

VisionSense – iVisionSuite Series Product

Comprehensive AI-Powered Computer Vision Solution for Facial, People, and Object Analysis



Features

- Seamlessly integrates with your existing CCTV systems using the RTSP protocol.
- Preloaded with advanced AI modules for vision analytics, including:
 - People Vision: People counting, queue analysis.
 - Face Vision: Face recognition and analysis.
 - Object Vision: Traffic item detection, hand gesture recognition, and hard hat detection.
- Seamlessly integrates with third-party systems using standard protocols, such as HTTP commands.
- Optimized for compatibility with Nvidia, Intel, and Hailo edge computing devices.
- Achieves facial recognition accuracy of up to 99.8%.
- Face Vision module supports up to 10,000 stored profiles for enhanced performance.
- Implements role-based access control for streamlined and secure permission management.

Introduction

Introducing our cutting-edge AI-powered vision analytics solution- VisionSense—designed to seamlessly integrate with your existing CCTV systems and IoT ecosystem. Equipped with advanced AI modules—People Vision, Face Vision, and Object Vision—it offers powerful features such as people counting, face recognition, queue management, and object detection. Optimized for peak performance and accelerated by Open VINO, the system leverages Nvidia, Intel, and Hailo edge computing devices to deliver accurate and reliable analytics across people, faces, and objects. With role-based access control, and a privacy mode to safeguard user data, it ensures a comprehensive and secure experience. Additionally, its seamless integration with third-party systems via standard protocols like HTTP commands makes it an ideal solution for enhancing your IoT ecosystem.

Key Functions

People Vision

- **General People Detection & Counting:** Accurately tracks bi-directional footfalls with advanced tracking to prevent double counting.
- **Queue Length Analysis:** Track visitor numbers and set custom triggers for specific zones.

Face Vision

- **Face Analysis:** Detects and analyzes visitor faces at specific locations to determine age range, gender, mood, and visit frequency.
- **Tagging and Grouping:** Assign tags to each individual for quick identification and organize them into one or more groups (e.g., VIP, Blacklist, Staff, Visitor).
- **Privacy Protection:** Ensure data privacy with a pure data reporting function.

Object Vision

- **Object Analysis:** Detects and identifies various objects, such as traffic items, hand gestures, and hard hats.
- **Tagging and Categorization:** Assigns tags to objects for easier identification and organizes them into predefined categories.

Proactive Alerts and Automated Actions

- **Real-time Alerts:** Receive instant notifications (e.g., VisionSense app, email) upon detection of a person or object of interest, and schedule proactive alerts for routine checks.
- **API Integration:** Trigger custom actions within your systems using API.
- **Automated Actions:** Trigger predefined actions based on POI or group detection, or according to a set schedule.

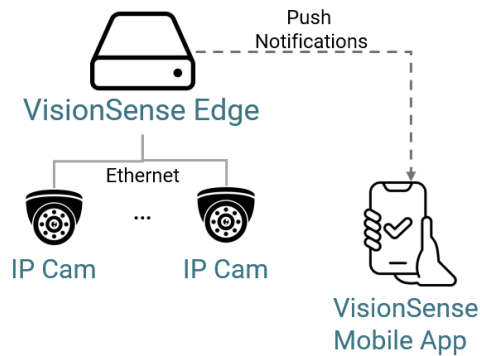
User Management & Security

- **Role-Based Access Control:** Supports multiple user groups and roles for enhanced security and data privacy.

In-Depth Integration Capabilities

- **Versatile Applications:** Integrate with various applications, including Signage dynamic content delivery based on lift and learn, and gender-based targeting.
- **Seamless Integration with IOT:** Leverage the RESTful API for easy integration with existing IOT systems and workflows.

VisionSense Solution Deployment Architecture



iVisionSuite/ VisionSense Software Specifications

System	Operating System	Ubuntu Linux, Windows
	Protocol	HTTP, HTTPS
	System Security	HTTPS with hardened security configurations Single login connection with renewable session token
	Supported Virtual Machine	VMWare, Hyper-V
Management Interface	Interface	Web Client
	Supported Browsers	Google Chrome on Windows, Linux, and Mac OS X
	Languages	English, Traditional Chinese, Simplified Chinese, Japanese, Korean
Video Source	Supported Types	IP camera with RTSP protocol
System Users Management	System Users	Register user accounts using name, email address, and phone number
	User Groups	Default administrator and user group, and user-defined groups
	Group Permissions	Administrator group can setup the system User and user-defined groups can only run attendance / investigation reports
Region of Interest Management	ROI Management	Define region of interest by web Manage person database through web portal
	Tag Management	Define different objects and people by different attributes
Detection Reports	Search Filters	Filter face results by video source, time period, tags, person's name, person group or stranger
	Data Export Format	Export face results in HTML or Excel format
Rules and Actions	Rule Engine	Rule based engine to trigger single or multiple system actions based on Capturing video source(s) Detection time period ROI/POI
		HTTP command Email Mobile app notification Trigger IO Box Trigger Wiegand Box
	Supported System Actions	
Live Notifications	Supported Platforms for app	iOS and Android
	Notification Type	Realtime notification to VisionSense mobile app or emails

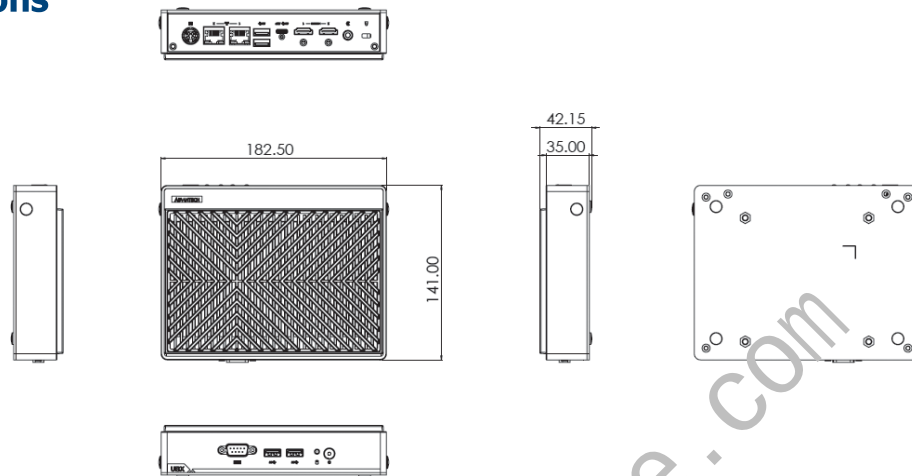
iVisionSuite/ VisionSense Hardware Specifications

Model		UBX-110H
Processor		Celeron 6305E Core-i3, 1115G4E Core-i5, 1145G7E Core-i7, 1185G7E
	Chipset	Integrated in SoC
Graphics		Intel Integrated Graphics
Security	TPM	TPM 2.0
Memory	Technology	DDR4-3200 SODIMM *1
	Max. Capacity	32GB (non-ECC)
Thermal Solution		Fanless
Resolution		USB-C: support up to 8K UHD (7680 x 4320 @ 60Hz); HDMI 1 and 2: support up to 4K UHD (4096 x 2160@60Hz)
I/O - Rear	Video	USB-C *1 HDMI2.0b *2
	Audio	Line-out *1
	USB	USB 3.2 Gen2 Type A(Blue) *2 USB-C(Supports DP 1.4, 8K@60Hz video output, 5V/2A, USB 3.2 Gen2 data transfer) *1
	LAN	RJ45 *2 (LAN1- i219: 10/100/1000 Mbps; LAN 2 - i225: up to 2.5 Gbps)
	Power Jack	DC 12V Power DIN4 *1
	Anti-theft Lock	Kensington Lock *1
I/O - Front	USB	USB 3.2 Gen2 Type A (Blue) *2
	COM	DB9 *1 (RS232/485/RS422 by BIOS)
	Button	Power Push Button Circle (Black) *1, button w/ power LED (Dark Green)
Internal I/O	Power Connector	6 pin pitch2.5 wafer *1
	USB2.0 Connector	5 pin pitch1.0 *2
LED		HDD Access (Green) *1
Mounting		VESA/Wall
Expansion	WiFi/BT	M.2 E-key 2230 *1
	Storage	M.2 M-key 2280 *2
Intel vPro	Intel vPro	Supported (Core i5, i7 only)
Operating System		Windows 10 IoT LTSC 2021, Windows 11 IoT, Linux, Android 12.0
Temperature		Operating: 0~ 45 °C
Target Dimensions (W x D x H)		182.5 x 141.5 x 35 mm
Certifications	EMC	CE, FCC, CCC, BSMI, UKCA, RF RED
	Safety	UL, CB, CCC, BSMI, BIS

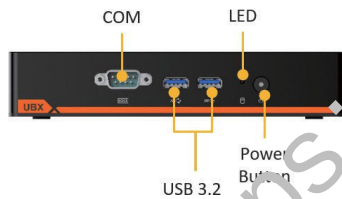
Hardware Dimension Specification

Dimensions

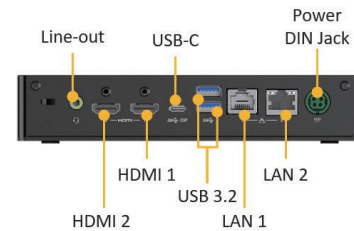
Unit: mm



Front View



Rear View



Ordering Information

Part Number	Description
UBX-110HVA5-G1E-C	i5 1145G7E, 16G/512G, iVisionSuite- VisionSense Edge
UBX-110HVA7-G1E-C	i7 1185G7E, 32G/1TB, iVisionSuite- VisionSense Edge