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

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 with a total storage capacity of 200 TB. 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.

- 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*

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.

*Warranty applies to products sold through an authorized Dahua Dealer.
## 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 (3.5-in.) for Operating System Supports 15 HDD (3.5-in.) for video and picture storage
- **Storage**: 8 TB per HDD
- **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
- **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
- **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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<th>Type</th>
<th>Part Number</th>
<th>Description</th>
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<td>EN 55032:2015</td>
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## Ordering Information

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<td>DSS7016DR</td>
<td>15 HDD, 512 IP Devices and 2000 Video Channels</td>
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## Dimensions (mm/in.)

- Physical Interfaces

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<th>Function</th>
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<td>Alarm I/O</td>
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<td>SAS HD1 and SAS HD2</td>
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<td>eSATA and USB 2.0 Ports x 2</td>
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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

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