

DHI-XIS7012R-V

1VGA AI X-ray Inspection Server



DeepSense

DeepSense series products adopt the most advanced AI technologies, including deep learning algorithms that primarily target people and vehicles, which provides higher flexibility and accuracy for end-users. This enables the Dahua DeepSense series to offer various advanced applications such as Face Recognition, ANPR, Metadata, People Counting, traffic data statistics, etc.

The complete lineup of Dahua DeepSense includes network (PTZ) cameras, network video recorders, servers, and platform management products. Beyond seeing the world, the power of AI allows devices to perceive the environment and understand the world in a better way.

System Overview

Dahua XIS is an AI based X-ray Inspection server which can work with security X-ray inspection machine. This device can analysis images supplied by X-ray machine and detect dangerous objects from Luggage.

With build-in deep learning module, XIS product adopt image structuring technology based on deep learning algorithms, achieving high-precision object analysis, picture storage, and management. By applying deep learning artificial intelligence, XIS help users to focus on target object, improve accuracy and efficiency of security check.

XIS can be widely used in areas for security screening, such as railway station, bus station, logistics & express, government agencies, retail, casinos, building and large events.

- Intel dual-core processor
- Built-in GPU for deep learning acceleration
- Supports dangerous object recognition
- Risk level setting and alarm triggering
- Real time detection of security screen
- Luggage X-ray images storage and export
- Support X-ray Inspection machine networking
- Supports RAID 0/1/5/6/10
- 1 VGA video input
- 2HDMI/2VGA video output
- Redundant power

Functions

Dangerous objects recognition

Embedded image structuring technology based on deep learning algorithms, support 6 kinds of object recognition. Recognizable objects include Knives, Bottle Liquide, Umbrella, Electronic, Guns and Spray cans. Recognizable object type increases with software update.

Real-time Alarm

Support automatically detect the dangerous object in the image and popping up the results immediately. Objects can be divided into different risk level, such as High risk, Warning and Safe object. Operator can see different levels of alarms in live view.

X-ray inspection machine networking

Traditional X-ray inspection machine can only stand-alone operation. XIS product helps it networking. After networking, datacenter can receive alarm from different X-ray inspection machine. Datacenter can storage objects images, can use date to analysis. After networking, the application and management of multiple X-ray inspection machines is more convenient.

Technical Specification

System

Main Processor	Intel Dual-core Processor
Memory	8GB, up to 32GB
Operating System	Embedded LINUX

Artificial Intelligence

Object Recognition	Dangerous object recognition, display and mark dangerous packages with corresponding risk levels
Object Category	Knives, Bottle Liquide, Umbrella, Electronic, Guns, Spray cans
Risk level	High risk, Warning, Safe object Object category can be selected into risk levels
Trigger Events	Alarm out, activated by object recognition risk level Voice prompt, support customized audio file upload
Picture Storage	Package picture storage with risk level and category information
Search Mode	Time /Date, Risk level, Object category
Backup Mode	USB Device

Video and Audio

Video Input	1 channel VGA
Resolution	1208 × 1024 @60fps, 1208 × 1024 @75fps, 1920 × 1080 @60fps
Two-way Talk	1 audio input, 2 audio output, RCA

Display

Main Output	HDMI1/VGA1: 1208 × 1024 @60fps, 1208 × 1024 @75fps, 1920 × 1080 @60fps
Video Loop Out	HDMI2/VGA2: 1208 × 1024 @60fps, 1208 × 1024 @75fps, 1920 × 1080 @60fps

Alarm

Alarm input	16 Channel
Relay Output	8 Channel

Network

Interface	4 RJ-45 Ports (10/100/1000Mbps)
Network Port Mode	Independent Ethernet Ports, Load Balance, Fault-Tolerance, Link Aggregation
Network Function	TCP/IP, IPv4, NTP, DHCP, DNS, IP Filter

Storage

Internal HDD	12 SAS/SATA HDDs, Up to 10 TB capacity for each HDD, Independent HDD bracket, hot-swap
HDD Mode	Single, Raid 0/1/5/6/10(Enterprise-level HDDs are recommended), Support Global HDD Hot-spare
eSATA	1 eSATA Port (Please contact technical engineer to confirm the compatible device)
SAS	1 miniSAS Port

Auxiliary Interface

USB	4 USB 3.0 Ports
RS232	1 Port
RS485	1 Port

Third-party Support

X-ray Machine Support	Nuctech, Safeway Syetem, Fiscan, etc.
-----------------------	---------------------------------------

Electrical

Power Supply	AC100V ~ 240V, 50 ~ 60 Hz, Hot-swap, Redundant
Power Consumption	<60W (Without HDD)

Environmental

Operating Conditions	0°C ~ +45°C (+32°F ~ +113°F), 86 ~ 106kpa
Storage Conditions	-20°C ~ +70°C (-4°F ~ +158°F), 0 ~ 90% RH

Construction

Dimensions	2U, 447.6mm x 558.2mm x 87mm (17.62" x 21.98" x 3.43") (without ear)
Net Weight	14kg (30.86 lb) (without HDD)
Installation	Standard 19-inch Rack-mounted

Certifications

CE	EN55032, EN55024, EN50130-4, EN60950-1
FCC	Part 15 Subpart B, ANSI C63.4-2014

Dimensions(mm)

