UShop EIS (Edge Intelligence Server)

Features

- Including UShop EIS service software
- Analytic functions included:
  - People Counting
  - Heatmap Analysis
  - Face Analysis
  - POS Monitor
- Support OnVIF-compliant IP Camera and Webcam Input
- Support UShop$^+$ Store BI Cloud Service

Introduction

UShop EIS is an intelligent sever system designed for future retail store management. It bundles UShop EIS Service software with multiple analysis functions so that you can understand real time store operation and business intelligence information, such as store traffic counting, in-store heatmap, customer demographics and POS transaction data. This information can be accessed by local database or SDK/API for customized application/service integration. Furthermore, UShop EIS Service is fully supported UShop$^+$ Store BI service that provided more comprehensive intelligent retail solutions. And UShop EIS platform is industrial design that provides the best reliability for 24/7 operations for various retail environment.
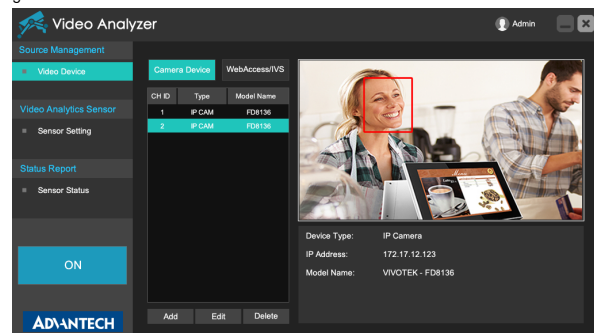
Main Functions

People Counter

Measure total number of visitors at different entrances simultaneously by video analysis of multiple cameras.
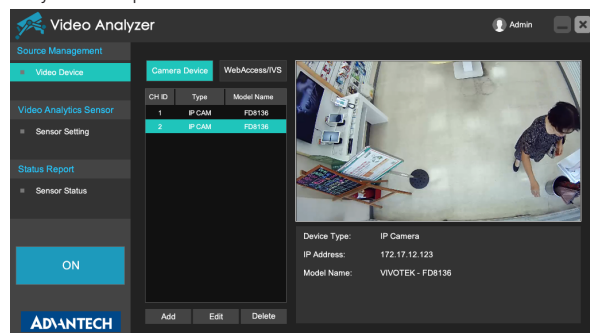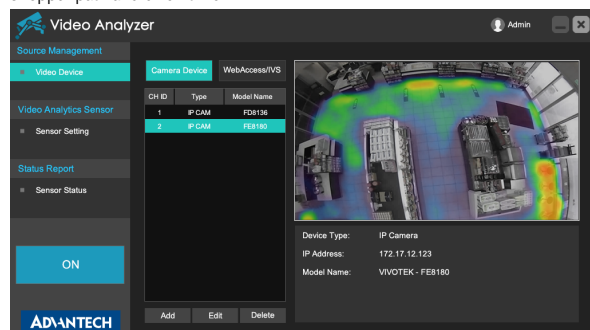

Face Analysis

Detect and analyze faces of customers at specific location to identify their age range, gender and focus.
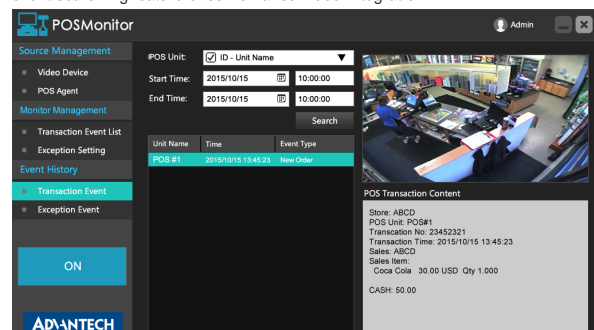

Heatmap Analysis

Analyze the shopping experience of customers at designated regions, including shopper path and dwell time.

POS Monitor

Convert POS transaction information to flexible data format for providing exception event searching feature of surveillance video integration.
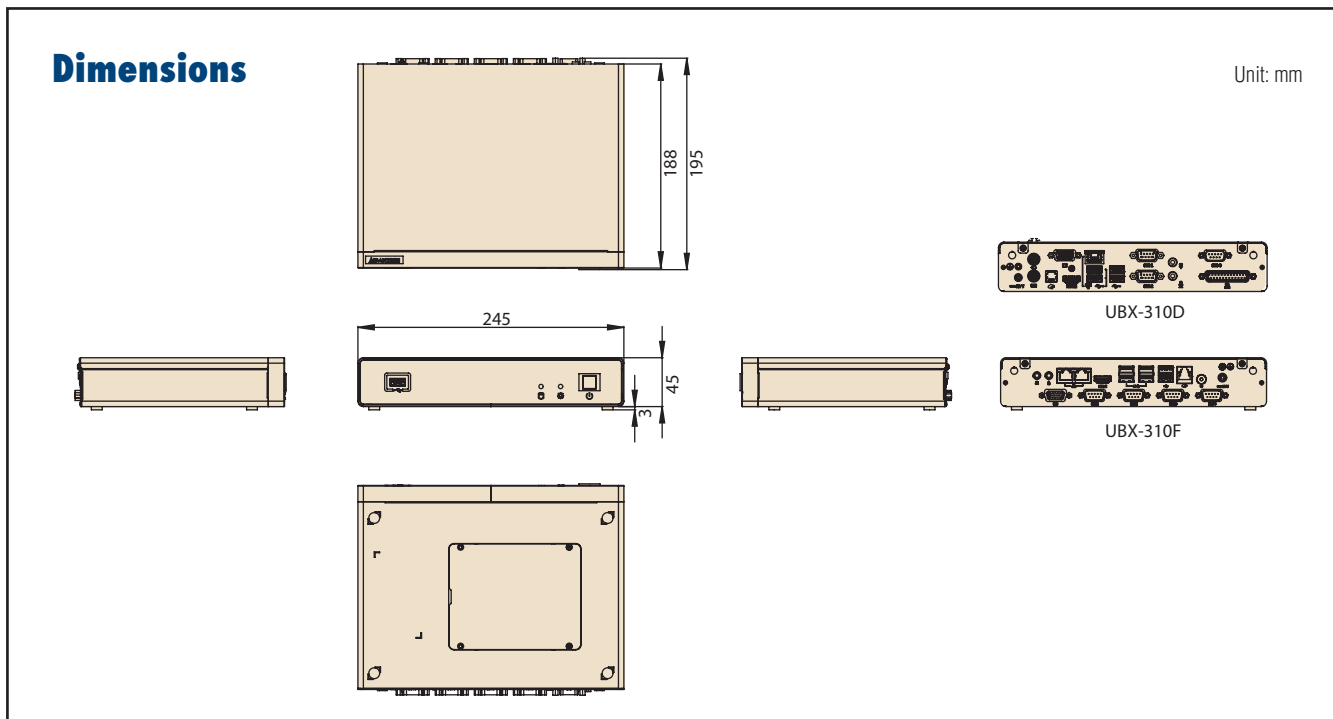
UShop EIS Software Specifications

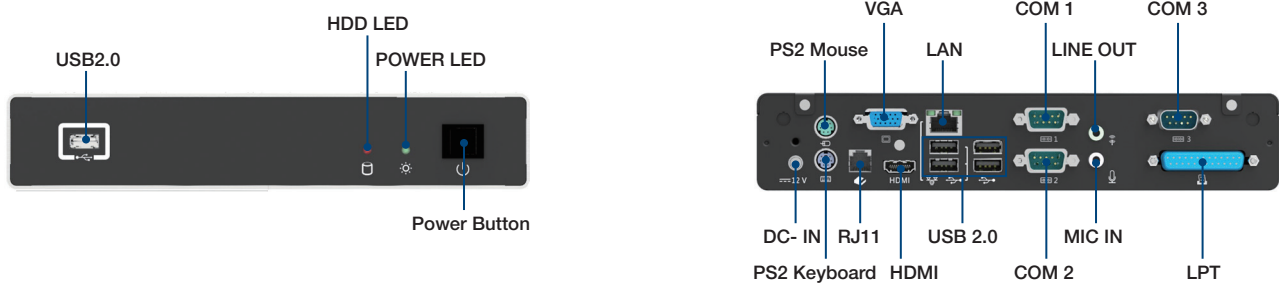| General Functions	Camera Input	IP Camera (OnVIF), USB Webcam
	User Authority	Multi-level authority of user account management for different analytic functions
	Data Export Format	Chart report (PNG), Statistic report (CSV)
	Data Storage Statistic	Statistic counting data in SQL Database
	Data Integration	Windows SDK/API
	Schedule Management	Configurable starting/stopping time of analytic functions for different week days
	Remote Management	Remote setting through LAN with UShop EIS Manager application console
	Software Upgrade	Support OTA automatic upgrade
	Language	English, Traditional Chinese, Simplified Chinese
People Counting	Video Source Resolution	Maximum: 1920x1080, Minimum: D1
	Counting Data	Provide real-time counting raw data and statistic data
	Data Resolution	Minimum analytical period: 1 minute
	Counting Area	Support multiple counting lines in one camera
Face Analysis	Video Source Resolution	Maximum: 1920x1080, Minimum: D1
	Face Size	Minimum: 60x60 pixels
	Face Rotation	Maximum deviation of face rotation in any direction (yaw, pitch and roll): 15 degrees
	Analytical Data	Face counting, Face dwell time (in screen), Gender, Age
Heatmap Analysis	Video Source Resolution	Maximum: 1920x1080, Minimum: D1
	Data Resolution	Minimum analytical period: 10 minutes
	Analytical Data	Visit frequency, Dwell Time
	Result Data Format	Visualization Image (Heatmap graph), analysis database
POS Monitor	Supporting NVR	Advantech VideoCMS, Hikvision NVR
	POS Connection Type	Ethernet, Serial Ports
	Monitor Data	POS transaction data, POS operation message, video analytical event
	POS Data Storage	Maximum: 6 months (depends on POS transaction data format)

UShopEIS Hardware Platform Specification

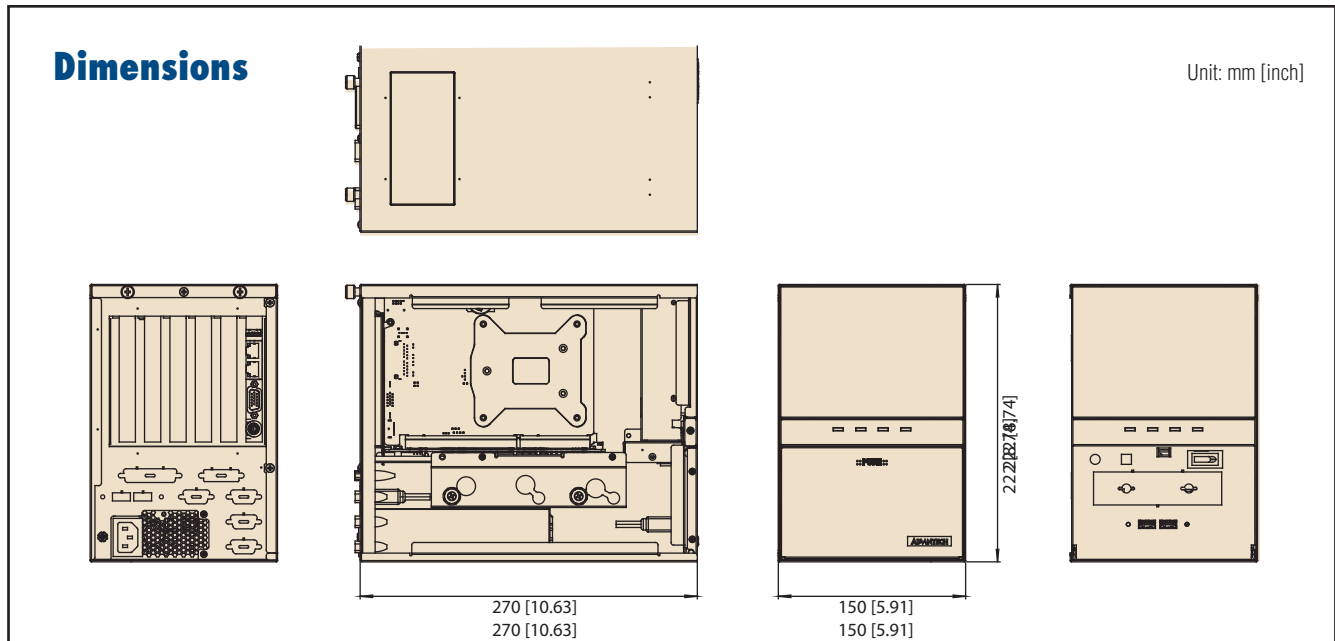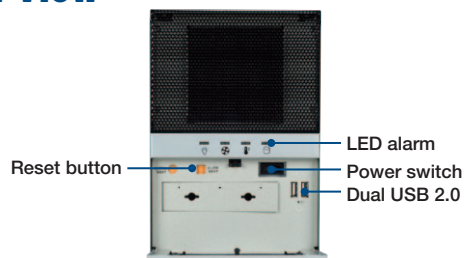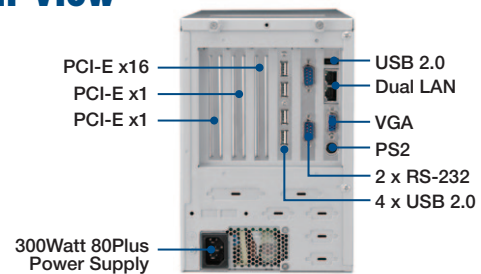|	Lite	Standard	Professional
Part Number	UBX-310UST-G1E-C	AiMC-342UST-G1E-C	ACP-2320UST-G1E-C
Number of Process Units	6	16	32
Maximum Analyzing Channels	People Counting: 3 (2 PU per channel) Heatmap Analysis : 3 (2 PU per channel) Face Analysis: 1 (4 PU per channel) POS Monitor: 3 (2 PU per channel)	People Counting: 8 (2 PU per channel) Heatmap Analysis: 8 (2 PU per channel) Face Analysis: 4 (4 PU per channel) POS Monitor: 8 (2 PU per channel)	People Counting: 16 (2 PU per channel) Heatmap Analysis: 16 (2 PU per channel) Face Analysis: 8 (4 PU per channel) POS Monitor: 16 (2 PU per channel)
CPU	Intel® Celeron® J1900, 2.4 GHz	Intel® Core™ i5-3550S, 3.0 GHz	Intel® Core™ i7-4790S, 3.2 GHz
RAM	8 GB DDR3L, 1333 MHz	16 GB DDR3L, 1333 MHz	16 GB DDR3L, 1333 MHz
Graphics	Intel® HD Graphics, HDMI/VGA	Intel® HD Graphics, VGA	Intel® HD Graphics, VGA/DVI
Storage	1 x SATA 2.5" HDD (500 GB)	1 x SATA 3.5" HDD (1 TB)	1 x SATA 3.5" HDD (1 TB)
Internet	1 x RJ45 (10/100/1000 Mbps)	2 x RJ45 (10/100/1000 Mbps)	2 x RJ45 (10/100/1000 Mbps)
I/O	5 x USB, 3 x COM, 1 x LPT	8 x USB, 2 x COM, 1 x PS/2	4 x USB, 1 x COM, 2 x PS/2
Power	60W (12V power adapter)	300W (Input 100 ~ 240Vᴀᴄ)	350W (100 ~ 240Vᴀᴄ)
Size	245 x 45 x 185 mm	150 x 222 x 270 mm	482 x 88 x 480 mm
Weight	2 kg	5 kg	11.7 KG
Operating System	Microsoft® Windows Embedded Standard 7		
Software	UShop EIS Service		
Environment Temprature	0 - 40° C (32 - 104° F)	0 - 40° C (32 - 104° F)	0 - 40° C (32 - 104° F)
Environment Humidity	90% at 40° C (non-condensing)	10-85% at 40° C (non-condensing)	10-85% at 40° C (non-condensing)

UShop EIS Lite - Dimension Specification

Dimensions

Unit: mm

188
195

245

45

3

UBX-310D

UBX-310F

Integrated I/O

USB2.0

HDD LED

POWER LED

Power Button

VGA

COM 1

COM 3

PS2 Mouse

LAN

LINE OUT

DC- IN

RJ11

USB 2.0

MIC IN

PS2 Keyboard

HDMI

COM 2

LPT

UShop EIS Standard - Dimension Specification

Dimensions

Unit: mm [inch]

270 [10.63]
270 [10.63]

150 [5.91]
150 [5.91]

222 [8.74]

Front View

LED alarm
Reset button
Power switch
Dual USB 2.0

Rear View

PCI-E x16
PCI-E x1
PCI-E x1

USB 2.0
Dual LAN
VGA
PS2
2 x RS-232
4 x USB 2.0

300Watt 80Plus
Power Supply

Interior View

2 x SO-DIMM Socket
Optional CPU cooler
System Fan

PCI-Ex1
PCI-Ex16

IDT-3120E

Optional mobile rack for dual 2.5" SATA
HDDs with a 3.5" drive bay occupancy
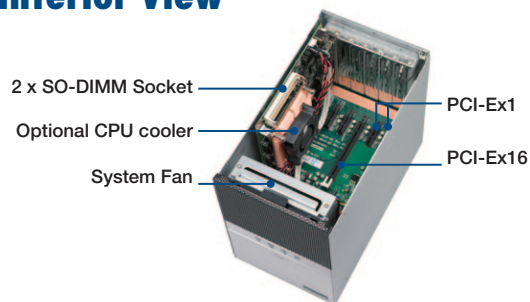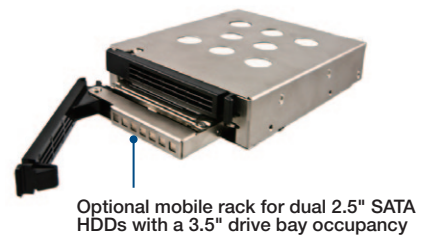
UShop EIS Professional - Dimension Specification

Dimensions

Unit: mm [inch]

426.4 [16.79]

468.5 [18.44]
482.0 [18.98]

44.4 [1.75]

88.0 [3.46]

523.9 [20.63]

479.4 [18.87]

87.2 [3.43]

42.1 [1.66]

92.0 [3.62] 92.0 [3.62] 92.0 [3.62] 92.0 [3.62] 61.1 [2.41]

Front View

Slim optical drive bay

Two SATA HDD tray

USB and PS/2 connectors

Inside View

Power supply

Dual system fan
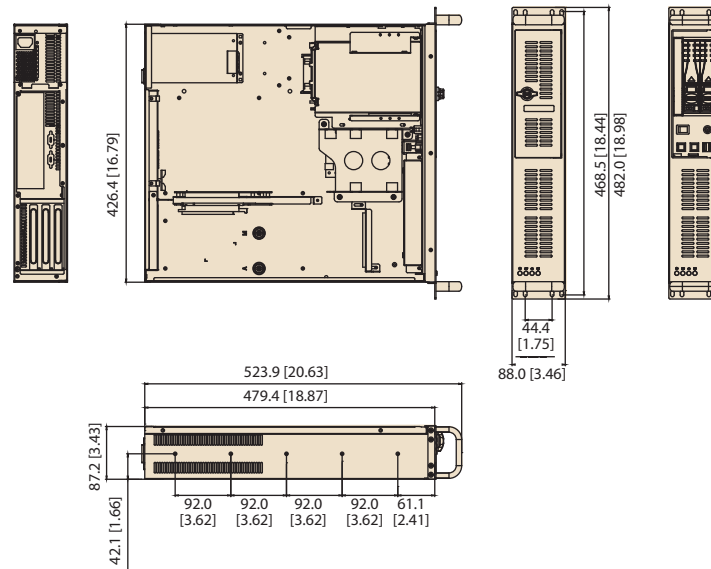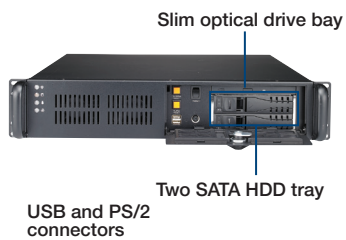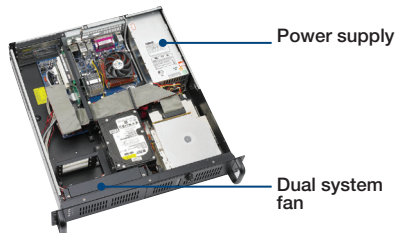
Rear View

Rear I/O bracket for low profile add-on cards