

# DHI-DSS4004-S2

An Economical Surveillance System



## Introduction

DSS4004-S2 is an economical general surveillance system preloaded with linux-optimized DSS Express, which improves reliability of the whole system. It supports up to 256 network cameras and integrates video, access control, video intercom and AI functions, which provides a cost-effective all-in-one solution.

## Features

### Cost-effective

- Preloaded with linux-optimized easy-to-use DSS Express, which makes the deployment simplified
- Pre-activated 256 video channels can save the enormous costs of projects

### High Reliability

- Hot standby of two servers will keep the system 7\*24h stable operation
- Long-term stability test makes the hardware, OS and software more compatible

## Main Functions

### •General Functions

#### Organization Management

- Achieve device group management through organization

#### Device Management

- Device initialization: Initialize Dahua's device
- Add devices via auto search, IP
- Manage Dahua's devices such as network camera, network speed dome, thermal camera, NVR, DVR, access control, etc.

#### Users & Authorities

- Add, edit and delete the users
- Assign different users with different permissions
- User can be restricted by the MAC and expiry data
- Set user PTZ permissions

#### Storage

- Central storage: local disk storage and extend storage via iSCSI

- Add, edit, delete, enable and disable the record plan
- Supports edge storage and central storage

#### Bind Resource

- Bind access control channels with the corresponding cameras

#### Playback

- Play back the record from the edge devices or central storage
- Video filter: normal, motion, alarm, video loss, tampering video
- Sync play
- Reverse playback
- Playback frame-by-frame
- Support 1X, 2X,4X,8X,16X,32X,64X, 1/2X, 1/4X, 1/8X, 1/16X, 1/32X, 1/64X playback
- Lock or mark the important record for central storage
- Support smart search
- Support searching record of POS data

#### Emap

- Raster map, main map and submaps
- Up to 8 levels of submap
- Add, edit and delete the hot spots (camera, alarm input) on the map
- View the live video and playback on the map
- Zoom in and zoom out the map
- Support visible range and initial angle
- Icon flashes on map when alarm occurs

#### Video Wall

- Add and manage the video wall
- Support screen ID on/off
- Support combining screens to one screen
- Bind decoding channel to screen
- Decode the real-time video to wall
- Decode the playback video to the video wall
- Manually/automatically decode to wall
- Control the video wall split
- Change the stream type of video channel
- Add box, screen on/off, and local display on client
- Tour the video channels in a single window
- Schedule plan: Set the running task on timeline
- Tour plan: loop display of different tasks, setting loop time
- Support NKB1000/NKB5000 to control video wall to control video wall

#### Live View

- Common layout and customized layout
- PTZ control
- Manual recording
- Snapshot
- Fisheye dewrapping
- Audio talk
- Set alarm window

- Turn on/off the audio in live view
- Region of interest: Divide one window into 4 or 6 parts, one for whole image, others for the details
- Save the current split as a view
- Support adding channel to favorite
- Video tour according to device, organization, favorite or view
- View map via live view window

### **Event Management**

- Detect the device exception, video events, alarm input, access control events, etc.
- Alarm scheme: All day template, weekday template, weekend template and custom template
- Alarm priority: low, medium, high
- Linkage: snapshot, record, pop-up live video, alarm output, PTZ, access control, video wall display
- Add, edit, delete, enable and disable alarm scheme
- Display event info including alarm time, alarm name, alarm status, etc.
- View the live video or pictures from related camera
- Acknowledge the events
- Arming control for events
- Forward the alarm to relevant user
- Send email of events
- Handle the events
- Search events

### **Download Center**

- Download record from central storage or device
- Download record by timeline, files or tags
- Supports multi-task download
- Supports dav, MP4, flv, asf, and avi format

### **•Intelligent Building Functions**

#### **Personnel Management**

- Add, edit and delete person and department
- Issue the card, fingerprint via USB reader or devices
- Authorize by door or door group
- Private password and face authentications
- Guest, VIP and normal person management

#### **Access Control**

- Door status and door events monitoring
- Door group and access level
- Access permission management
- One-key to lock/unlock the doors
- Fire alarm linkage
- Advanced door rules, such as anti-passback, first card unlock, inter-door lock, multiple card unlock, remote verification
- Extract record from device

#### **Video Intercom**

- Video intercom between VDP devices based on SIP protocol
- Video intercom between VDP devices with command center
- Release the text information to VTH
- Address book releases to VTO

#### **Attendance**

- Set access control devices as attendance stations
- Attendance time period management, including fixed attendance and free attendance

- Attendance shift management and arrangement, including department shift, person shift, temporary shift
- Attendance report management, including attendance record report, abnormality report, card-swiping report, overtime report, away report

#### **Visitor Management**

- Visit registration, appointment registration
- Searching visit record and export

#### **Vehicle Entrance**

- Edit parking-lot, includes total and available spaces, parking name etc.
- Manage owners, vehicles and cards
- Bind LED screen with ITC or spot detector device
- Open the barriers via VTO with cards or remotely
- Force existing vehicles to leave
- Search and export the historical pass records
- Support daily, weekly, monthly, and annual statistics of vehicle entrance

#### **Alarm Controller**

- Display all alarm controller devices and subsystems under device
- Arm/Disarm alarm controller
- Arm, disarm, cancel alarm, normal, bypass, isolate in zone or subsystems

### **•Artificial Intelligence**

#### **Face Recognition**

- Live face
- Similar face search
- Feature search
- Recognition records
- Structured report of gender and age
- Face library management
- Face trace
- Face alarm and event linkage

#### **ANPR**

- Real-time license plate recognition
- Search history license plate recognition result
- Search arming record

#### **Flow Analysis**

- Search and export people counting report
- Search and export heatmap report

### **•System Maintenance**

#### **Log**

- Operator log in control client
- Door log
- Search and export log

#### **Backup and Restore**

- Back up system data automatically (daily, weekly, monthly)
- Back up system data manually
- Restore system data from server or local file

#### **Other Functions**

- FTP for alarm pictures
- Device time calibration, server time calibration

**Single-Point Performance Specification**

System

Main Processor	64 bit 4 core CPU (CORE-I3-6100)
Operating System	Linux
Power	Support hot swap
Memory	8GB(1×8GB)
Chassis	1.0mm SGCC steel plate

Interface

Network Port	4 Ethernet Ports ( 10/100/1000Mbps )
RS232	Reserved
RS485	Reserved
USB Port	Front panel: 2 × USB 3.0, Rear panel: 2 × USB 3.0 onboard panel:1 × USB 2.0
HDMI	2 HDMI, one as network config, another as spare
VGA	1 VGA, as network config
HDD Installation	Built-in 1× 1T HDD disk (2.5") for system Support 3HDD disks (2.5") for Video &Picture storage

Video Management

Items		DSS4004-S2
<b>Client</b>	PC Client	100
	DSS Mobile 2	100
	DSS Mobile for VDP	5000
<b>Org. and User</b>	Organization	10 hierarchies, 999 organizations per hierarchy
	User Group	3 Levels
	User	100 online users and unlimited users
<b>Devices (Single Point Performance )</b>	Video	256 Channels
	Onvif	64 IP, 64 Channels
	Access Control	100 IP, 512 Doors
	VDP Devices	1100 Devices (Unit VTO no more than 100)
	Facial Recognition Channels	32
	ANPR Camera	32
	Alarm Host	64
	POS Channels	32
	Time Attendance	64
<b>Media Transmission Server</b>	Video Input per Server	350 Mbps
	Video Output per Server	350 Mbps

<b>Record</b>	Playback Bandwidth per Server ( With Recording)	150 Mbps
	Video Storage Bandwidth per Server	150 Mbps
	Maximum Capacity per Storage Server	200TB
	Download Task	UP to 5 per Client
<b>Event</b>	Number of event reception without Pic	80 per Second
	Number of event reception with Pic	5 per Second
<b>Emap</b>	Hierarchy of Raster Map	8 Hierarchies
	Photos of Raster Map	Up to 64 Photos
	Map size of Raster Map	Up to 14.7MB
	Channel Number	Up to 200
<b>Personnel Management</b>	Persons	30,000
	Cards	30,000
	Fingerprints	90,000

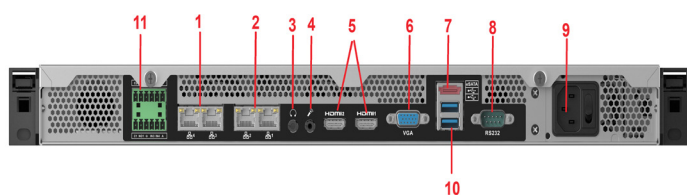
Other

Power	100V ~ 240V, 47 ~ 63Hz
Consumption	70W ~ 120W (with HDD)
Working Environment Temperature	0 C ~ 45 C
Working Environment Humidity	5%~90% (non-condensation)
Storage Environment Temperature	-20 C ~ +70 C
Storage Environment Humidity	5% ~ 90% (non-condensation)
Working Altitude	-60m ~ 3000m
Weight (Without Package)	6.0Kg
Dimension	1U, 440mm×398.6mm×43.65 mm
Installation Method	Standard 19" rack installation

Physical Interface



- 1- Power Button
- 2- USB 3.0
- 3- USB 3.0
- 4- HDD Status
- 5- Alarm Indicator
- 6- Network Indicator



- 1- Giga Lan port 3~4
- 2- Giga Lan port 1~2
- 3- Audio output
- 4- Audio input
- 5- HDMI Port1/Port2
- 6- VGA
- 7- ESASA
- 8- RS232
- 9- Port Interface
- 10- USB3.0 Port
- 11- Alarm In&Out

Dimensions (mm)

