in to any of the sub-devices to search for images, play back and preview videos, display statistical data, and more.

- Supports 12-channel HD video and image input, and building composite images in ANPR composite mode.
- Performs section speed measurement for multiple sections and channels.
- Settings can be customized for the different sections.
- The speed limit can be set for small and large vehicles.
- Speeds that exceed or fall below set limits can be filtered out to reduce false alarms.
- The violation name and code can be set based on the ratios of the speed vehicles travel at.
- Images can be searched for by event and status.
- · Offers GPS and Beidou positioning.
- · Matching schemes can be set when developing images.
- Storage can be allocated for images and videos, and the system can be configured to overwrite data when storage is full.













Management and Statistics

Statistics on the status of the device, checkpoints, traffic flow, violations, and events that occurred at intersections can be generated and managed. The information can also be displayed in line or bar charts, and the device supports producing daily and weekly reports.

Transmission of Multiple FTP Servers

The device performs simultaneous transmission of 3 FTP servers. You can also upload linked videos and images of motor and non-motor vehicles, license plates, drivers, front-seat passengers, pedestrian faces, and more. 2 FYP connection modes can be selected, including long and short connection.

Dual NICs and Network Switching

With its embedded gigabit dual NICs and 16 built-in $10 \, \text{M}/100 \, \text{M}$ adaptive Ethernet ports, the device performs network switching, and receives, stores, and forwards data at 288 Mbps in video access mode, and 240 Mbps in checkpoint synthesis mode.

Automatic Network Replenishment (ANR)

To protect against data loss, when the system disconnects from the network, it caches the data on the HDD of the edge storage device. After the network is restored, the cached data is uploaded to the FTP server and platform.

Scene

It is suitable for use in various scenarios, such as at checkpoints, and for E-police, illegal parking, and road monitoring systems.

Technical Specification		
Basic		
Operating System	Linux	
Operating Interface	Web client	
Network Protocol	TCP/IP; HTTP; HTTPS; SFTP; FTP; DNS; RTP; RTSP; RTC; NTP; DHCP; IEEE 802.1X	
Image Encoding Format	JPEG	
Main Processor	High-performance embedded processor	
Memory	2 GB	
Power Switch	1 power switch	
Indicator Light	$1\times \text{on/off status; } 1\times \text{operation status; } 1\times \text{alarm indicator; } 1\times \text{disk read/write indicator}$	
Function		
Storage	Disk; FTP; SFTP	
OSD Overlay	Time, address, lane name, driving direction, violation code, violation name, vehicle speed, speeding ratio, plate, plate color and type, vehicle color and size, vehicle type, seatbelt status, call, GPS information, remote device GPS, section information and code, section distance and speed limit, entry and exit time, entry and exit lane, and more.	
Positioning	GPS; BDS	
Composite Image	Supports combining 1 to 6 source images into a composite image by using normal and related composition functions. Related channels can be set to match target images across channels, so that a composite image can be developed providing an overall impression of the target. Supports 3 strategies for matching: ID matching, plate matching, and a combination of matching the ID first, and then the plate. Supports fuzzy match by vehicle type, vehicle lane, plate color, and vehicle color. Customize the order that images are merged in and the close-up image number.	
Automatic Network Replenishment (ANR)	Platform and FTP; manual upload	
Auto Registration	Yes	
Restricted List/Trusted List	Yes. Import and export allowlist and blocklist files and perform fuzzy search of vehicles on the list by plate number.	
Anti-deletion	Yes. Videos and images cannot be directly deleted.	
Vehicle Search	Search by time, channel, plate, speed, lane, target type, plate color, vehicle color, and violation type such as not wearing seatbelt and calling while driving. Fuzzy search is supported. Export results in CSV and EXCEL format.	
Alarm Event	Storage full, external alarm, license plate blocklist, illegal access, and security fault alarm.	
Built-in Software	Edge Storage Device Software	
Port		
HDD Interface	4× 4 TB disk (included); supports max. 4 SATA 3.5" disks	
RS-232	2, one of them is for debugging data from the serial port.	
RS-485	4	
USB	2 USB 3.0 Ports	

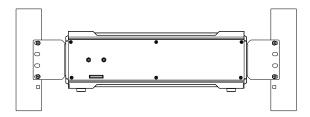
Network Port	18 (2 × RJ-45 Ethernet port 10/100/1000 M network transmission and 16 × RJ-45 Ethernet port 10/100 M network transmission)	
Optical Fiber	2, 1000 M SFP fiber port. Dual NICs G1/G2 on the same network segment.	
Antenna	1	
Audio Input	1 × 3.5 mm port	
Audio Output	1 × 3.5 mm port	
Video Input	Supports 16-ch HD video input in video access mode and 12-ch input in ANPR Composite mode.	
Alarm Input	4	
Alarm Output	4 (optocoupler)	
Power Output	1, 12 VDC	

General

Power Supply	12 VDC	
Power Consumption	<40 W	
Operating Temperature	−30 °C to +65 °C (−22 °F to +149 °F)	
Operating Humidity	10%–90% (RH), non-condensing	
Product Dimensions	355.0 mm \times 267.5 mm \times 118.5 mm (13.98" \times 10.53" \times 4.67") (L \times W \times H)	
Net Weight	7.5 kg (16.53 lb)	
Gross Weight	10.5 kg (23.15 lb)	
Installation	Rack mount; desktop mount	

Ordering Information			
Туре	Model	Description	
Edge Storage Terminal	DHI-ITSE1200- TA-G02	Edge Storage Terminal, total HDD capacity 2 T, supports 4G	
	DHI-ITSE1200- TA-G04	Edge Storage Terminal, total HDD capacity 4 T, supports 4G	
	DHI-ITSE1200- TA-G08	Edge Storage Terminal, total HDD capacity 8 T, supports 4G	
	DHI-ITSE1200- TA-G16	Edge Storage Terminal, total HDD capacity 16 T, supports 4G	
	DHI-ITSE1200- TA-N02	Edge Storage Terminal, total HDD capacity 2 T	
	DHI-ITSE1200- TA-N04	Edge Storage Terminal, total HDD capacity 4 T	
	DHI-ITSE1200- TA-N08	Edge Storage Terminal, total HDD capacity 8 T	
	DHI-ITSE1200- TA-N16	Edge Storage Terminal, total HDD capacity 16 T	

Installation



Dimensions (mm [inch])

