

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

 \cdot Preloaded with linux-optimized easy-to-use DSS Express, which makes the deployment simplified

 \cdot Pre-activated 256 video channels can save the enormous costs of projects

High Reliability

 \cdot Hot standby of two servers will keep the system 7*24h stable operation

 \cdot Long-term stability test makes the hardware, OS and software more compatibile

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

 \cdot Central storage: local disk storage and extend storage via <code>ISCSI</code>

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

Bind Resource

 \cdot Bind access control channels with the corresponding cameras

Playback

- \cdot Play back the record from the edge devices or central storage
- \cdot 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

Emap

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

Video Wall

- \cdot Add and manage the video wall
- · Support screen ID on/off
- · Support combining screens to one screen
- · Bind decoding channel to screen
- \cdot Decode the real-time video to wall
- \cdot 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 dewraping
- · Audio talk
- \cdot Set alarm window
- $\cdot\,$ Turn on/off the audio in live view

 $\cdot\,$ Region of interest: Divide one window into 4 or 6 parts, one for whole image, others for the details

- $\cdot\,$ Save the current split as a view
- · Support adding channel to favorite
- $\cdot\,$ Video tour according to device, organization, favorite or view
- · View map via live view window

Event Management

 $\cdot\,$ Detect the device exception, video events, alarm input, access control events, etc.

 $\cdot\,$ 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.

- \cdot View the live video or pictures from related camera
- · Acknowledge the events
- Arming control for events
- · Forward the alarm to relevant user
- \cdot Send email of events
- \cdot Handle the events
- · Search events

Download Center

- \cdot 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
- \cdot 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
- $\cdot\,$ Advanced door rules, such as anti-passback, first card unlock, inter-door lock, multiple card unlock, remote verification
- $\cdot\,$ Extract record from device

Video Intercom

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

Visitor Management

- Visit registration
- \cdot Searching visit record and export

Vehicle Entrance

 \cdot 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
- \cdot Open the barriers via VTO with cards or remotely
- · Force existing vehicles to leave
- · Search and export the historical pass records
- \cdot Support daily, weekly, monthly, and annual statistics of vehicle entrance

Alarm Controller

 \cdot Display all alarm controller devices and subsystems under device

- · Arm/Disarm alarm controller
- \cdot 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 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 heapmap report

•System Maintenance

Log

- · Operator log in control client
- · Door log
- $\cdot\,$ 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

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
Client	PC Client	10 online
	DSS Mobile 2	10 online
	DSS Mobile for VDP	200 online and 2000 total
Org. and User	Organization	10 hierarchies, 999 organizations per hierarchy
	User Group	3 Levels
	User	10 online users and 50 users
Devices (Single Point Performance)	Video	256 Channels
	Access Control	64 IP, 64 Doors
	VDP Devices	1000 Devices (Unit VTO no more than 64)
	Facial Recognition Channels	32
	ANPR Camera	32
	Alarm Host	64
Media Transmission Server	Video Input per Server	350 Mbps
	Video Output per Server	350 Mbps

Record		k Bandwidth rver (With ing)	150 Mbps	
	Video Storage Bandwidth per Server		150 Mbps	
	Maximum Capacity per Storage Server		100TB	
	Download Task		UP to 5 per Client	
Event		r of event on without Pic	80 per Second	
	Number of event reception with Pic		5 per Second	
Emap	Hierarchy of Raster Map		8 Hierarchies	
	Photos of Raster Map		Up to 64 Photos	
	Map siz	e of Raster Map	Up to 14.7MB	
	Channe	l Number	Up to 200	
	Persons	5	2,000	
Personnel Management	Cards		2,000	
	Fingerprints		2,000	
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)		6.0Кg		
Dimension		1U, 440mm×398.6mm×43.65 mm		
Installation Method		Standard 19" rack installation		

