DAHUA TECHNOLOGY

Digital Surveillance System
DSS Pro Video Management System Server with Mobile Device Support

- Embedded Linux Operating System with Pre-installed DSS Pro Software
- Redundant Power Supply and Hot Standby for Stable 24/7 Operation
- Supports 512 IP Devices and 2000 Video Channels per Server
- Supports Mobile Devices
- 15 Hot-pluggable Hard Drives and Extended Storage via iSCSI
- Supports GPS Fleet Management for Mobile Solutions
- Live Video Playback
- Configure Video Wall Layout and Scheme
- Configure NVR Recording
- Offers Fisheye Camera Dewarping on Live View and Playback Images
- Intelligent Video System with Face Recognition
- Five-year Warranty*

System Overview

The DSS7016R Video Management System is a powerful, all-in-one video surveillance management system preloaded with Linux-optimized DSS software for system scalability and reliability. The server supports up to 2000 network cameras, 200 online clients, 100 roles, and an unlimited number of users.

The server provides user rights management, device management, alarm management, center storage, TV wall output and, two-way audio. In addition to these VMS features, the server offers advanced features, including POS integration with data sync and the Intelligent System, features not found on many other VMS servers.

Functions

Flexibility and Scalability
The DSS7016R VMS Server supports 2000 video channels per server, with support for 512 connected network cameras. The server supports 15 hard disk drives for video and snapshot storage. The server also supports edge storage and extended storage via iSCSI.

Compatibility
The VMS server is compatible with all Dahua IP-enabled devices: network cameras, NVRs, DVRs, Mobile DVRs, and access control devices plus many more. The server is also compatible with the ONVIF protocol, so it can connect to ONVIF-enabled third-party devices. The server offers and SDK for further support of third-party platforms and mobile operating systems.

Fisheye Camera Support
DSS features full support for Dahua Fisheye cameras. The software supports options for the Fisheye camera installation and eight (8) dewarp modes. Dewarping solves the problem of distortion in the circular panoramic view in both live or playback modes.

Real-time Face Recognition
The DSS7016R-S2 performs real-time facial recognition on up to 64 channels simultaneously. The server captures and analyzes facial features to determine gender, age, expression, glasses, moustache, and mask, and then can record the faces and store the associated structured data. The server also filters incoming video to display faces that match target features.

Intelligent Business Analysis
The DSS supports people counting and heat map; advanced features that add business intelligence to your security system. Intelligent Analysis tracks and stores daily, weekly, monthly, and yearly people flow through a defined scene and stores the data. DSS retrieves this data and supports searching, displaying, and storing the data.

Video Wall
DSS offers settings to configure all aspects of a video wall application. The application supports video wall layout, live preview, scheme configuration, and tour setup. In addition, the application supports video wall splicing and roaming.

Management Operations
The server manages the devices and the user accounts for an entire organization. Operators can assign different camera ranges, active use periods, and business roles for each user. The server also supports different schemes for various events, including IVS, to record and view all event history information.

Mobile Device Support
The DSS7016R provides for integration and full support of mobile surveillance devices. The server is capable of adding mobile devices via a WiFi or a 3G/4G network and displays the device's real-time location, speed, and direction. The DSS7016R also keeps statistics for abnormal GPS activity, speeding, and entering/exiting a defined location.

ONVIF

Technical Specification

System

Main Processor	Intel® Core™ i5-6500, 64-bit Processor
Operating System	Embedded Linux
Management Software	DSS, pre-installed
Memory	8 GB, DDR3
Motherboard	Embedded
Hard Disk	Hot-swappable and online replacement SAS and SATA compatible, intermixing allowed
Power Supply	Redundant Power Supply

Display

Mode	Live View, PTZ Control, Snapshot, Instant Playback, Customized Layout
Video Wall	Push Real-time, Alarm and Playback Video to Wall
Dewarping	Supported for Fisheye Video on Live View and Playback

Playback

Playback	36-channel Synchronized Playback
Playback Mode	Normal, Motion Detection, Alarm, IVS, POS
Search Mode	Smart Search, POS Transaction Data and Video

Storage

HDD Installation	Built-in 1 TB HDD (2.5-in.) for Operating System Supports 15 HDD (3.5-in.) for video and picture storage
Storage	8 TB per HDD
Total Storage Capacity	200 TB, including local, edge and external devices
HDD Mode	Single, RAID 0/1/5/6/10

Interface

Audio	Input: One (1) Channel Output: One (1) Channel
USB	Front Panel: Two (2) USB 2.0 Ports Rear Panel: Two (2) USB 2.0 Ports
Display	Two HDMI Ports: • One (1) as Network Configuration • One (1) as a Spare Port One (1) VGA Port, as Network Configuration

Video Management

Maximum Connected IP Devices		500
Maximum IP Channels		2000
Auto Register		500 IP Devices 2000 Channels
Maximum Connections	Face Recognition Cameras	64 Channels
	LPC	64 Channels
	POS Devices	64 Channels
	ONVIF	100 Devices
	Mobile DVR	200 IP Connections 800 Channels
Clients per System		200 Simultaneous Users
Number of Users		Unlimited
Number of Roles		100
Bandwidth, per Server	Video Input	700 Mbps
	Video Output	700 Mbps
	Video Storage	700 Mbps

Mobile Support

Devices	WiFi, 3G/4G Networks
GPS	Displays location, speed, direction of device
Functions	• Device location history • Speeding alarm • Entering/exiting E-Fence • Report abnormal GPS data

Network

Network Ports	Four (4) RJ-45 Ports (10/100/1000 Mbps)
Interoperability	ONVIF, DSS SDK for Integration
GIS Map	Supported; Google and RasterMap
Email	Supported; Yahoo, Gmail, HotMail

Electrical

Power Supply	100 VAC to 240 VAC, 50/60 Hz
Power Consumption	10 W to 200 W, with HDD

Environmental

Operating Conditions	−0° C to +50° C (+32° F to +122° F), 5% to 90% RH, non-condensing
Storage Conditions	−20° C to +70° C (−4 °F to +158° F), 5% to 90% RH, non-condensing
Operating Altitude	−60.0 m to 3000.0 m (−196.85 ft to 9842.52 ft)

Construction

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Dimensions	3U, 444.80 mm x 522.40 mm x 133.20 mm (17.51 in. x 20.57 in. x 5.24 in.)
Net Weight	20.0 kg (44.09 lbs)
Material	Hot-dipped galvanized sheet steel (1.2 mm), precise aluminum alloy slide, patented pull-out rack design
Front Cover	7-in. HD LCD Screen (1920 x 1080, 1280 x 1024, 1024 x 768)
Installation	Standard 19-in. Rack Installation

Certifications

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Safety	EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
Electromagnetic Compatibility (EMC)	FCC 47 CFR Part 15 Subpart B EN 55032:2015 EN 55024:2010+A1:2015 EN 50130-4:2011+A1:2014 EN 61000-3-2:2014 EN 61000-3-3:2013

Ordering Information

Type	Part Number	Description
Digital Surveillance System	DSS7016DR	15 HDD, 512 IP Devices and 2000 Video Channels

Dimensions (mm/in.)
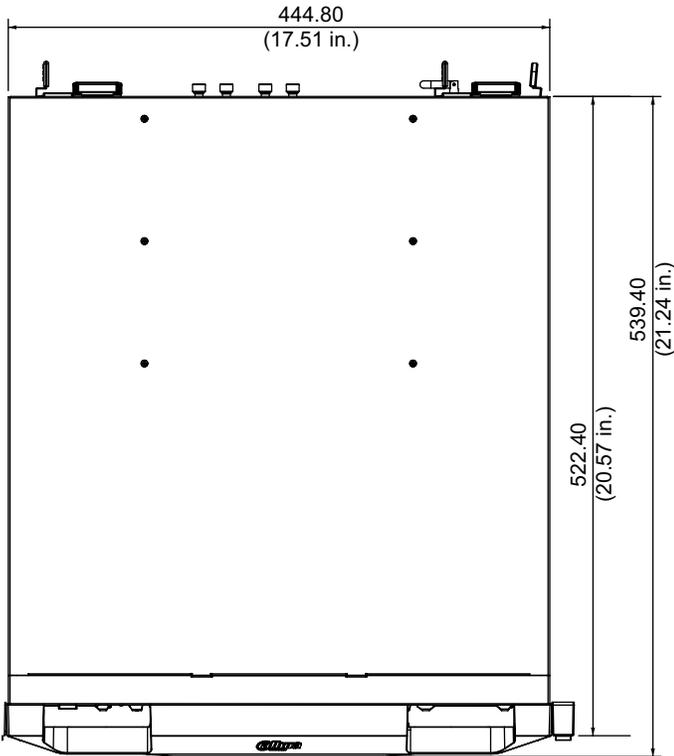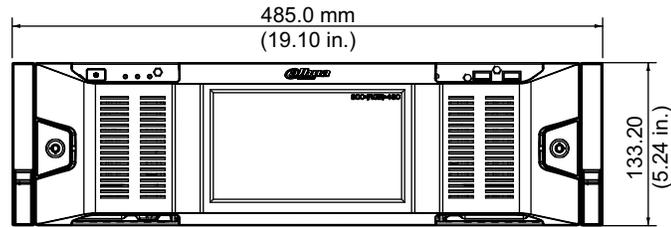
Physical Interfaces
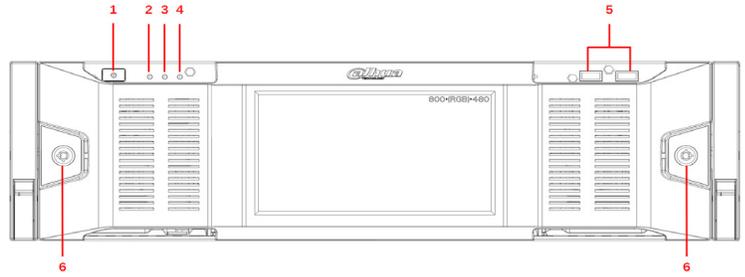
1	Power Button	4	Network Status
2	HDD Status	5	USB 2.0 Ports x 2
3	Alarm Status	6	Lock
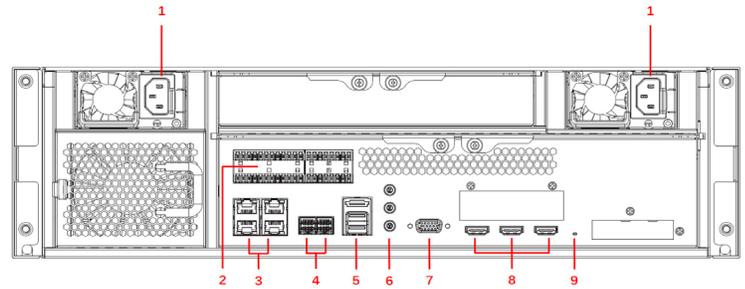
1	Power Connection	6	Audio IN and OUT
2	Alarm I/O	7	VGA OUT
3	Gigabit Network Ports, 1 to 4	8	HDMI 1, HDMI 2, HDMI 3 OUT
4	SAS HD1 and SAS HD2	9	Reset Button
5	eSATA and USB 2.0 Ports x 2		