# **FaceView**

## **Empowering AI Facial Recognition**



## **Features**

- Real-time identification and notification, supports VPU/GPU acceleration
- High-precision facial recognition engine for registered ID and gender/age/ emotion with 98.5 accuracy rate
- Customer behavior statistical analysis with visualization history event dashboard for customer analytics
- Provides customer ID database which can modify VIP/Blacklist ID data for improved management
- Provides SDK for integrating FaceView functions with current solution
- Advanced add-on modules of mask recognition and body temperature detection for contemporary pandemic prevention

## Introduction

Advantech's Faceview solution provides fast, high-precision, scalable facial recognition in real time for AloT applications in retail, hospitality, and public safety fields. Gathering data on gender, age, and emotion helps retailers better understand their customers and improve existing business models.

This solution also provides the VIP/Watch-list management feature that improves customer experience by instantly recognizing VIP customers when they walk in and offering better customer service

## **Feature Details**

#### Visitor Identification

- Registered ID and gender/age/emotion recognition
- Image improvements addressing poor lighting and motion blur

#### **Customer Analytics**

- Statistical analysis for customer behavior
- Watch list history dashboard

## **Customer Management**

- Maintain customer database
- Import & export VIP/blacklist ID data

## Mask Add-On Features

Masked individuals recognition

## Spoofing prevention for improper use of masks

## **Temperature Detection (FaceMeHealth)**

- Discover real-time body temperature
- Anti-pandemic solution at public entrance

## Minimum Requirements

#### Hardware Minimum Requirements\*:

- Intel Atom CPU+VEGA-320
- 4 GB RAM
- 32GB (Including Windows 10 OS)

#### **Operation System:**

Windows 10 1809 LTSC 64-bit

#### Database:

NoSQL: MongoDB 4.2.0

\* In the high-precision model, supports 4.6FPS for (Single) face inference & 30 FPS for 720P streaming video with maximum four people in field of view

#### **Recommended Advantech Hardware:**

AIR-100-S61A1, AIR-200-S92A1, AIR-300-00A1(barebone), EI-52-S6A1

# **Software Specifications**

FaceView Specifications	
Live-View of Facial Recognition	Identify and mark visitor faces
Add-On Features	Masked Individuals Recognition, Mask Detection, Temperature Detection (FaceMeHealth*)
Advanced Face Property	Age, gender, emotion, ID, head pose
Daily Visiting Analytics	Down times and periods
Customer/List Enrollment	Input by cameras, photos, and db files
Customer/List Management	Customer profile edit and delete
VIP/Blacklist Notification	Live-view, e-mail, and mobile apps
Model Complexity*	Ultra High, Very High, and High
Accuracy**	99.50%~ 94.12%
Image Preprocessing	Lightness, sharpen, and resolution enhancement
Support AI Chipsets	Intel CPU, Intel® Movidius VPU and NVIDIA® Jetson™

\* FaceMeHealth an independent application with 3in1 features including Face/Mask/ Thermal recognition&detection with fewer face property

- Accuracy: Ultra high>Very high>High; Speed: Ultra high<Very high<High
- \*\* Results depend on selected model complexity and false accept rate (1E-6~1E-4)

## Order Information

- 31ASFCVWAD0101 Standard FaceView I.APP (Application + SDK)
- 31ASFCVWSD0101 Standard FaceView SDK only
- 31ASFCVWAD12A1 FaceView Mask Add-On\* (Application+SDK) FaceView Mask Add-On\* SDK Only
- 31ASFCVWSD12A1
- 31ASFCVWAD22A1 FaceMeHealth (Face+Mask+Thermal 3in1. Application+SDK)

\* Add-On license must be purchased with standard FaceView license