Overview

ECS-5XS Series is an industrial-grade intelligent analysis device that works with ordinary network cameras. The device is integrated with video decoding, data transmission, data storage, and intelligent algorithms. It receives videos from ordinary network cameras, analyzes objects in the videos, and outputs an alarm upon detection of an abnormal behavior. The device is easy to deploy, operate, and adapts to different environments.

The device utilizes deep learning algorithms to achieve fast and accurate face comparsion and action analysis. It complies with industrial-grade standards, featuring a sophisticated and sturdy appearance, and is suitable for various indoor and outdoor application scenarios. The device offers abundant APIs to meet various application requirements and facilitate integration with third-party systems.

Features

- Supports real-time analysis of 4/8/16-ch 2MP video streams.
- Built-in over 100 behavior algorithms.
- Supports local algorithm warehouse mode, enabling selection of any 20 types of algorithms for deployment. Actual concurrency depends on the model of the selected algorithms.
- Supports face-behavior linkage (identifying the person after detecting an abnormal behavior) .
- Supports generating alarm videos/images and reporting alarm information to third-party platforms via API.
- Supports standard H.264 and H.265 video streams.
- Supports integrating 4/8/16-ch third-party cameras via RTSP or Onvif.
- Dual Gigabit Ethernet ports enable dual-network IP configuration, adapting to diverse networking environments.
- Supports up to 128 face libraries with 100, 000 face imagesin total.
- Lightweight, fanless structure, flexible deployment, suitable for harsh conditions (including dusty, oily, extremely hot or extremely cold environments) .

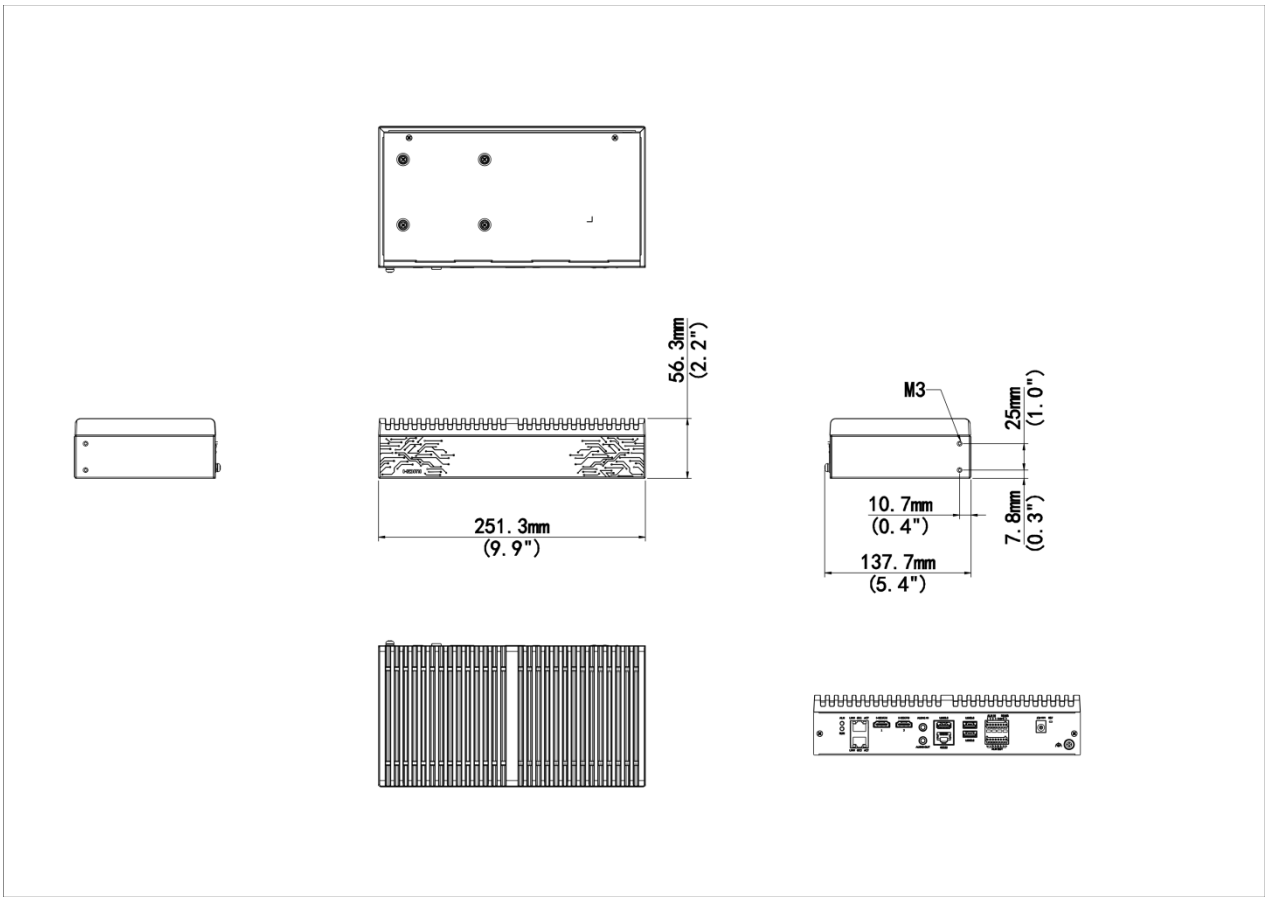
Specifications

Model	ECS-508S-SF-HA	ECS-504S-SF-HA	ECS-516S-SF-HD
BOM			
BOM	0235C8TP	0235C8TS	0235C9KL
VCA			
Smart	1, General functions: face detection, Intrusion Detection (support pedestrians, motor vehicles, and nonmotorized vehicles), Overcrowding Detection, Area People Counting, Tripwire People Counting, Preset Marker Detection, Enter Area, Leave Area, Cross Line Detection 2, Environmental safety: Fire Detection, Fume Detection, Evacuation Route Obstruction, Object Removed, Rat Detection, Dog Detection, Uncovered Soil Detection, Improper Stacking Of Materials, Trash Bin Open Detection, Trash Bin Overflow, Exposed Trash, Bagged Trash, Charging Gun Not In Place Detection, Gas Cylinder Detection, No Fire Extinguisher Detection, Dump Truck Without Tarp Detection, Oil Leak Detection, Water Leak Detection, Gas Leak Detection, Test Paper Color Change Detection, Unattended Fire Detection, Ground Water Accumulation Detection, Animal Intrusion Detection [wild boar, bear, tiger, other animals (cat, dog, cow, horse, sheep, pig, leopard, wolf, deer, kangaroo)], Elevator Entrance Detection, Light-On Detection, Long Queue Detection, Equipment Detection 3, Personal wearing safety clothing: No Hard Hat Detection, No Work Clothes Detection, No Reflective Clothing Detection, No Mask Detection, Shirtless Detection, No Chef Uniform Detection, No Chef Hat Detection, No Safety Harness Detection, No Safety Belt Detection, No Safety Goggles Detection, No Safety Gloves Detection, No Dust/Gas Mask Detection, Exposed Long Hair Detection 4, Personnel behavior safety: Sleep On Duty Detection, Absence Detection, Smoking Detection, Calling Detection, Using Mobile Phone Detection, Fall Detection, Climbing Detection, Long Stay Detection, Fight Detection, Crowd Detection, Quick Moving Detection, Inadequate Worker, Knife/Stick In Hand Detection, Hand Detection, Pedestrian Reverse Motion Detectoin, Reverse Motion On Escalator Detection 5, Vehicle safety: Illegally Parked Motor Vehicle, Illegally Parked Non-Motor Vehicle, Campus Vehicle Congestion Detection, Forklift Overspeed Detection, Vehicle Entering/Exiting Service/Charging Station, Campus Entrance/Exit Lpc, Illegal Fueling Detection, Construction Vehicle Detection, Vehicle Washing Detection (Vehicle Washing Detection, VehicleBypassingToAvoidWashing, InsufficientVehicleWashingWaterVolume), Campus Vehicle Overspeed Detection, Forklift Detection 6, Expressway Event: Litter Detection, Traffic Accident Detection, Vehicle Underspeed Detection, Vehicle Driving Away Detection, Fog Detection, Abnormal Parking Detection, Non-Motor Vehicle Intrusion Detection, Emergency Lane Occupation Detection, Pedestrian Intrusion Detection, Vehicle Wrong-Way Driving Detection, Road Snow Accumulation Detection, Vehicle Congestion Detection, Road Construction Detection, Traffic Parameters, Expressway Smoke and Fire 7.Water Resources/Urban Management: Restricted Area Fishing Detection, Water Outlet Discharge Detection, Ship Detection (Cargo ship, Sand carrier, Passenger ship)		
Features			

Face detection	8-channel (Face detection and behavior analysis cannot be enabled simultaneously on the same channel)	4-channel (Face detection and behavior analysis cannot be enabled simultaneously on the same channel)	Supports up to 16 channels of 2MP video streams for real-time analysis, 12 channels of 4MP video streams for real-time analysis, 8 channels of 6MP and 8MP video streams for real-time analysis (Face detection, behavior analysis and Expressway Event cannot be enabled simultaneously on the same channel)
analysis	8-channel	4-channel	Supports up to 16 channels of 2MP video streams for real-time analysis, 12 channels of 4MP video streams for real-time analysis, 8 channels of 6MP and 8MP video streams for real-time analysis
Face library capacity	128 face libraries, total 20,000 face images	128 face libraries, total 20,000 face images	128 face libraries, total 100,000 face images
Work clothes library capacity	8 work clothes libraries, a single storage capacity of 50 images		
Algorithm self-learning	Support self optimization of some algorithms: Intrusion Detection Cross Line Detection Absence Detection Climbing Detection Long Stay Detection		
Operating system	Linux		
Operation entry	Web, HDMI, Recommend Web		
Supported languages	Chinese, Traditional Chinese, English, Japanese, Korean, Arabic, Russian, Argentine Spanish, Persian, Spanish	English, Japanese	English, Japanese
Video input	8-channel 2MP-8MP H.265 or H.264 cameras	4-channel 2MP-8MP H.265 or H.264 cameras	16-channel 2MP H.265 or H.264 cameras 12-channel 4MP H.265 or H.264 cameras 8-channel 6MP-8MP H.265 or H.264 cameras
Storage			
DDR RAM	8 GB DDR4	4GB DDR4	8 GB DDR4
Hard disk	2.5-inch, 128GB SSD included	2.5-inch, 128GB SSD included	2.5-inch, 1TB SSD included
Alarm capacity			
Alarm image	Max 20,000 alarm images,	Max 20,000 alarm images,	Max 150,000 alarm images,

Alarm video	Max 20,000 alarm video clips	Max 20,000 alarm video clips	Max 150,000 alarm video clips,
Electrical property			
Operating temperature	-40~70℃		
Operating humidity	5% to 90% (non-condensing)		
Storage temperature	-40~70℃		
Storage humidity	5% to 95% (non-condensing)		
Power consumption	≤20W		
Weight	≤1.5KG (with SSD)		
Dimensions	56.3mm(H)×251.3mm(D)×137.7mm(W)		
External interface			
Network interface	2 x 10M/100M/1000M adaptive Ethernet interfaces (RJ45)		
USB interface	2 x USB2.0, 1 x USB3.0		
Alarm input	4-ch		
Alarm output	4-ch		
Serial interface	1 x RS-485 (phoenix connector)		
Power supply	12 V/2 A		
Data Dock			
Websocket mode	√		
HTTP/HTTPS mode	√		
HTTP/HTTPS live	√		
Compliance			
NDAA Compliant	Support		

Dimensions



Unlimited New View

Zhejiang Uniview Technologies Co., Ltd.

http://www.uniview.com

overseasbusiness@uniview.com; globalsupport@uniview.com

No. 369, Xietong Road, Xixing Sub-district, Binjiang District, Hangzhou City, 310051, Zhejiang Province, China

©2024-2026 Zhejiang Uniview Technologies Co., Ltd. All rights reserved.

*Product specifications and availability are subject to change without notice.

Despite our best efforts, technical or typographical errors may exist in this document. Uniview cannot be held responsible for any such errors and reserves the right to change the contents of this document without prior notice.