DS-IX2003-A7U/LX(B)
Intelligent Fusion Server

Intelligent fusion server, equipped with professional GPU card, integrates deep learning-based algorithms of facial analysis, picture structuralization and video structuralization. It is a collection of analysis, storage and application. By recognizing, analyzing, modelling and comparing pictures of faces, human bodies or vehicles, the intelligent fusion server can perform functions as list alarm, creating personnel archives, personnel trace analysis, searching by human body picture, vehicle arming, and so forth.

The intelligent fusion server is widely applied in city, community, school, company, industrial area and other face recognition scenarios.

- Integrates analysis, storage and application as one, and applicable to various scenarios

- Concurrent analysis of Max. 96 channels of 1080P network cameras for a single device

- Face picture analysis and processing of Max. 384 pieces per second for a single device

- Provides Max. 80 million pieces of pictures and data storage for a single device

- Performs various functions, including list alarm, personnel archive, personnel trace analysis, search by human body picture, and vehicle arming, etc. via web application interface

- Equipped with professional GPU accelerator and integrates deep learning-based intelligent algorithms

- Supports cluster deployment to deal with balanced load, dynamic adding and failover

- Supports adding Max. 5 devices under cluster mode.

▪ Specification

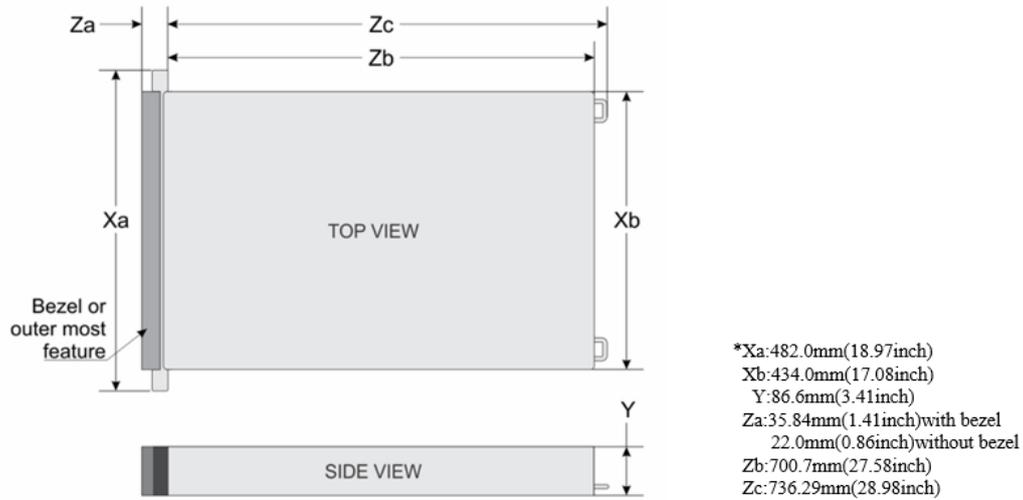| Face Analysis	
Analysis Type	Supports analysis, comparison and classification of faces in pictures, real-time videos or recordings.
Data Type	Picture, video
Facial Video Format	Resolution: 720 P to 8 MP Real-time video stream: H.264, Hikvision H.265 Local recording: H.264, Hikvision H.265
Video Frame Rate Requirement	12 to 30 frames per second (25 frames per second recommended)
Face Picture Format	JPEG(JPG), TIF, BMP, PNG, partial GIF(static diagram)
Face Picture Requirement	Face analysis target: Resolution: 48 × 48 to 8000 × 8000 (64 MP) Size: ≤ 10 MB Pupil distance: 20 to 300 pixels recommended Face angle deviation: Face analysis: ≤35° (vertical); ≤55° (horizontal) Face picture of list library: ≤25° (vertical); ≤30° (horizontal)
Face Attribute	Gender, age, expression, smile, as well as behaviors of wearing a mask, or glasses
Face Video Analysis and Comparison	96 channels (2 MP) 72 channels (> 2 MP to 5 MP) 48 channels (> 5 MP to 8 MP)
Face Picture Analysis and Comparison	384 pieces/second Format: JPEG(JPG), TIF, BMP, PNG, partial GIF(static diagram)
Max. Arming Lists	3 million
Max. List Libraries	128
Concurrent Performance-1 V 1 Comparison	30 pairs per second
Blocklist Alarm-Response Time	1 s
Video Structuralization	
Analysis Type	Supports analysis and modelling for human bodies or vehicles in pictures, real-time videos or recordings.
Data Type	Picture, video
Video Format	Resolution: 720 P to 8 MP Real-time video stream: H.264, Hikvision H.265
Analysis of Human Body and Vehicle Videos	96 channels (2 MP) 72 channels (> 2 MP to 5 MP) 48 channels (> 5 MP to 8 MP)
Analysis of Human Body and Vehicle Pictures	240 pieces per second (2 MP) 120 pieces per second (> 2 MP to 8 MP)
Video Frame Rate Requirement	12 to 30 frames per second (25 frames per second recommended)
Picture Format	JPEG(JPG), TIF, BMP, PNG, partial GIF(static diagram)

Human Body Picture Requirement	Resolution: 256 × 256 to 8000 × 8000 (64 MP) Human body width: 70 to 300 pixels recommended Completeness: the blocking area should be less than 30 percent of the target Angle deviation: the depression angle should be no greater than 44°
Imported Video Analysis	Single video size ≤ 10 GB, and total video size ≤ 100 GB Max. 40 times accelerated analysis speed Format: TS, DaHua es, SVAC, MBF, PS, MP4, AVI, ASF, HIK es, Tian Di es
Human Body Attribute	Gender, age, hair style, clothes type, clothes color, as well as the following behaviors: wearing a hat, a mask, or glasses; carrying a bag or luggage; driving a non-motor vehicle (the number of passengers, vehicle type, vehicle size, driving direction, driving speed)
Vehicle Attribute	Vehicle color, vehicle type, vehicle main brand, license plate number
Data Storage	
Picture and Structured Data	20 million (Hot data) + 60 million (Cold data)
Search by Face Picture-Response Time	2 s
Search by Human Body Picture-Response Time	2 s
Search by Vehicle Picture-Response Time	2 s
Product Performance	
Algorithm Type	Faces, human bodies or vehicles
Cluster Capacity	≤ 5
Web Application	
Alarm	Blocklist, allowlist, high frequency, low frequency, and license plate
1 V 1 Comparison	Supports rapid and accurate comparison of 2 face pictures
Smart Search	List library search, capture library search, alarming search
Personnel Archive	Support
Device Operation and Maintenance	Support
Hardware Specifications	
CPU	Intel Xeon Silver 4410Y × 2
Memory	128 GB
GPU Cards	KT2 card ×3
Rated Power Consumption	377 W
Max. Power Consumption	418 W
Network Interfaces	Gigabit Ethernet self-adaptive interface ×6
External Interfaces	USB 2.0 × 2 + USB 3.0 × 2 + VGA × 2
Device Dimensions	715.5 mm × 482 mm × 86.8 mm (28.2 inch × 19.0 inch × 3.4 inch)
Package Dimensions	965 mm × 670 mm × 320 mm (38.0 inch × 29.4 inch × 12.6 inch)
Chassis Height	87 mm (3.4 inch)
HDD Specifications	480 GB SSD × 2 (RAID1) + 480 GB SSD × 3 + 12 TB SATA ×5
PSU	Hot-plugged efficient 1+1 redundant power module
Physical and Environmental Parameters	
Storage and Transportation Temperature	-40 °C to 70 °C (-40 °F to 158 °F)

Working Temperature	5 ℃ to 35 ℃ (41 ℉ to 95 ℉)
Working Humidity	8% to 90% (without condensation)
Net Weight (Without Package)	21.9 kg (48.28 lb.)
Gross Weight (With Package)	33.76 kg (74.42 lb.)

▪ Available Model

DS-IX2003-A7U/LX (B)

▪ Dimension

*Xa:482.0mm(18.97inch)
Xb:434.0mm(17.08inch)
Y:86.6mm(3.41inch)
Za:35.84mm(1.41inch)with bezel
22.0mm(0.86inch)without bezel
Zb:700.7mm(27.58inch)
Zc:736.29mm(28.98inch)

▪ Accessory

▪ Included

DS-IX2002-A7U/L X(B)	DS-IX2001-A7U/L X(B)

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