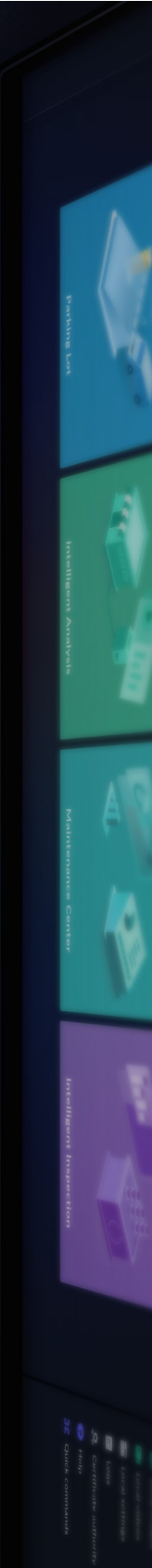


# DSS ONEBOX

Deploy Fast, Secure Faster



V8.8.0



## Introduction

DSS OneBox is an all-in-one workstation with a pre-installed license that works right out of the box, requiring no installation or deployment. It is equipped with Intel 13th generation Core i7 processor and 32 GB of RAM with decoding capability and moderate amount of storage space.

With support for up to 128 video channels and built-in video surveillance, event center, video intercom, attendance, and visitor management, DSS OneBox is particularly well suited for the SMB software market, such as offices, stores, and warehouses.



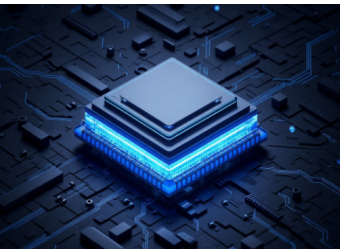
## Features



### Compact Design

A harmonious blend of style and functionality, effortlessly fitting into the security environment.

- Designed with aluminum and glass, offering a modern look along with exceptional durability.
- Compact 0.5 L design allows for flexible deployment across various security scenarios.



### Powerful Performance

A powerful core for uninterrupted monitoring.

- 1 TB SSD storage.
- Integrated GPU decoding capabilities support multiple channels of 1080P video, ensuring the smooth management of multiple video streams.
- Supports network speeds of up to 2.5 Gbps, ideal for high-bandwidth applications.

### Simplified Management

Real-time monitoring with easy management.

- 4-screen 4K output delivers clear and detailed views tailored to various monitoring needs.
- Plug-and-play functionality with a pre-installed operating system and licensed software, automatically launching the client at startup for quick access.
- Mobile app allows for monitoring security status over both public and local networks, facilitating flexible system management.
- Easily restores system default settings with one key.



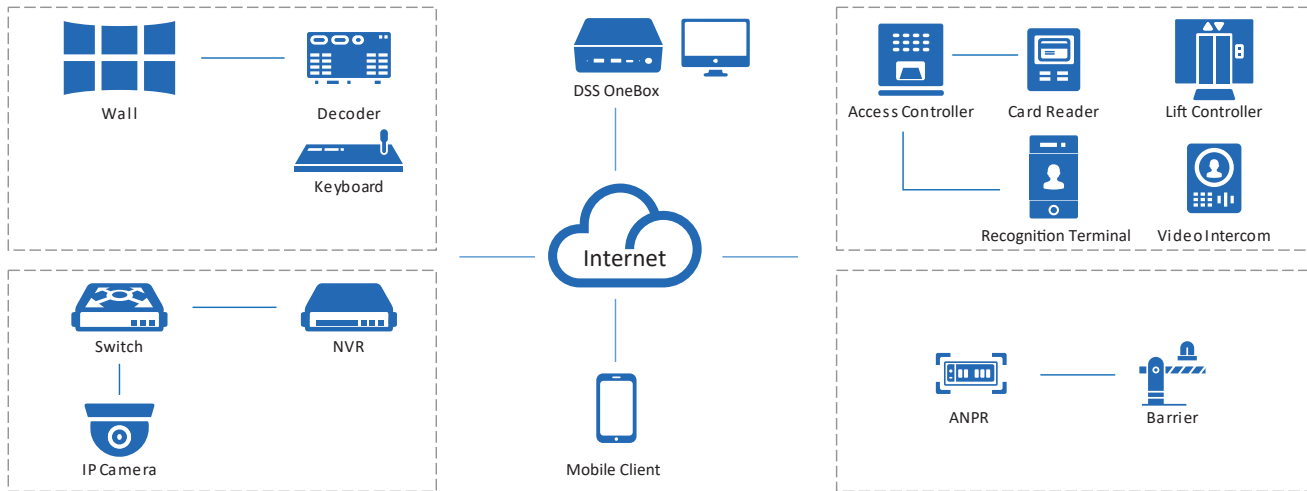
### Comprehensive Solution

One-stop management for diverse security needs.

- Supports up to 128 video channels to accommodate a wide array of monitoring environments.
- Features multiple modules designed to meet diverse security requirements.



## System Architecture



## Main Functions

### Monitoring Center

#### ◆ Live View

With its easy-to-use live view, you can both customize and control how you view videos in real time. The layout can also be configured to display videos in different sizes, enabling you to prioritize important areas by placing them in larger windows.

You can also remotely control certain devices to perform various actions such as talking to people through the camera, operating IP speakers (talk, broadcast, play audio, and adjust the volume), viewing dewarped live view from fisheye cameras, and unlocking turnstiles to grant access.

Visual tracking lets you follow a target across different areas or locations, without losing sight of the target, as long as the places that the target passes through are covered by the associated cameras.

With the AcuPick capability of connected devices, the platform automatically recognizes different types of objects in the video, then you can select a target, and quickly locate it in DeepXplore.

If an emergency occurs, manual recording is just a click away, so that you can quickly view the relevant footage as evidence.

#### ◆ Playback

The playback function allows you to play recorded videos in multiple windows. Playback speed is highly flexible. You can play fast-forward up to 64X to skip irrelevant parts, or slow down to 1/64X to focus on important moments. You can also jump to the previous or next video clip of the most recent time to track the event with reduced effort.

To control the data in the videos, you can add tags to mark relevant content. The filtering function lets you narrow results by video type or target type, so you can quickly find and handle only the footage you need.

#### Video Wall

### ◆ *Video Wall*

Video wall is used to display videos on a large screen that consists of many smaller screens. Highly customizable, it supports not only flexible layouts, but also display of live and recorded videos, so you can focus on important details in the video. Also, you can use tasks to schedule videos from different channels appear on the video wall at specified times or run on a continuous loop.

### ◆ *Map*

The map provides an intuitive way to track devices and events by location. Device icons on the map flash red when an alarm is triggered, instantly showing the event location. You can add submaps for different areas. For example, a plan view of a public square can be added to a map to pinpoint the positions of people within that square.

## ***DeepXplore***

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Powered by AI technology, you can easily search for targets, look for their historical records, and even generate movement tracks, so you can observe their whereabouts through setting simple search conditions. Also, the WizSeek function enhances precision by letting you combine text with search conditions, so you can pinpoint specific targets more efficiently.

## ***Event Management***

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The event center supports monitoring and handling over 200 types of alarms while continuously generating statistics. To give you a clear picture of what is happening in your area, the alarm center also shows metrics like total alarms processed and the most frequently triggered alarm types. The system is flexible. You can choose from predefined alarm types, or create custom alarm types to match your workflows. You can also manually trigger alarms to take snapshots and send email notifications, so that important events get immediate attention.

## ***Maintenance Center***

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A unified dashboard gives you a single-pane view of devices and channels and more, so you can instantly spot issues like offline devices.

## ***Access Management***

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### ◆ *Access Control*

Control doors and lifts across multiple zones using a zone-based management model. Each zone maintains a map for quick location of access points, and a unified access panel lets you monitor and operate door and lift channels across zones in real time. You can create flexible access rules to grant or deny access efficiently, allowing secure access control.

### ◆ *Attendance*

The attendance function delivers complete attendance management by supporting attendance point and rule configuration. Also, you can quickly search for attendance records, view daily details, and generate customizable statistical reports. Attendance rectification and scheduled exports ensure data integrity, providing faster and more reliable attendance tracking and reporting that scales with your organization.

### ◆ *Video Intercom*

All video intercom devices can be managed directly through a single, intuitive interface that supports two-way communication and remote access control. Through this interface, you can secure access to your premises, and receive calls and emergency reports directly from on-site personnel. Building management is also very convenient, as you can send group notifications to all indoor monitors, keeping people informed of important events, such as scheduled power outages.

### ◆ *Visitor*

DSS OneBox offers a full visitor management process, covering from appointment and registration to access permission granting and automatic permission revocation once a visit ends. A complete, detailed record of all visits is available for your review at any time.

## ***Intelligent Analysis***

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To boost your profitability and enhance your service offerings, the platform provides valuable insights into on-premises people information through advanced intelligent analysis and heat map generation. It allows you to track the number of people in an area at any given time, identify high-frequency hotspots, pinpoint the exact times when people counts reach the peak, empowering data-driven decisions to optimize operations.

## ***Parking Lot Management***

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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. The platform supports scenes without barriers to ensure smooth navigation for drivers, and it supports resetting available parking spaces to ensure accuracy of your parking occupancy information.

## Hardware Specification

| Item                  |                          | Description  |
|-----------------------|--------------------------|--|
| System Parameters     | CPU                      | Intel i7-13620H  |
|                       | Memory                   | 32 GB  |
|                       | SSD                      | 1 TB   |
|                       | GPU                      | Intel® UHD Graphics for 12 <sup>th</sup> /13 <sup>th</sup> Gen Intel® Processors |
|                       | Network Port             | 10/100/1000/2500 Mbps  |
|                       | Operating System         | Windows  |
| I/O Port              | USB 3.0                  | 2  |
|                       | USB 2.0                  | 2  |
|                       | Type-C                   | 2  |
|                       | HDMI OUT                 | 2  |
|                       | RJ45                     | 1  |
|                       | Audio Combo              | 1  |
|                       | DC IN                    | 1  |
|                       | Power Button             | 1  |
|                       | System Reset Button      | 1  |
|                       | Button for Clearing CMOS | 1  |
| Other                 | Network Card             | Wi-Fi: 2.4G/5G, BT: 5.2  |
| Power                 | Power Supply             | DC power   |
|                       | Power Input              | 19 V   |
|                       | Max Power Consumption    | 120 W  |
| Dimensions and Weight | Product Dimensions       | 117.0 mm × 117.0 mm × 42.0 mm (4.61" × 4.61" × 1.65")                            |
|                       | Packaging Dimensions     | 186.0 mm × 186.0 mm × 115.0 mm (7.32" × 7.32" × 4.53")                           |
|                       | Net Weight               | 520 g (1.15 lb)  |
|                       | Gross Weight             | 1.8 kg (3.97 lb)   |
| Environment           | Operating Temperature    | 0 °C to +40 °C (+32 °F to +104 °F)   |
|                       | Operating Humidity       | 10%–90% (RH)   |
|                       | Operating Altitude       | < 5,000 m (16,404.2 ft)  |
|                       | Storage Temperature      | -60 °C to -20 °C (-76 °F to -4 °F)   |
|                       | Storage Humidity         | 10%–90% (RH)   |
| Certification         |                          | CE   |
| Warranty              |                          | 36 months  |

## Server Specification

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

| Parameter                               |   | Single Server  |
|---|---|--|
| <b>Total Devices</b>                    | Devices <sup>①</sup>                                      | 246 devices  |
|   | Auto-registered Devices                                   | 246 devices  |
| <b>Devices and Channels<sup>②</sup></b> | Video Devices and Channels <sup>②</sup>                   | 128 devices; 128 channels                                    |
|   | P2P Devices   | 32 devices   |
|   | Devices Added by ONVIF Protocol                           | 128 devices; 128 channels                                    |
|   | Devices Added by Hikvision Protocol                       | 128 devices; 128 channels                                    |
|   | Devices Accessed via RTSP                                 | 128 devices; 128 channels                                    |
|   | Face Recognition Channels                                 | 8 channels   |
|   | ANPR Channels   | 8 channels (4 channels for entrance)                         |
|   | Video Metadata Channels                                   | 8 channels   |
| <b>Intelligent Analysis</b>             | People Counting Channels                                  | 16 channels  |
|   | Heat Map Channels   | 16 channels  |
| <b>Access Control Devices</b>           | Access Control Devices and Lift Control Devices           | 68 devices; 68 channels                                      |
|   | Total Access Control Devices                              | 64 devices; 64 doors   |
|   | Access Control Devices on the DSS Platform                | 64 devices; 64 doors   |
|   | Lift Control Devices                                      | 4 devices; 4 channels  |
|   | Video Intercom Devices                                    | 16 devices   |
|   | Visitor Terminals   | 10 devices   |
| <b>Alarm Devices</b>                    | Alarm Controllers   | 8 devices; 80 zones  |
| <b>IP Speaker</b>                       | IP Speakers   | 16 devices   |
| <b>Media Transmission Server</b>        | Total Incoming Bandwidth                                  | 200 Mbps   |
|   | Incoming Video Bandwidth                                  | 200 Mbps   |
|   | Incoming Picture Bandwidth                                | 50 Mbps  |
|   | Total Outgoing Bandwidth                                  | 200 Mbps   |
|   | Outgoing Video Bandwidth                                  | 200 Mbps   |
|   | Outgoing Picture Bandwidth                                | 50 Mbps  |
|   | Picture Storage Bandwidth                                 | 50 Mbps  |
| <b>Event<sup>③</sup></b>                | Storage of Events or Alarms without Pictures <sup>④</sup> | Average: 15 per second<br>Peak: 60 per second (lasts 1 hour) |
|   | Access Control Events                                     | Average: 15 per second<br>Peak: 60 per second (lasts 1 hour) |
|   | Combined Events   | Average: 5 per second<br>Peak: 20 per second (lasts 1 hour)  |

① The maximum number of devices that the platform supports, including IPC, NVR, and ITC.

② When adding video channels and video devices, such as IPC, NVR and ITC, to the platform, the maximum number of devices and channels that the platform supports.

③ These values represent the maximum number of events that can be triggered at the same time. The numbers are measured based on the peak concurrency tests that were carried out 3 times a day. Each test lasted 20 minutes, with 30% of the peak concurrency being applied to the remaining day.

④ For events with snapshots, you must take into account the ability for disks and servers to concurrently write images at the same time.

## ■ Performance Specification

| Organization, Role and User     |                                       |
|---------------------------------|---------------------------------------|
| Organizations                   | 10 levels; 999 organizations in total |
| Roles (User Permission)         | 20                                    |
| Users                           | 50                                    |
| Online Users (PC and Agile App) | 10                                    |
| Roles per User                  | 32                                    |
| User Groups                     | 100                                   |
| Users per User Group            | 50                                    |
| DSS OnePass Users               | 50 online users and 500 total users   |

| Live View and Playback                  |                 |
|---|-----------------|
| Total Public View Folders               | 999             |
| Total Public Views                      | 1,000           |
| Total Private View Folders              | 999 per user    |
| Total Private Views                     | 1,000 per user  |
| Favorites Level                         | 10              |
| Total Favorites                         | 999 per user    |
| Device Channels for Total Favorites     | 2,000 per user  |
| Tags                                    | 10,000 per user |
| Locked Videos                           | 10,000 per user |
| Linked Tracking Channels per Channel    | 8               |
| Simultaneous Video Downloads per Client | 5               |
| Tours per User                          | 20              |

| Video Wall                             |     |
|--|-----|
| Video Walls                            | 32  |
| Public Video Wall Tasks                | 64  |
| Private Video Wall Tasks per User      | 64  |
| Public Video Wall Tour Tasks           | 64  |
| Private Video Wall Tour Tasks per User | 64  |
| Touring Videos per Video Wall Window   | 128 |

## Event

|                               |                   |
|-------------------------------|-------------------|
| Event Sources for Event Rules | 128 event sources |
| Combined Events Rules         | 100               |
| Combined Events               | 128               |
| Generic Event Rules           | 50                |

## DeepXplore

|                             |     |
|-----------------------------|-----|
| Channels Searched at a Time | 128 |
|-----------------------------|-----|

## Map

|                            |   |
|----------------------------|---|
| Hierarchies                | 8   |
| Maximum Size of Raster Map | 50 MB   |
| Raster Map Resolution      | 8,100 × 8,100   |
| Raster Maps                | 32  |
| Resources per Raster Map   | Up to 300 (after merging)<br>Up to 1,000 (before merging) |
| Static Visual Range        | 128   |

## Person and Vehicle Management

|   |        |
|---|--------|
| Person and Vehicle Groups                 | 999    |
| Group Levels                              | 10     |
| Total Persons                             | 5,000  |
| Persons on the DSS Platform               | 5,000  |
| Person Groups that a Person can Belong to | 20     |
| Cards                                     | 10,000 |
| Faces                                     | 5,000  |
| Fingerprints                              | 10,000 |
| Palm Veins                                | 10,000 |
| Vehicles                                  | 5,000  |

## Arming Lists<sup>①</sup>

|  |       |
|--|-------|
| Total Faces                            | 5,000 |
| Total Face Arming Groups               | 50    |
| Face Comparison Databases              | 50    |
| Faces per Face Comparison Database     | 5,000 |
| People in Total Face Comparison Groups | 5,000 |

|   |       |
|---|-------|
| Total Vehicle Arming Groups             | 8     |
| Vehicles per Vehicle Arming Group       | 5,000 |
| Vehicles in Total Vehicle Arming Groups | 5,000 |
| Total Text-Defined Alarms               | 100   |

① A face can belong to multiple face databases. All the devices together cannot contain more than 10 million faces when the number of faces in the arming lists are multiplied by the number of devices. For example, if a face arming list with 200,000 faces is sent to 40 devices, you can only send another face arming list with 100,000 faces to 20 devices. Or, you can send a list with 50,000 faces to 20 devices and another list with 100,000 faces to 10 devices.

### Access Control

|   |  |
|---|--|
| Zones   | 999  |
| Zone Levels   | 10   |
| Access Rules (Doors and Lifts)  | 50   |
| Door Access Rules   | 50   |
| Lift Access Rules   | 50   |
| Persons for Access Rules (Doors and Lifts)                                    | 5,000  |
| Persons for Door Access Rules   | 5,000 (1 password, 2 face images, 3 fingerprints, 2 palm veins, 1 Bluetooth card, and 5 cards for each person) |
| Persons for Lift Access Rules   | 5,000  |
| Persons per Rule  | 1,000  |
| Person Groups per Rule  | 100  |
| Global Anti-passback Rules  | 4  |
| Anti-passback Groups per Global Anti-passback Rule                            | 2–4  |
| Card Readers per Anti-passback Group for Global Anti-passback Rule (by Route) | 32   |
| Card Readers per Anti-passback Group for Global Anti-passback Rule (by Area)  | 32   |
| Global Interlock Rules  | 4  |
| Door Access Points per Group for the Rule of Global Interlock within Groups   | 2–4  |
| Interlock Groups for the Rule of Global Interlock between Groups              | 2  |
| Doors per Interlock Group for the Rule of Global Interlock between Groups     | 1–4  |
| Total Public Passwords  | 1,500  |
| Public Passwords per Device   | 500  |
| Scheduled Verification Plans  | 64   |

### Video Intercom

|                                |    |
|--------------------------------|----|
| Call Groups (Custom)           | 20 |
| Rooms (Custom) per Call groups | 16 |
| Persons per Room               | 20 |
| OnePass Accounts per Room      | 20 |

### Visitor

|                           |        |
|---------------------------|--------|
| Appointments in Progress  | 10,000 |
| Visitor Permission Groups | 50     |

### Attendance

|                                |           |
|--------------------------------|-----------|
| Total Attendance Points        | 64        |
| Device Attendance Points       | 64        |
| Break Periods                  | 16        |
| Attendance Periods             | 32        |
| Attendance Shifts              | 50        |
| Holiday Plans                  | 100       |
| Attendance Calendars           | 10        |
| Overtime Rules                 | 10        |
| Regular Schedules              | 100       |
| Temporary Schedules            | 2,000,000 |
| Scheduled Report Sending Rules | 32        |

### Intelligent Analysis

|   |    |
|---|----|
| People Counting Groups                                    | 4  |
| People Counting Rules per Group                           | 20 |
| Channels for Extracting People Counting Data at a Time    | 16 |
| Metadata Statistics Channels Searched at a Time           | 16 |
| Crowd Distribution Statistics Groups                      | 4  |
| Rules per Crowd Distribution Statistics Group             | 20 |
| Channels for Extracting Crowd Distribution Data at a Time | 16 |
| Vehicle Density Statistics Groups                         | 4  |
| Rules per Vehicle Density Distribution Statistics Group   | 20 |
| Channels for Extracting Vehicle Density Data at a Time    | 16 |

### Parking Lot

|                                 |       |
|---------------------------------|-------|
| Parking Lot Organization Level  | 10    |
| Total Parking Lot Organizations | 999   |
| Vehicles                        | 5,000 |
| Vehicle Groups                  | 8     |
| Vehicle Groups per Parking Lot  | 8     |
| Main Parking Lots               | 1     |

|   |     |
|---|-----|
| Total Entrance/Exit Points                          | 4   |
| Total Entrances and Exits                           | 4   |
| Entrances   | 4   |
| Exits   | 4   |
| Parking Overtime Rules                              | 128 |
| Time Periods per Day for Each Overtime Parking Rule | 6   |
| Rules for Sending Scheduled Reports                 | 32  |

### Maintenance Center

|             |     |
|-------------|-----|
| Alert Rules | 128 |
|-------------|-----|

### Quick Commands

|                            |    |
|----------------------------|----|
| Quick Commands per User    | 20 |
| Commands per Quick Command | 20 |

### IP Speaker

|                              |    |
|------------------------------|----|
| Broadcasting Channels        | 16 |
| Customized IP Speaker Groups | 20 |

### Notification Center

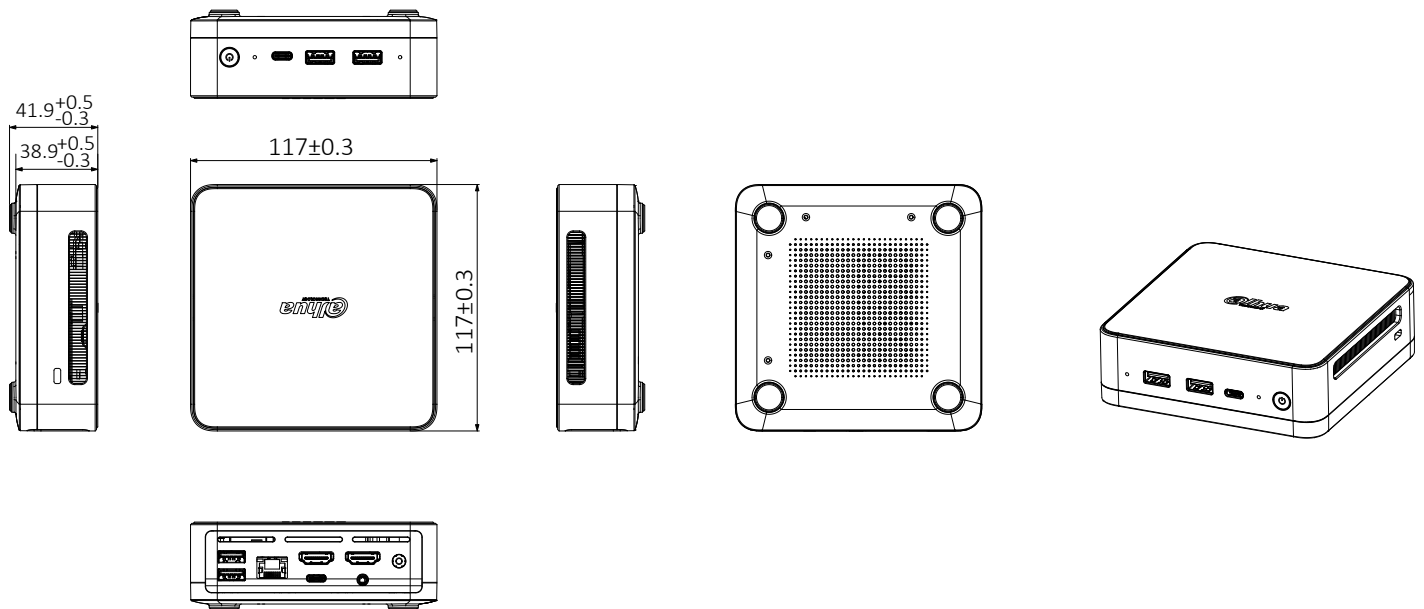
|          |       |
|----------|-------|
| Messages | 1,000 |
|----------|-------|

### Data Storage

|  |            |
|--|------------|
| Total Database Records                     | 10,000,000 |
| Event Records                              | 2,000,000  |
| Face Recognition Records                   | 2,000,000  |
| ANPR Records                               | 2,000,000  |
| Metadata Records                           | 2,000,000  |
| Access Records                             | 2,000,000  |
| Analysis Records for People Enter and Exit | 2,000,000  |
| Video Intercom Records                     | 2,000,000  |
| Visitor Records                            | 2,000,000  |
| Attendance Records                         | 2,000,000  |
| <b>Attendance Daily Reports</b>            | 2,000,000  |
| Request Records                            | 2,000,000  |
| Historical Count Records                   | 2,000,000  |
| In Area Statistical Records                | 2,000,000  |

|   |           |
|---|-----------|
| Heat Map Records                                  | 2,000,000 |
| Hourly/Daily/Monthly Face Statistics              | 2,000,000 |
| Hourly/Daily/Monthly Human Body Statistics        | 2,000,000 |
| Hourly/Daily/Monthly Motor Vehicle Statistics     | 2,000,000 |
| Hourly/Daily/Monthly Non-motor Vehicle Statistics | 2,000,000 |
| Vehicle Enter Records                             | 2,000,000 |
| Vehicle Exit Records                              | 2,000,000 |
| Vehicle Forced Exit Records                       | 2,000,000 |
| Maintenance Alert Records                         | 2,000,000 |
| Maintenance Fault Records                         | 2,000,000 |
| Operator Logs                                     | 2,000,000 |
| Service Logs                                      | 2,000,000 |

## ■ Dimensions (mm)



## ■ DSS Mobile Client Main Functions

### ***DSS Agile 8***

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#### ◆ ***Live View***

Even when you are away from your computer, you can keep your premises secure with DSS Agile. You can view live videos from up to 16 channels simultaneously and choose among 3 stream types to suit your mobile network conditions. PTZ control lets you pan, tilt, and zoom to cover nearly every angle. When anything of interest occurs, you can take snapshots or recordings as evidence that stores on your phone, or send a voice message to deter unwanted activities.

#### ◆ ***Playback***

In DSS Agile, recorded videos can be played back at up to 8X speed or slowed down to 1/8X. You can also use manual recording to record important footage and save it directly to your phone.

#### ◆ ***Visitor Management***

You can create visitor passes and grant access permissions with ease, while effortlessly tracking each visitor's status, from initial visit details through end of the visit. Automatic visit and leave can be set for unmatched convenience.

#### ◆ ***Access Control***

With DSS Agile, you can remotely monitor and operate all access control devices, from remotely unlocking a door for someone with verified credentials, to setting a door to remain locked to prevent any entry.

#### ◆ ***Target Tracking***

When suspicious activity occurs, DSS Agile lets you quickly locate persons of interest by searching face recognition records over a specified time range, uploading a face image to find matches, or searching captured records of people, non-motor vehicles, and motor vehicles by attributes.

#### ◆ ***Event***

You can receive and manage a wide range of alarms, and subscribe to alarm notifications, so you will still get notified even when DSS Agile is not running.

#### ◆ ***Video Intercom***

You can make and receive calls with main 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 record of incoming and outgoing calls ensure you never miss important messages.

#### ◆ ***Alarm Controller***

You can remotely operate alarm controllers through DSS Agile to protect areas, such as arming and disarming areas, bypassing and isolating zones, viewing real-time area and zone status, and filtering displays to show only the information you care about.

### ◆ File Management

You can manage snapshots and videos, including deleting them, exporting them to local albums, and more. Video downloads can be paused automatically or manually, saving your time and bandwidth from redownloading them when the download is interrupted.

## DSS OnePass

### ◆ Visitor Management

You can easily manage visitors by registering their details and generating visitor passes with the required access permissions. When they arrive, they can use the passes to gain access to where you are, and DSS OnePass logs when visitors begin and end their visits.

### ◆ Intercom Monitoring

When guests arrive, they can call from the door station, or be verified through live video. Once you confirm their identity, you can remotely open the door in DSS OnePass. If you spot any unwanted activities, you can tap to call the management center to report an emergency.

### ◆ Door Opening

You can open the door using Bluetooth, by scanning the QR code at the door station, or remotely through the app.

### ◆ Attendance

You can check in and out directly in the app, and view your attendance records there.

### ◆ Message Center

The unlock records and alarm messages on the indoor monitor are fully accessible in DSS OnePass, allowing you to identify potential threats and keep your residence secure.

## ■ DSS Mobile Client Requirements

|                         | iOS  | Android              |
|-------------------------|--|----------------------|
| <b>Model</b>            | iPhone 5S or later   | -                    |
| <b>RAM</b>              | -  | 2 GB or more         |
| <b>Resolution</b>       | -  | 1280 × 720 or higher |
| <b>Operating System</b> | iOS 12.0 or later  | Android 8.0 or later |
| <b>Language</b>         | Arabic, Bulgarian, Czech, English (United States), French, Japanese, Korean, Spanish (Latin America), Polish, Portuguese, Russian, Chinese (Simplified), Spanish (Europe), Chinese (Traditional), Turkish, Ukrainian, Vietnamese, Malay, Romanian, Indonesian, Italian, Slovak |                      |