

DHI-IVSS7016DR

3U 16HDD Intelligent Video Surveillance Server



- Industry embedded micro-controller
- Max 768Mbps incoming bandwidth
- 256-channel IP video access
- Supports RAID 0/1/5/6/10
- 3 HDMI/1 VGA video output
- Redundant power

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 AI camera). Shows real-time face detection and recognition results from AI 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.

Perimeter Protection(with AI camera)

Automatically filters out false alarms caused by animals, rustling leaves and bright lights, so as to improve alarm accuracy. Enables system to act secondary recognition for the targets.

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 black/ white list, 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 slave device instantly takes over the master 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.

Ultra series | DHI-IVSS7016DR

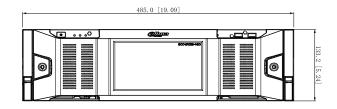
Technical Specification		
System		
Main Processor	Industry embedded micro-controller	
Operating System	Embedded Linux OS	
Operation Interface	WEB (PCAPP), local GUI	
AI Applications		
Al by Camera	Supports AI by camera function: Human face detection, human face recognition, video metadata (person/ vehicle/non-motor vehicle), perimeter protection	
Perimeter Protection		
Perimeter Function (AI by Camera)	256-channel	
Human Face Detection		
Human Face Properties	Supports 6 properties: Gender, age range (6-level), glasses, expression (8 types), mouth mask, and beard	
Face Detection Performance (Al by Camera) (Channel Number)	128-channel	
Human Face Recognition	on	
Human Face Recognition Performance (AI by Camera) (Channel Number)	128-channel	
ANPR		
Plate Database Capacity	50 plate databases with 300,000 plate numbers in total Supports black list/white list	
Plate Detection Performance	64-channel	
Video Metadata		
Human Body Properties	Top color, top type, bottom color, bottom type, cap, bag, age, gender, and umbrella	
Vehicle Properties	Supports 9 properties: Plate, plate color, vehicle body, vehicle brand, driver calling, seatbelt status, decoration object in the vehicle, and vehicle registration place	
Non-motor Vehicle Properties	Supports 4 properties: Vehicle type, vehicle color, people amount, and helmet	
Metadata Performance (Al by Camera) (Channel Number)	64-channel	
Video Parameters		
Remote Connection	256	
Network Bandwidth	RAID Incoming bandwidth: 768Mbps Recording bandwidth: 768Mbps Outgoing bandwidth: 768Mbps Single HDD Incoming bandwidth: 768Mbps Recording bandwidth: 512Mbps Outgoing bandwidth: 768Mbps	
Resolution	12MP/8MP/6MP/5MP/4MP/3MP/1080P/960P/720P/ D1/CIF/QCIF	
Decoding Capability	6-channel12MP (20fps)/7-channel12MP (15fps)/6- channel8MP (30fps)/12-channel8MP (15fps)/7- channel6MP(30fps)/9-channel5MP(30fps)/11- channel5MP (25fps)/12-channel4MP (30fps)/18- channel4MP (20fps)/19-channel3MP (25fps)/12- channel1080P (60fps)/24-channel1080P (30fps)/36- channel720P (30fps)	

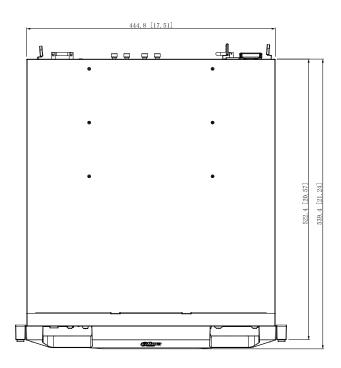
Video Output	1-channel VGA output, 3-channel HDMI output, VGA 1/ HDMI 1 outputs the same video source. Supports 4K output
Multi-screen Display	Customized display. Max. 36-channel local live view. Max. 16-channel PCAPP live view
Third-party Support	Onvif, RTSP, Sony, Panasonic, Axis, Arecont, Pelco,Canon, Samsung
Compression	
Video Compression	Smart H.265+/Smart H.264+/H.265/H.264
Audio Compression	G.711A/G.711U/PCM/G726
Network	
Protocol	HTTP, HTTPS, TCP/IP, IPv4, RTSP, UDP, SMTP, NTP, DHCP, DNS, DDNS, P2P
Mobile Phone	DMSS
Interoperability	ONVIF (Profile S, T and G), CGI, SDK
Browser	Chrome, PCAPP, IE9 or higher, Firefox
Network Mode	NIC binding mode such as multiple-address mode, load balance, fault-tolerance, etc
Record Playback	
Multiple-channel Playback	Max. 16-channel playback
Record Search	Search video detection/manual record/IO alarm/ intelligent event/all record file
Storage Medium	Internal HDD, SAS disk array enclosure
Backup Method	HDD, peripheral USB storage device
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
Storage	
HDD Group	16
RAID	RAID0/1/5/6/10
Storage Pool	N/A
Alarm	
General Alarm	Motion detect, tampering, local alarm
Anomaly Alarm	IPC offline alarm, storage error, HDD full, IP conflict, MAC conflict, login lock, fan malfunction
Intelligent Alarm	Human face detection, human face recognition, video metadata (person/vehicle/non-motor vehicle),perimeter protection (intrusion, tripwire),plate recognition
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(reserved)
Audio Output	1-channel, speaker output, audio linkage output
Alarm Input	16-channel
Alarm Output	8-channel
Internal HDD	16 slots, SATA3.0/SAS. Max.10T/HDD
eSATA	1 port

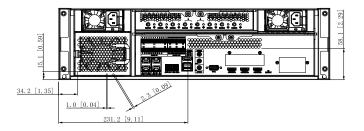
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SAS	2 SAS3.0 ports
RS-232	1 port, for debug or transparent COM data
	1 port, control peripheral PTZ and so on. Supports
RS-485	various protocols
USB	4 ports. 2 USB2.0 port at the front panel and 2 USB3.0 port a the rear panel
HDMI	3 ports; support 4K output
VGA	1 port
Network	4 RJ-45 10/100/1000Mbps self-adaptive Ethernet ports
Power	2 ports
PoE	N/A
General Parameters	
Power Supply	100V AC-240V AC 50±2%Hz
Power Consumption	122W (Without HDD, idling)
Net Weight	16 kg (35.27 lb)
Gross Weight	17 kg (37.48 lb)
Dimensions	Chassis: 444.8 mm × 522.4 mm × 133.2 mm (17.51 " × 20.57 " × 5.24 ") Max. size: 485 mm (with hanger) × 522.4 mm × 133.2 mm (with feet mat) (19.09 " × 20.57 " × 5.24 ")
Packaging Dimensions	689 mm× 779 mm × 464 mm (27.13 " × 30.67 " × 18.27")
Operating Temperature	0 °C to 45 °C (+32 °F to +113 °F)/10%RH–90% RH
Storage Temperature	0 °C to 40 °C (+32 °F to +104 °F)/30%RH-85% RH
Operating Humidity	10%-90%
Storage Humidity	30%-85%
Operating Altitude	5000 m (16404.20 ft)
Installation Mode	Desktop/rack
Certifications	CE: CE-LVD: EN 60950-1/IEC 60950-1 CE-EMC: EN 61000-3-2, EN 61000-3-3, EN 55032, EN 50130, EN 55024 FCC: Part 15 Subpart B UL 60950-1

Dimensions(mm[inch])







 Rev 001.001
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 Pictures in the document are for reference only, and the actual product shall prevail.