

# KX-FDASV8016Z

All-in-one Security System for Enterprises



## Hardware Specification

Item	Description	
System	Main Processor	Intel i5-6600, 64 bits 4 Core Processor
	Operation System	Embedded Linux
	Memory	8 GB
	System Disk	Seagate 7200 RPM Enterprise Class HDD 1 TB
	Motherboard	Embedded board (7 × 24 operation)
	Hard Disk Hot Swap	Support hot swap and online replacement
	Hard Disk Compatibility	SAS/SATA disk
Interface	Number of Network Ports	4 Ethernet ports (100/1000 Mbps)
	USB	2 × USB 2.0 on front panel; 2 × USB 3.0 on rear panel
	HDMI	3 HDMI ports
	VGA	1 VGA port
Storage	HDD Installation	Support 15 HDDs (3.5") for video or picture storage (8 TB per HDD)
	Storage	Up to 200 TB per server
	HDD Mode	Single
	Bandwidth of Video Storage per Server	612 Mbps
Other	Power	Maximum power 315 W; stable power 210 W
	Working Environment Temperature	0 °C to 40 °C (32 °F to +104 °F)
	Working Environment Humidity	10%–80% (RH), non-condensing
	Storage Environment Temperature	–20°C to +70°C (–4 °F to +158 °F)
	Storage Environment Humidity	5%–90% (RH), non-condensing
	Working Altitude	0 m–5000 m (0 ft–16,404.20 ft)
	Weight (Without Package)	19.1 kg (42.11 lb)
	Dimension	444.8 mm × 133.2 mm × 522.2 mm (17.51" × 5.24" × 20.56")
	Installation Method	Standard 19-inch pallet mount
	Secondary Development	Platform SDK provided

## ■ PC Client System Requirements

Item	Description	
	Recommended	Minimum
<b>CPU</b>	Intel Core i7, 64 bits 4 Core Processor	Intel Core i3, 64 bits 4 Core Processor
<b>Memory</b>	16 GB	4 GB
<b>Graphics Card</b>	GeForce® GTX 1060 3 GB (Discrete Graphics Card)	Intel® HD Graphics 530 (Integrated Graphics)
<b>Hard Drive Capacity</b>	200 GB free space for DSS Client	100 GB free space for DSS Client
<b>Ethernet Port</b>	1,000 Mbps	

## ■ Performance Specification

Organization, Role and User	
Organizations	10 levels; 999 organizations in total
Roles (User Permission)	100
Users	50 online users and 200 total users
Users for VDP Mobile APP (iOS and Android supported)	500 online users and 5,000 total users

Recording Plan	
General Recording Plans	3,000
Motion Detection Recording Plans	3,000
Video Retrieval Plans	3,000

Event	
Event Rules	3,000
Combined Event Rules	100
Combined Events	200

Map	
Hierarchies	8
Size of Offline GIS Map Package	500
Raster Maps	256
Submaps per Map	32
Maximum Size of Raster Map	15 MB
Raster Map Resolution	8100 × 8100
Resources on GIS Map	300
Resources per Raster Map	300

## Person and Vehicle Management

Persons and Vehicle Groups	999
Sub Groups per Level (Main Group Included)	10
Persons	100,000
Cards	200,000
Faces	100,000
Fingerprints	200,000
Vehicles	20,000

## Face and Vehicle Watch Lists<sup>①</sup>

Face Watch Lists	50
Vehicle Watch Lists	16
Total Faces	100,000
Faces per Face Watch List	50,000
Vehicles per Vehicle Watch List	20,000

## Intelligent Analysis

People Counting Groups	8
People Counting Rules per Group	20

## Parking Lot Management

Vehicles	20,000
Vehicle Groups	16
Parking Lots	8
Entrances and Exits	16

## Access Control

Persons per Permission Group	10,000
Access Permission Groups	200
Door Groups	200
Public Passwords	1,500

## Notification Center

Notification Center Message	1,000
-----------------------------	-------

## Data Storage

Event Records	5,000,000
Face Recognition Records	5,000,000

ANPR Records	5,000,000
Metadata Records	5,000,000
Access Control Records	5,000,000
Video Intercom Records	5,000,000
Visitor Records	5,000,000
Entrance Records	5,000,000
Exit Records	5,000,000
Forced Exit Records	5,000,000
Historical Counting Records	5,000,000
In Area Statistical Records	5,000,000
Heat Map Records	5,000,000
Operator Logs	5,000,000
Service Logs	5,000,000

## Server Specification

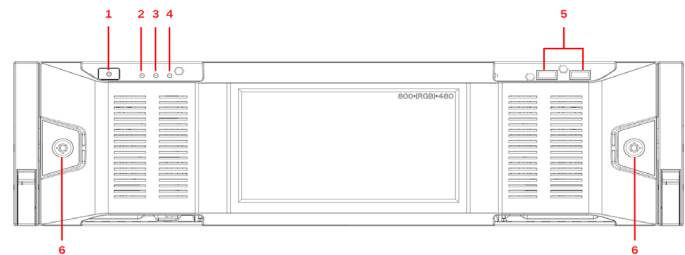
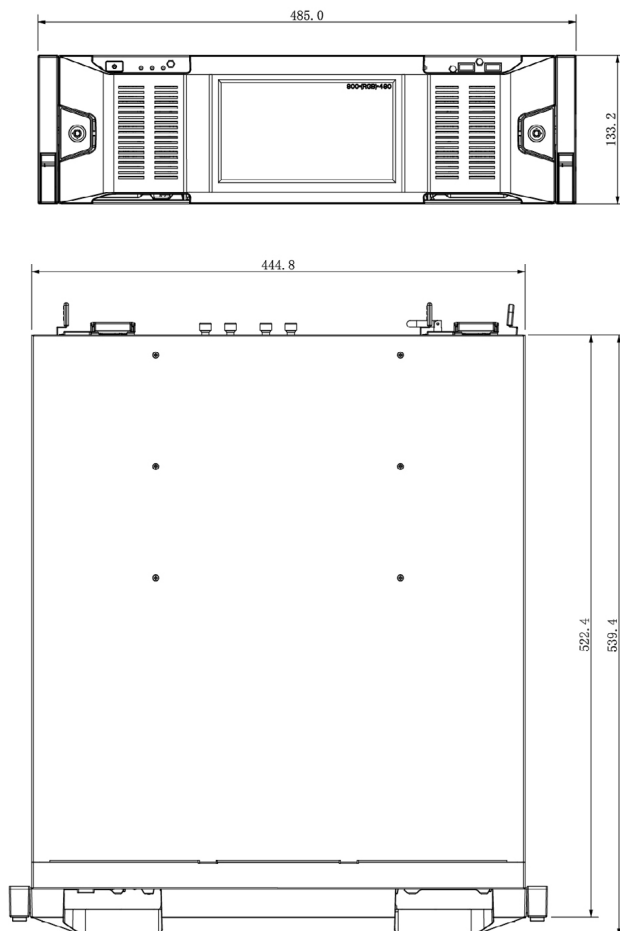
Parameter		Single Server	Multiple Servers
<b>Number of sub servers per system</b>	Sub Servers	-	5 servers
<b>Total Devices</b>	Devices <sup>②</sup>	2,000 devices	6,000 devices
	Auto-Registered Devices	1,000 devices	5,000 devices
<b>Video Devices and Channels</b>	Video Devices and Channels <sup>③</sup>	500 devices; 1,000 channels	2,500 devices; 5,000 channels
	P2P Devices	32 devices	
	Add devices by ONVIF	500 devices; 1,000 channels	2,500 devices; 5,000 channels
	Face Recognition Devices and Channels	20 devices; 100 channels	100 devices; 500 channels
	ANPR Channels	100 channels	500 channels
	Video Metadata Channels	100 channels	500 channels
	<b>Access Control Devices</b>	Access Control Devices	200 devices; 500 doors
VDP		2,000 devices	
<b>Alarm Devices</b>	Alarm Controllers	64 devices; 320 zones	320 devices; 1,600 zones
	Emergency Phone Towers	20 devices; 40 channels	100 devices; 200 channels
<b>Intelligent Analysis</b>	People Counting Channels	32 channels	160 channels
	Heat Map Channels	32 channels	160 channels
<b>Media Transmission Server</b>	Total Incoming Bandwidth	600 Mbps	3,000 Mbps
	Incoming Video Bandwidth	600 Mbps	3,000 Mbps
	incoming Picture Bandwidth	100 Mbps	500 Mbps
	Total Outgoing Bandwidth	600 Mbps	3,000 Mbps
	Outgoing Video Bandwidth	600 Mbps	3,000 Mbps
	Outgoing Picture Bandwidth	100 Mbps	500 Mbps
	Total Storage Bandwidth	600 Mbps	3,000 Mbps

<b>Media Transmission Server</b>	Video Storage Bandwidth	600 Mbps	3,000 Mbps
	Picture Storage Bandwidth	100 Mbps	500 Mbps
<b>Playback, Storage and Download</b>	Prerecording Bandwidth for Alarm Recordings	400 Mbps	2000 Mbps
	Maximum Capacity per Storage Server(IPSAN)	200 TB	1 PB
<b>Events<sup>④</sup></b>	Total Events <sup>⑤</sup>	240 per second	480 per second
	Storage of Events or Alarms with Pictures <sup>⑥</sup>	240 per second	480 per second
	Alarms with Snapshots (Stored on Devices)	240 per second	480 per second
	Access Control Events	240 per second	480 per second
	Number of Combined Events	100 per second	

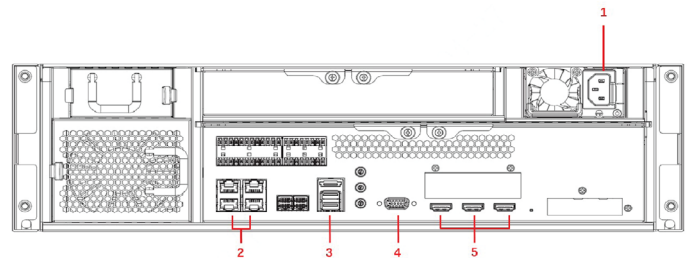
- ① All the devices together cannot contain more than 10 million faces when the number of faces in the watch lists are multiplied by the number of devices. For example, if a face watch list with 200,000 faces is sent to 40 devices, you can only send another face watch list with 100,000 faces to 20 devices. Or, you can send a list with 50,000 faces to 20 devices and another list with 100,000 faces to 10 devices.
- ② The maximum number of devices, including IPC, NVR, and ITC, cannot exceed 2,000 for a single server, and 6,000 for multiple servers.
- ③ When adding video channels and video devices, such as IPC, NVR and ITC, to the platform, you cannot add more than 500 devices, 1,000 channels for a single server, and 2,500 devices, 5,000 channels for multiple servers.

- ④ 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.
- ⑤ The maximum number of events that can be triggered at the same time largely depends on the concurrent write capability of the database.
- ⑥ For events with snapshots, you must take into account the ability for disks and servers to concurrently write images at the same time. For servers it is 200 Mbps.

## ■ Dimensions (mm) and Panels



- 1- Power Button
- 2- Hard Device Indicator
- 3- Alarm Indicator
- 4- Network Indicator
- 5- USB 2.0
- 6- Lock



- 1- Power Interface
- 2- Gigabit LAN Port 1-4
- 3- USB 3.0
- 4- VGA
- 5- HDMI Port 1-3