DSS Express

Pay-as-you-go Security System for SMB



V8.1.0

Introduction

DSS Express can be used with 64 cameras for free and supports up to 256 cameras with license. In addition, it is easy to be integrated with access control, video intercoms and AI features such as facial recognition, ANPR, and video metadata.
It is suitable for retail stores, vehicle entrance management, and office buildings.

Features



Lower Investment

The free version of DSS Express provides 64 video channels and requires more affordable hardware. As your needs increase, you only need to pay for a new license and get extra performance.



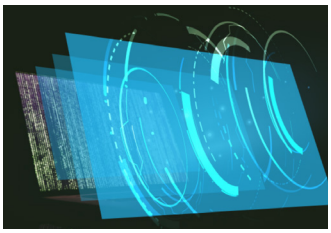
Pay-as-you-go

DSS Express is flexibly scalable. You can purchase different licenses to increase the number of devices you can connect to the platform. DSS Express supports up to 256 video channels, 64 doors, and 256 video intercoms.



Easy Upgrade

For more functions and capacity, simply upgrade to the professional version with just a license and a few simple steps.



Unified Platform

All your needs can be addressed directly in DSS Express with the comprehensive applications it can provide, including video surveillance, access control, video intercom, face recognition, and ANPR.

Main Functions

Monitoring Center

Live View

With the highly customizable live view function, you can view real-time videos in any way you want. Additionally, the layout can be arranged to display different videos in different sizes, so that areas that are more important can be displayed in a more visible way. On special occasions, you can directly operate on devices, such as talking to nearby people through a camera, or unlocking the barrier of a turnstile to let people in. When something important happens, such as a robbery, the manual recording is only one click away to save that particular part of the video as evidence.

Playback

The playback function allows you to play recorded videos stored on the server and devices in multiple windows. To help you efficiently wade through tons of videos, you can play them 64X faster than the normal speed, skipping parts that you are not interested in, or you can slow them down to 1/64X, to focus on important sections. To control the data in the videos, you can add tags to mark relevant content, and you can even lock them to prevent them from being overwritten when the disk space is full. The filter function can also be very helpful when you only need to deal with a specific type of video, or a type of target that appeared in one or more areas.

Video Wall

Video wall is used to display videos on a large screen that consists of many smaller screens. Highly customizable, you can not only configure the layout of the video wall, but you can also display recorded videos and real-time videos to zero in on important details in the video. With the task function, you can schedule videos from different channels to be displayed on the video wall at specified times or in a loop.

Map

The map is a very useful function that allows you to keep track of devices and events through their location information. With it, you can mark a device and immediately know the location of an event when the device triggers an alarm and flashes red on the map. You can also add submaps to different areas. For example, a plan view of a public square can be added to a map to reveal the exact location of people who are inside the public square.

DeepXplore

Powered by AI technologies, you can easily search for targets and records, and generate tracks to locate their whereabouts with simple search conditions.

Event Management

You can monitor and process over 200 types of alarms right in the event center. In addition to predefined alarm types that are triggered by devices, DIY alarm types that are manually triggered are available for situations such as taking a snapshot or sending an email to the administrator when you see something important.

Access Management

Access Control

The integrated access control system gives you the ability to manage access through various types of access control devices added to DSS Express, while keeping a complete access record for your later exam.

Video Intercom

All video intercom devices can be managed based on different in one single interface. With two-way communication and remote access control, you have the ability to secure access to your premises. Also, residents will be able to call and report emergencies quickly, allowing you to take immediate actions. To make building management easier, messages that a lot of people should know, such as the electricity will be out for a few hours for maintenance purposes, can be sent to their indoor monitors with only a few steps.

Visitor

DSS Express offers a complete process to manage visitors, including registration, access permission authorization, and ending visit with all permissions canceled. A complete, detailed record of all visits is available for your review at any time.

Intelligent Analysis

To improve services and profitability, understanding how many people are in an area at any time, where people go to the most, and when peak numbers occur with people number analytics and heat maps can provide valuable and actionable insights.

Parking Lot Management

With DSS Express, you can remotely manage your parking lot by customizing the passing rules and monitoring the real-time video from the entrance or exit. Complete records with detailed information of vehicles are generated for your review.

System Requirements

	Server		PC	
	Recommended	**Minimum**	**Recommended**	**Minimum**
CPU	Intel® Core(TM) I7-9700K CPU@3.60 GHZ	Intel® Core(TM) I5-9400 CPU@2.90 GHZ	I7-6500@3.20 GHz	I3-2120@3.20 GHz
Memory	8 GB		8 GB	4 GB
System Disk	7200 RPM Enterprise Class HDD 1 TB, 500 GB free space for DSS	7200 RPM Enterprise Class HDD 1 TB, 200 GB free space for DSS	-	
Storage Disk	7200 RPM Enterprise Class HDD		100 GB free space for DSS Client	50 GB free space for DSS Client
Graphics Card	-		GeForce GTX 1060 3 GB (Discrete Graphics Card)	Intel (R) HD Graphics 530 (Integrated Graphics)
Ethernet Port	1000 Mbps		1000 Mbps	
Operating System	Microsoft® Windows 10 20H2(64-bit) Microsoft® Windows 11(64-bit)		Microsoft® Windows 7 (64-bit) Microsoft® Windows 10 20H2(64-bit) Microsoft® Windows 11(64-bit)	
Languages	English (United States), Simplified Chinese.		Arabic, Bulgarian, Czech, Danish, English (United States), Finnish, French, German,Hebrew, Hungarian, Italian, Japanese, Korean, Macedonian, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Thai, Traditional Chinese, Turkish, Ukrainian, Vietnamese.	

Performance Specification

The following specifications are obtained in a server with recommended system requirments.

Organization, Role and User	
Organizations	10 levels; 999 organizations in total
Roles	20
Users	10 online users and 50 total users
Users for VDP Mobile App	50 online users and 500 total users

Recording Plan	
General Recording Plans	256
Motion Detection Recording Plans	256

Person and Vehicle Management	
Persons	5,000
Cards	10,000
Faces	5,000
Fingerprints	10,000
Vehicles	5,000

Map	
Hierarchies	8
Maximum Size of Raster Map	15 MB
Number of Raster Maps	32
Number of Resources per Raster Map	300
Raster Map Resolution	8,100 × 8,100

Face and Vehicle Watch Lists①	
Face Watch Lists	50
Vehicle Watch Lists	8
Total Faces	5,000
Faces per Face Watch List	5,000
Vehicles per Vehicle Watch List	5,000

Intelligent Analysis	
People Counting Groups	4
People Counting Rules per Group	20

Parking Lot Management	
Vehicles	5,000
Vehicle Groups	8
Parking Lots	1
Number of Entrances and Exits	4
Number of Entrances	2
Number of Exits	2
Entrance and Exit Points	4

Access Control	
Access Permission Groups	50
Persons per Permission Group	5,000
Door Groups	50

Video Intercom	
Rooms	1,000
Persons per Room	10
VDP Accounts	5

Notification Center	
Notification Center Messages	1,000

Data Storage	
Event Records	2,000,000
Face Recognition Records	2,000,000
ANPR Records	2,000,000
Metadata Records	2,000,000
Access Control Records	2,000,000
Video Intercom Records	2,000,000
Visitor Records	2,000,000
Entrance Records	2,000,000
Exit Records	2,000,000
Historical Count Records	2,000,000
In Area Statistical Records	2,000,000
Heat Map Records	2,000,000
Operator Logs	2,000,000
Service Logs	2,000,000

Server Specification

Parameter		Single Server
Total Devices	Devices	512 devices
	Auto-Registered Devices	32 devices
Video Devices and Channels②	Video Devices and Channels	256 devices; 256 channels
	P2P Devices	32 devices
	Add Devices by ONVIF	256 devices; 256 channels
	ANPR Channels	8 channels
	Face Recoginition Devices and Channels	8 devices; 8 channels
	Video Metadata Channels	8 channels
Access Control Devices	Access Control Devices	64 devices; 64 doors
	VDP	256 devices
Alarm Devices	Alarm Controllers	16 devices; 160 zones
Intelligent Analysis	People Counting Channels	16 channels
	Heat Map Channels	16 channels
Media Transmission Server	Total Incoming Bandwidth per Server	200 Mbps
	Incoming Video Bandwidth per Server	200 Mbps
	Incoming Picture Bandwidth per Server	50 Mbps
	Total Outgoing Bandwidth per Server	200 Mbps
	Outgoing Video Bandwidth per Server	200 Mbps
	Outgoing Picture Bandwidth per Server	50 Mbps
	Total Storage Bandwidth per Server	100 Mbps
	Video Storage Bandwidth per Server	100 Mbps
	Picture Storage Bandwidth per Server	50 Mbps
Playback, Storage and Download	Prerecording Bandwidth for Alarm Recordings	50 Mbps
	Maximum Capacity per Storage Server (Local)	2 TB
Event③	Total Events④	60 per second
	Storage of Events or Alarms without Pictures⑤	60 per second
	Alarms with Snapshots (Stored on Devices)	60 per second
	Access Control Events	60 per second

① Number of face watch lists and devices: Number of faces × number of devices < 10 million. For example, a face watch lists of 200 thousand faces can be sent to 50 face recognition devices including IVSS, NVR and face recognition cameras.

② Total number of video devices and channels indicates that the number of video devices and channels connected to the platform, such as IPC, NVR, and ITC, cannot exceed the parameter.

③ Event concurrency is peak concurrency: 20 minutes of peak concurrency test, 3 times a day, and 30% peak concurrency for 8 hours per day.Event concurrency is in accordance with database concurrent writes. Concurrency of event with pictures must take picture write capacity of the disk into account.

④ Total event concurrency: The ability to write all events to system records concurrently.

⑤ For concurrency of events with pictures, picture write concurrency should also be taken into consideration. The picture write concurrency of an individual server is up to 200 Mbps, so the concurrency of events with pictures is limited by picture write capacity.

DSS Mobile Client Main Functions

DSS Agile

Live View

Even when you are away from your computer, you can also ensure the safety of your area right on DSS Agile. You can watch the real-time videos remotely from up to 16 channels at the same time with 3 stream types for you to choose according to the status of your mobile network. PTZ control is also supported so that you can cover most of the area. When anything of interest happens, you can take snapshots or recordings as evidence that stores on your phone, or send a voice message to deter unwanted activities.

Playback

Videos stored on devices or the server can both be played up to 8X faster or 1/8X slower on DSS Agile. You can also use the manual recording function to record important content and save it to your phone.

Access Control

With DSS Agile, you can remotely monitor and operate all access control devices. For example, you can open a door for someone who has a proven identity, or set a door to be always closed so that no one can access.

Target Tracking

For suspicious activities, you can locate targets directly in DSS Agile by searching for face recognition records from a period, uploading a face image of a specific target, or searching for capture records of people, non-motor vehicles, and motor vehicles by features.

Event

You can receive and process various types of alarms. You can also receive alarms when DSS Agile is not running with a subscription button.

Video Intercom

You can makes calls to and receive calls from master stations, indoor monitors and door stations. After subscribing to offline calls, you will still receive calls even when the App is not running. Also, a complete records of incoming and outgoing calls ensure that you will not miss any important message.

File Management

Snapshots and videos stored on devices or the server can be managed as you need, such as deleting them or exporting them to your album.

DSS Agile VDP

Visitor Management

You can easily manage visitors by registering their information and generating visitor passes with necessary access permissions. When they arrive, they can use the passes to gain access to where you are. DSS Agile VDP will log when visitors begin and end their visits.

Intercom Monitoring

When guests arrive, they can call you on the door station or you can verify their identities through the live video. After confirming they are who you are expecting, you can remotely open the door for them directly on DSS Agile VDP. If you spot any unwanted activities, tap and call the management center to report an emergency.

Message Center

The unlock records and alarm messages on the indoor monitor are fully accessible on DSS Agile VDP, allowing you to identify potential threats and ensure the safety of your residence.

DSS Mobile Client Requirements

	iOS	Android
Model	iPhone 5S or later	-
RAM	-	2 GB and above
Resolution	-	1280 × 720 or higher
Operating System	iOS 10.0 or later	Android 5.0 or later
Language	Arabic, English (United States), French, Russian, Simplified Chinese	

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