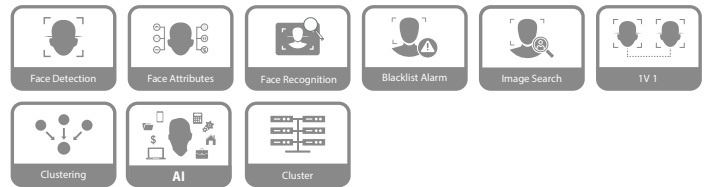


DHI-IVS-F7500-2T-S2-GU2

Face Recognition Intelligent Server



- Adopt advanced face deep learning algorithm, and give full play to GPU parallel computing processing capability. Algorithm recognition effect and practical performance have reached advanced level in the industry.
- Adopt advanced clustering algorithm, so clustering is more accurate.
- Arm the restricted list database which has millions of face data.
- Adopt multiple slot design.
- Support modular replacement, which better meets requirements of changing the hardware.
- Support cloud deployment.



System Overview

Based on server, this intelligent image analysis and comparison device integrates server resources and intelligent algorithm, analyzes and compares face images that are transmitted through network. Main functions include face detection, face modeling, face arm, search by image, and face clustering. This device applies to intelligent application scenes such as public security, building, finance and traffic.

Functions

Face Detection

Detect and analyze face image stream, including gender, age, expression, glasses, mustache, mouth mask, open and closed eyes.

Face Modeling

Extract face image features.

Face Arming

Compare the face snapshot with designated face database in real-time, and get information about the first person that exceeds arm thresholds.

Search History Alarm Records

Search historical deployment alarm records.

Registered Database Management

Distinguish restricted list database, trusted list database, static database and other databases.

Add, delete and modify the databases.

Add, delete and modify the database members.

Search Registered Database

Search registered database member by name, gender, birthday and identity card number.

Search by Image in Registered Database

Select one face image manually, compare with registered database, thus find the qualified personnel, and arrange them according to the similarity.

Search Snapshot Database

Search historical person passing by records in the snapshot database.

Search by Image in Snapshot Database

Select one face image manually, filter by time and channel, compare with historical data, thus find the qualified personnel, and arrange them according to the similarity.

1V1

Support 1V1 face comparison, and return similarity result.

Face Clustering

Support face clustering and archives, work with Video Cloud Platform to provide one face and one archive, archive integration, identity confirmation and other face related applications.

Cluster

Support cluster (only in the case of working with video cloud platform).

Application

Public security: Personnel control, search by image, face clustering, and identity verification.

Traffic police: Arm the personnel whose driving license is cancelled, and pedestrians running red light.

Finance: Indicate VIP customers.

Building: Access control and attendance check based on face recognition.

Retail: Personnel classification by attributes, and indicate VIP customers.

Technical Specification

System

Main processor	Two Intel Xeon Gold 5120
GPU	Two NVIDIA TESLA T4 GPU
Operating system	CentOS Linux release 7.4.1708 (Core)
Memory	Sixteen 16GB DDR4 memory, maximum 24 slots.
HDD	Five 3.5"4T disks which can be extended to maximum 32T (each disk is 4T), and maximum 8 slots. 7.2K RPM SATA 6Gbps 512n 3.5"

AI for Face Analysis

Face Detection	Detect and analyze face image stream, including gender, age, expression, glasses, mustache, mouth mask, open and closed eyes. Support jpg, png, bmp, jfif, dib, tif, jpe, pbm, ppm, and pgm pictures.
Face Modeling	Extract face image features.
Face Arming	Compare the face snapshot with designated face database in real-time, and get information about the first person that exceeds arm thresholds.
Search History Alarm Records	Search historical deployment alarm records.
Registered Database Management	Distinguish restricted list database, trusted list database, static database and other databases. Add, delete and modify the databases. Add, delete and modify the database members.
Search Registered Database	Search registered database member by name, gender, birthday and identity card number.
Search by Image in Registered Database	Select one face image manually, compare with registered database, thus find the qualified personnel, and arrange them according to the similarity.
Search Snapshot Database	Search historical person passing by records in the snapshot database.
Search by Image in Snapshot Database	Select one face image manually, filter by time and channel, compare with historical data, thus find the qualified personnel, and arrange them according to the similarity.
1V1	Support 1V1 face comparison, and return similarity result.
Face Clustering	Support face clustering and archives, and work with Video Cloud Platform, so multiple faces of one person cluster as one archive; identity verification and other face related applications.
Cluster	Support cluster (in case of deployment of video cloud child node).

Port

Network	Two 10000/1000 MB self-adaptive network ports
USB	2 front USB3.0 ports and 3 rear USB3.0 ports
VGA	2 VGA ports
Other Ports	1 RJ-45 management network port

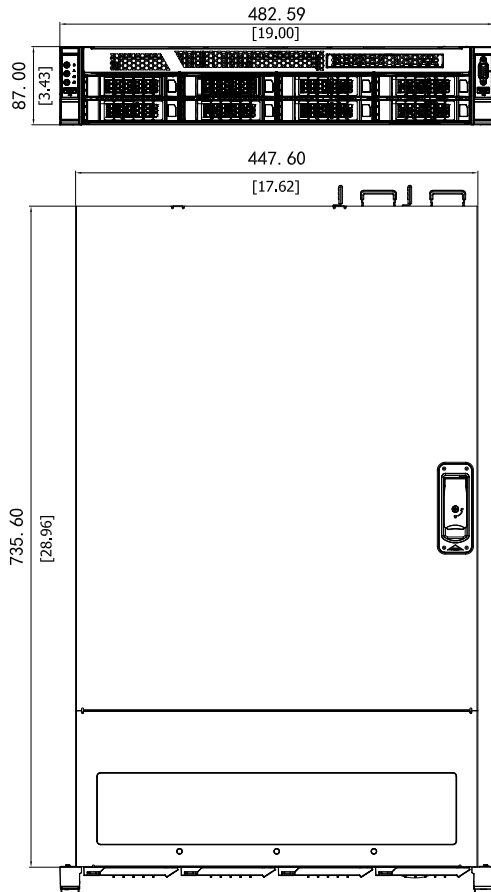
General

Power Supply	100–127V/200–240V, 50/60Hz, 10A/5A
Power Redundancy	Dual power redundancy
Power Consumption	≤ 800W
Operating Temperature	10°C to 35°C (50°F to 95°F)
Operating Humidity	35%–80% RH, maximum relative humidity is 90%RH (40°C).
Storage Temperature	-40°C to 60°C (-40°F to 140°F)
Storage Humidity	20%–93%RH
Gross Weight	31.89 kg (70.31 lbs)
Net Weight	22.09 kg (48.70 lbs)
Dimensions	87.00mm × 447.60 mm × 735.60 mm (3.43" × 17.62" × 28.96")
Package Dimensions	273.00mm × 754.00mm × 1069.00mm (10.75" × 29.68" × 42.09")
Installation	Standard 19" rack installation with guide rail.

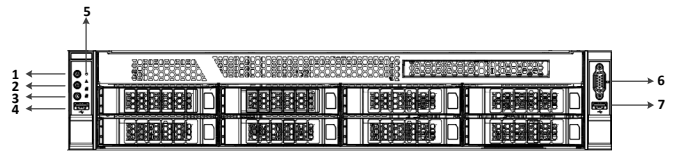
Ordering Information

Type	Model	Description
Face Recognition Intelligent Server	DHI-IVS-F7500-2T-S2-GU2	Face Recognition Intelligent Server

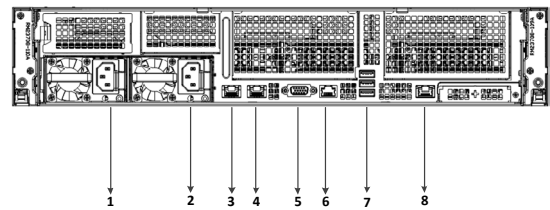
Dimensions (mm[inch])



Panels



- 1 Power Button
- 2 ID Button
- 3 Reset Button
- 4 USB3.0 Port
- 5 HDD/System Status/LAN1/LAN2 LED
- 6 VGA Port
- 7 USB3.0 Port



- 1 Power Input1
- 2 Power Input2
- 3 LAN Port1
- 4 LAN Port2
- 5 VGA Port
- 6 Serial Port
- 7 3*USB3.0 Port
- 8 Management Port