

Video AI Facial Recognition Edge SRP

Smart and Accurate Facial Recognition for
Intelligent City Services



- ✓ **Low-cost AI based facial recognition utilizing edge computing**
- ✓ **Ready-to-use standalone single-site solution for attendance monitoring**
- ✓ **Reliable 24/7 user support via I.App**

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Enabling an Intelligent Planet



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WISE-PaaS
AIoT Solutions & Marketplace

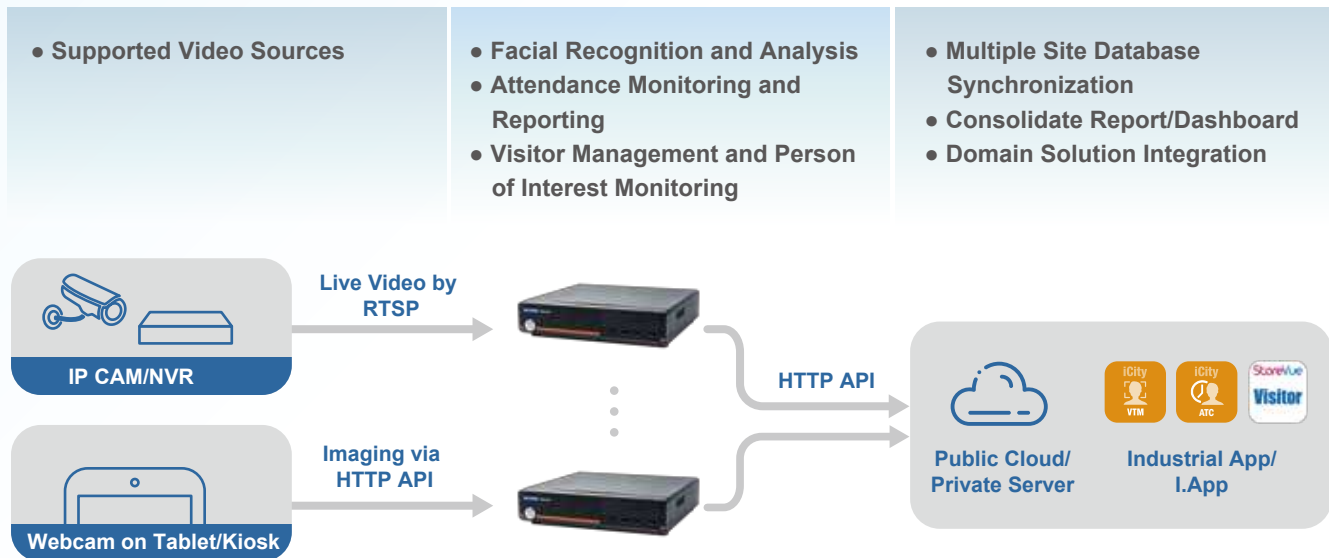
I Introduction

Advantech's AI Facial Recognition Edge solution-ready package (SRP) is aimed at precise facial recognition for highly flexible online and offline applications. This technology is integrated with a complex deep learning algorithm that enables fast recognition and accurate performance.

I Solution Architecture



I How it Works



The Visual AI Facial Recognition (VFR) Edge features a built-in AI deep learning algorithm that facilitates rapid and accurate recognition performance on a single edge computer. It can analyze multiple image capture resources including RTSP streams for IP cameras, mobile devices, and static photos taken via webcam or terminal device. VFR Edge enables various facial recognition applications, such as attendance monitoring, access control, person-of-interest (POI) monitoring, and visitor management.

I Advantages of Video AI Facial Recognition Edge

Enables single and multiple site facial recognition

- Ready to use single-site solution utilizing a single VFR Edge using preexisting cameras
- Facial recognition functions are expandable via I.App on WISE PaaS

Transform your camera into facial recognition device

- Equip multiple media resources with image capture function.

Highly accurate recognition techniques

- Person-of-interest (POI) monitoring and visitor management
- High angle camera recognition capability

I Application

Identify frequent customers to encourage loyalty

Sensor: IPCAM
Edge Computing: USM-260VFR
I.App: Visitor management



Visitor Recognition

Ensure safety and monitor POI using facial recognition

Sensor: IPCAM
Edge Computing: USM-260VFR
I.App: Intelligent NVR + CMS (solution integration)



Real-Time Surveillance

Monitor attendance using facial biometrics

Sensor: Camera on Tablet
Edge Computing: USM-260VFR + USM-130
I.App: Attendance monitoring CMS



Attendance Monitoring

Enable visitor self registration and check-in using facial recognition

Sensor: Camera on kiosk
Edge Computing: USM-260VFR + UTC-520
I.App: Visitor management



Visitor Management



Payment Integration

Create a more efficient and pleasant shopping experience

Sensor: Camera on KIOSK
Edge Computing: USM-260VFR
I.App: Smart POS (solution integration)



Repeat Visitor Identification

Analyze repeat customers for targeted marketing

Sensor: IPCAM
Edge Computing: USM-260VFR
I.App: Visitor Recognition



Interactive Digital Signage

Display personalized digital ads and content in real time

Sensor: Webcam for facial recognition
Edge Computing: USM-260VFR + USM-210
I.App: Visitor recognition + Signage CMS



Access Control

Enable accurate detection at entrances and exits

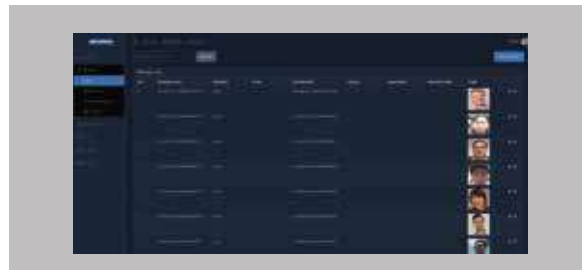
Sensor: 3D camera module
Edge Computing: USM-260VFR + UTC-310
I.App: Access control management (solution integration)

I Key Features of Video AI Facial Recognition

1.

Person of Interest (POI) Management

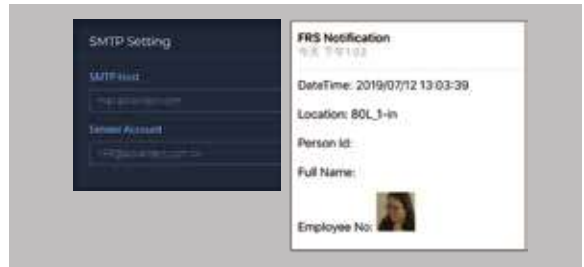
- 1.Enroll POIs using a web portal or mobile app
- 2.Categorize people for easier identification (i.e. VIP, blacklisted individuals, staff, or visitors)



2.

Live Notifications and Alerts

- 1.Real-time POI identification alerts via email or app
- 2.Notification app available for iOS and Android devices



3.

Extensive Integration Capabilities

- 1.Integrated I/O control device for access control
- 2.RESTful APIs available for interactive signage, intelligent NVR, and other applications



4.

Comprehensive Reporting

- 1.Detailed reports on recognized and unrecognized individuals
- 2.Daily visitor reports using POI entry and exit records



5.

Flexible Design and Configuration

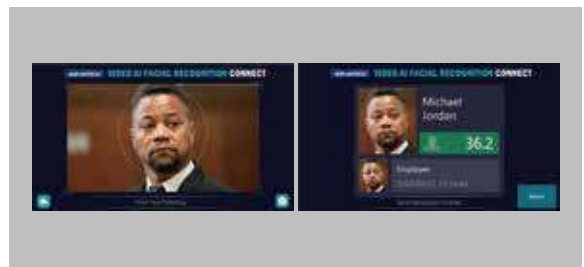
- 1.Configurable facial recognition standards and capture frequency
- 2.Configurable region of interest (ROI)



6.

VFR-Connected Mobile App

- 1.Mobile app provided for single-site facial recognition attendance monitoring and reporting
- 2.Supports Android, Windows OS



I Ordering Information



	Edge Installation		Cloud Service
Type	Edge SRP	Industrial App	Industrial App
Name	Video AI Facial Recognition Edge	WISE-PaaS/VideoSense Facial Recognition Edge	Attendance Management System
P/N	USM-260VFR-G1E-C	32ASVSFREDGE10 (WISE-PaaS/Marketplace)	32ASVSFREDGE10 (WISE-PaaS/Marketplace)
Software Package	<ul style="list-style-type: none"> VFR Edge (pre-installed) VFR App (free download) 	<ul style="list-style-type: none"> VFR Edge software license (one-time charge for single device) VFR App (Free download) 	<ul style="list-style-type: none"> Fat Server software license (annual fee/per VFR connection)



USM-260VFR-G1E-C

Software	Software	Video AI Facial Recognition
	Software Features	Facial Recognition Standalone Attendance Monitoring System
	Max. Channels	4 camera sources
CPU		Intel® Core™ i7-7700T, 2.9 GHz
RAM		16 GB DDR4, 2400 MHz
Graphics		Integrated Intel® HD Graphics 530
Storage		1 x SATA 2.5" HDD (1 TB)
Connectivity		1 x RJ45 (10/100/1000 Mbps)
I/O		4 x USB, 2 x COM, 2 x RJ-45
Power		90W (19V power adapter)
Dimensions		24 x 210 x 5.7 mm / 9.44 x 8.28 x 2.24 in
Weight		3.5 kg / 7.72 lb
Operating System		Ubuntu, Linux
Environment	Temperature	with 2.5" hard disk 0 ~ 40 °C/32 ~ 104 °F
	Humidity	90% @ 40 °C/104 °F (non-condensing)
	Vibration	with HDD: 0.5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 3 axes, 1hr/axis
	Shock	With HDD: 10 G, IEC 60068-2-27, half sine, 11 ms duration

Advantech Headquarters

No. 1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei, Taiwan 11491
Tel: 886-2-2792-7818 Fax: 886-2-2794-7301
www.advantech.com

US/Canada: 1-888-576-9668
Europe: 00800-2426-8080/8081
China: 800-810-0345/8389
Taiwan: 800-777-111
Japan: 0800-500-1055
Korea: 080-363-9494/9495

Singapore: +65-6442-1000
Malaysia: 1800-88-1809
Australia: 1300-308-531
Thailand: 66-2-248-3140
Indonesia: +62-21-7511939
Mexico: 1-800-467-2415

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