

DHI-IVSS7012

2U 12HDDs Intelligent Video Surveillance Server



- · Industry embedded micro-controller
- · Max 512Mbps incoming bandwidth
- · 128-channel IP video access
- · Supports RAID 0/1/5/6/10/50/60
- · 3 HDMI/2 VGA video output

System Overview

Dahua IVSS goes beyond the ordinary NVR products. It is an Intelligent Video Surveillance Server that combines video management features with traditional video storage functions in one device. Besides the basic functions as a network video recorder, IVSS is integrated with features such as face detection and face recognition for different business and industrial applications.

An all new UI design supports device operation and maintenance management, improving the value and experience of surveillance view, and serving the era of security big data.

Functions

Face Recognition (with AI camera)

Supports real-time Face Detection & Recognition (with Al camera). Shows real-time face detection and recognition results from Al camera. Records faces with video metadata. Facial features are filtered during real-time display, so as to show only faces with target features. Facial features include gender, age, expression, and more. The linkage actions for face detection and recognition events are configurable, including alarm, buzzer, snapshot, video recording, and more.

AI IVS (with AI camera)

With deep learning algorithm, AI IVS technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire, intrusion, parking detection, loitering detection and crowd gathering estimation) are largely reduced.

Video Metadata (with AI camera)

Metadata is feature attribute information extracted from a target object which can be used for data retrieval. Currently, there are four main kinds of metadata in the security industry: Human face, human body, and motor vehicle. non-motor vehicle metadata.

ANPR

Automatic Number Plate Recognition available for convenient entrance/ exit management. This feature provides number plate recognition (working with Dahua ITC camera), number plate comparison with blocklist/allowlist, vehicle database management, and vehicle record search.

N+M Hot Standby

The highly reliable redundancy N+M Hot Standby design provides a secure failover technique to ensure immediate backup. In the event of a system failure, the sub device instantly takes over the main device to ensure no data loss.

Fisheye Dewarp

Supports multiple fisheye dewarp modes to make viewing video easy whether it is live or during playback.

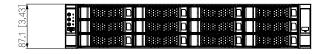
Smart Tracking

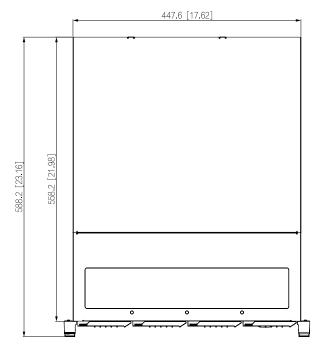
The automatic tracking PTZ feature automatically tracks a moving target throughout the camera's field of view. This function is ideal for following an object as it moves through airports, parking lots, city centers, or other scenes.

Technical Specification		Resolution	24MP/16MP/12MP/8MP/6MP/5MP/4MP/3MP/1080P/9 60P/720P/D1/CIF/QCIF
System Main Processor Industry embedded micro-controller			1-channel 24MP/2-channel 16MP/5-channel 12MP (20fps)/6-channel 12MP (15fps)/5-channel
Operating System	Embedded Linux OS	Decoding Capability 6MP(30fps)/ (25fps)/10-cl (20fps)/16-cl (60fps)/20-cl	8MP (30fps)/10-channel 8MP (15fps)/6-channel 6MP(30fps)/8-channel 5MP(30fps)/9-channel 5MP (25fps)/10-channel 4MP (30fps)/15-channel 4MP
Operation Interface	WEB (PCAPP), local GUI		(20fps)/16-channel 3MP (25fps)/10-channel 1080P (60fps)/20-channel 1080P (30fps)/30-channel 720P
Al Applications			(30fps)
Al by Camera	Face detection, face recognition, video metadata, IVS (tripwire, intrusion, abandoned object, missing object, fast moving, parking detection, crowd gathering, loitering, and fence-crossing),people counting, smoking	Video Output	2-channel VGA output, 3-channel HDMI output, VGA 1, HDMI 1 outputs the same video source VGA2/HDMI2 outputs the same video source Supports 4K output
detection, call detection		Multi-screen Display	1st Screen: Max.64-channel 2nd Screen: Max.16-channel 3rd Screen: Max.1-channel
Perimeter Function (AI by Camera)	64-channel	Third-party Support	Onvif, RTSP, Sony, Panasonic, Axis, Arecont, Pelco, Canon, Samsung
Human Face Detection		Compression	
Human Face Properties	Supports 6 properties: Gender, age range (6-level), glasses, expression (8 types), mouth mask, and beard	Video Compression	Smart H.265+/Smart H.264+/H.265/H.264
		Audio Compression	G.711a; G.711u; PCM; G.726
Face Detection Performance (AI by	64-channel	Network	
camera) (Channel Number)		Protocol	HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; P2P; iSCSI; UPnP; SNMP; IPv6
Human Face Recognition		Mobile Phone	DMSS
Human Face Recognition Performance (Al by Camera) (Channel Number)	64-channel	Interoperability	ONVIF (Profile S, T and G), CGI, SDK
,,		Browser	Chrome, PCAPP, IE9 or higher, Firefox
ANPR	50 plate databases with 300,000 plate numbers in total	Network Mode	NIC binding mode such as multiple-address mode, load balance, fault-tolerance, etc
Plate Database Capacity	Supports allowlist and blocklist	Record Playback	
Plate Detection Performance	32-channel	Multiple-channel Playback	Max. 16-channel playback
Video Metadata		Record Search	Search video detection/manual record/IO alarm/ intelligent event/all record file
Human Body Properties	Gender, age, sleeves length, top color, bottom type, bottom color, bag, rain coat, umbrella, hat, hairstyle, direction, hold a baby, mouth mask	Storage Medium	Internal HDD
		Backup Method	HDD, peripheral USB storage device
Vehicle Properties	Vehicle type, vehicle color, plate color, logo, calling, seatbelt, ornament, region	Playback Function	Play/pause/stop/fast forward/fast backward/reverse play/frame by frame play. Full-screen, backup (clip/file), snapshot, digital zoom audio on/off
Non-motor Vehicle Properties	Non-motor vehicle type, non-motor vehicle color, number of passengers, umbrella, rain coat, bag , sleeve length, top color, hat, hair style, mouth mask	Storage	
		HDD Group	12
Metadata Performance (AI by Device) (1080P) (Channel Number)		RAID	RAIDO/1/5/6/10/50/60
		Storage Pool	N/A
Metadata Performance		Alarm	
(AI by Camera) (Channel Number)	32-channel	General Alarm	Motion detect, tampering, local alarm
Video Parameters		Anomaly Alarm	IPC offline alarm, storage error, HDD full, IP conflict, MAC conflict, login lock, fan malfunction
Remote Connection	128		
Network Bandwidth	Incoming bandwidth: 512Mbps Recording bandwidth: 400Mbps Outgoing bandwidth: 512Mbps	Intelligent Alarm	Human face detection, human face recognition, video metadata (person/vehicle/non-motor vehicle), IVS, plate recognition, people counting, smoking, call

Alarm Linkage	Record, picture storage (full image), local external alarm output, IPC external alarm output, access & control, audio prompt, buzzer, log, preset, email	
Peripheral Interface		
Audio Input	1-channel, RCA port (reserved)	
Audio Output	2-channel, RCA port, speaker output, audio linkage output	
Alarm Input	16-channel	
Alarm Output	8-channel	
Internal HDD	12 slots, SATA3.0/SAS. Max.16T/HDD	
eSATA	1 port	
SAS	1 SAS2.0 port	
RS-232	1 port, for debug or transparent COM data	
RS-485	1 port, control peripheral PTZ and so on Supports various protocols	
USB	4 ports. 2 USB3.0 port at the front panel and 2 USB3.0 port a the rear panel	
HDMI	3 ports; support 4K output	
VGA	2 ports	
Network	4 RJ-45 10/100/1000Mbps self-adaptive Ethernet ports	
Power	1 port	
PoE	N/A	
General Parameters		
Power Supply	AC100-127V/200-240V 50/60Hz	
Power Consumption	80W (without HDD, idling) 224W (all HDDs connected))	
Net Weight	13.5 kg (29.76 lb)	
Gross Weight	14 kg (30.86 lb)	
Dimensions	Chassis: 447.6 mm × 604.3 mm × 87 mm (17.62 " ×23.79 " × 3.43 ") Max. size: 482.6 mm (with hanger) × 604.3 mm × 87 mm (with feet mat) (19.00 " × 23.79 " × 3.43 ")	
Packaging Dimensions	With Packaging: 654 mm × 834 mm × 201 mm (25.74 "× 32.83 " × 7.91 ") Protection box: 625 mm × 895 mm × 271 mm (24.60 " ×35.24 " × 10.67 ")	
Operating Temperature	0 °C to +45 °C (+32 °F to +113 °F)/10%RH–90%RH	
Storage Temperature	-20 °C to +70 °C (-4 °F to +158 °F)	
Operating Humidity	10%–90%	
Storage Humidity	30%–85%	

Dimensions(mm[inch])





Operating Altitude
Installation Mode

Certifications

CE-EMC: EN 61000-3-2, EN 61000-3-3, EN 55032, EN

5000 m (16404.20 ft)

CE: CE-LVD: EN 60950-1/IEC 60950-1

Desktop/rack

50130, EN 55024 FCC: Part 15 Subpart B UL 60950-1