



## Face Recognition 4 in 1

- **Access Control via Facial Recognition**
- **Time Stamp Attendance**
- **Human Body Temperature Meter**
- **Mask Detection**

**INSIZE ATF-1612-U**

## Introduction

The INSIZE ATF-1612-U is a system introducing new innovative technology. This measures temperature, allows access via facial recognition, and records time. This system introduces a highly advanced built-in facial recognition algorithm and high resolution infrared thermography camera allowing accurate temperature measuring. This brand new technology will identify someone by Face ID, even while wearing a face mask. It can also locate the forehead and accurately measure forehead temperature without touch. The ATF-1612 is the ideal solution for fully automatic contactless access control, facial recognition, and temperature.



### Infrared Thermography Camera

- Optimized for human body temperature measurement ( $\pm 0.5^{\circ}\text{F}$ )
- Range: 5Ft
- Real-time measurement ( $< 0.1$  second)

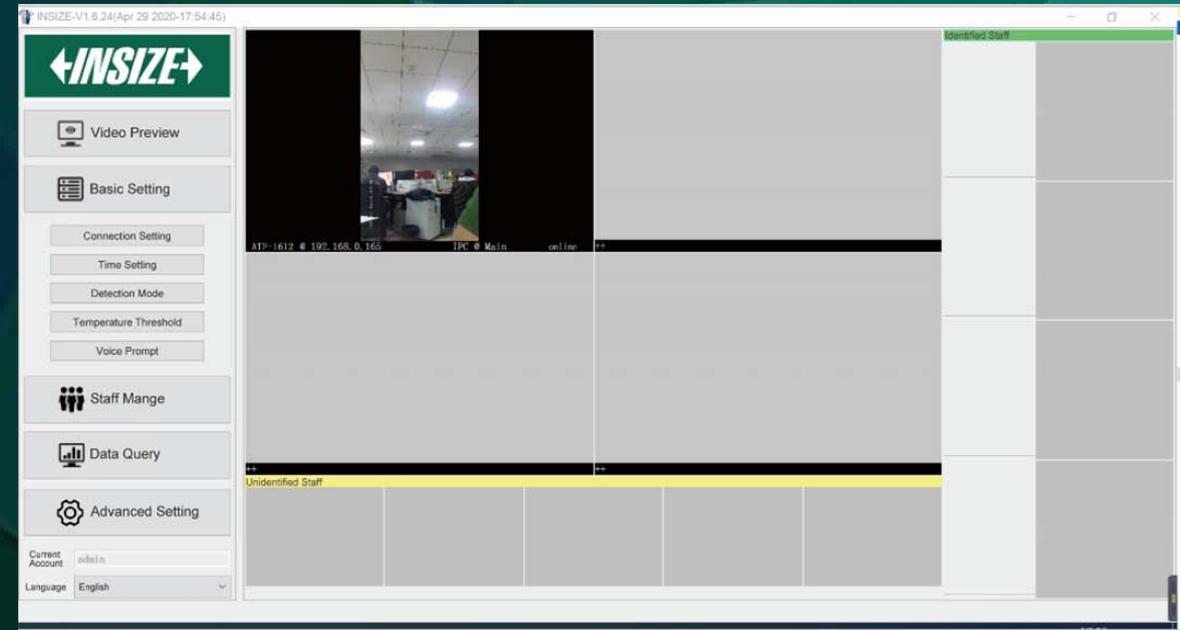
### Dual Camera with Advanced Algorithm

- High Face ID accuracy at 99.9%
- Support Face ID identification with face mask (accuracy 90%)
- High performance face anti-spoofing technology protects system from attack
- Real-time face recognition ( $< 0.2$  second)

### Stable & Easy Use

- Stable operation based on Linux
- 7 inches Display screen
- Easy & Flexible deployment

# Product Appearance



**ATF-1612-U and Setting Software (included)**

# Features

## All in One System

Integrated access control and touchless forehead thermometer

## Access At a Glance

Walk through identification & authorization, no slowing down or stopping needed

## Contactless Forehead Temperature Measurement

High resolution infrared thermography camera enhanced by an Algorithm that provides instant and high accuracy forehead temperature measurement with zero human involvement in less than 0.1 seconds. Can set up for Fahrenheit or Celsius. Temperature measurement can be switched on or off.

## High Accurate & Reliable Face ID

Built-in world class facial recognition algorithm with dual cameras detects the identification in less than 0.2 seconds with the accuracy rate more than 99.9%. High performance face anti-spoofing technology can resist many kinds of presentation attack, such as, printed photo, the electronic display of a facial photo, replaying video using an electronic display and 3D face masks. Enhanced facial recognition algorithm can identify people even if they are wearing masks with the accuracy rate more than 90%.

## Detect Someone Wearing or Not Wearing a Mask

It can detect whether a person wears mask or not. Wear mask detection can be switched on or off.

## Good Performance in Complex Light Environments

High Quality ISP (Image Signal Processing) with self-adaptive Face Auto Exposure technology provides good quality face image, even in high contrast light environments, such as an entrance with shiny sun light, or in the low light night.

# Use

It is for indoor or covered use only.

It detects one person each time.

The accuracy is +/- 0.5°F, while the accuracy of mercurial thermometer is 0.2°F. It is used to make a primary temperature measurement and record up to 30,000 people on a device. Allows you to download and store for reference in the future.

Easily programmable. It can be used as thermal detector only. It is not necessary to input facial pictures in advance. It will alert you when the forehead temperature is above the preset target (for example, 100°F). It can detect the forehead temperature of people with or without marks. It can also alarm if the people do not wear masks. Both visual and sound alerts such as "Temperature" or "No Mask".

It is necessary to input face pictures in advance for facial recognition. Simply take a picture of the face with a cell phone.

Set alarms for "Access not Allowed", "Abnormal Temperature", and/or "No Mask". Alarms are both visual and audible.

A plant or school can have this set up at every entrance. It does not need a human to operate it. The readings will alert on the device but can be monitored in an office as well. If a notification/alarm pops up, a worker or student can be approached and the situation handled as needed.

# Alarm



<b>NO PROBLEM</b>	prompt message	body temperature is normal XX°F (in green)
	face recognition pop-ups	yes
	voice prompt	check in successfully
	sound and light alarm	green light
<b>ABNORMAL TEMPERTURE</b>	prompt message	body temperature is abnormal XX°F (in red)
	voice prompt	abnormal body temperature
	sound and light alarm	red light + audio alarm (can be switched off)
<b>WITHOUT MASK</b>	prompt message	without a mask
	voice prompt	please wear a mask
	sound and light alarm	red light + audio alarm (can be switched on off)
<b>FACE DOES NOT MATCH DATABASE</b>	Face recognition pop-ups	no
	voice prompt	no
	sound and light alarm	red light + audio alarm (can be switched off)

# Application Scenario

School/Campus



Public Transportation



Airport



Office



Shopping mall



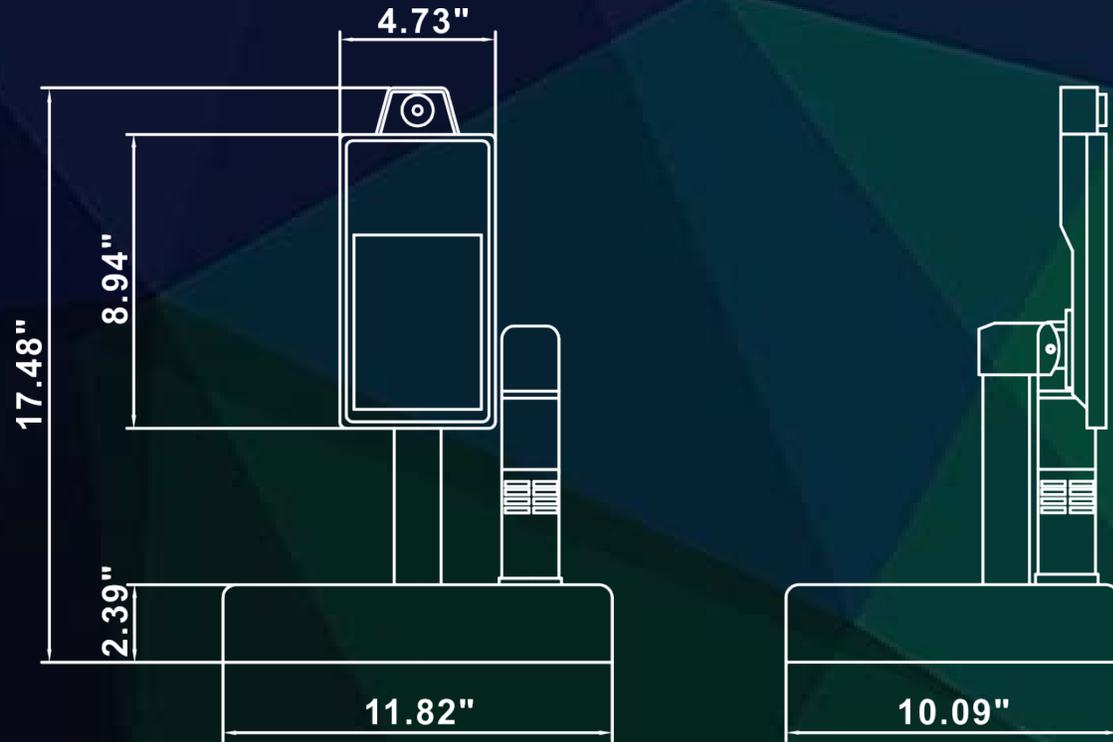
Hospital



# Specifications

<b>Operation System</b>	Linux
<b>Display</b>	7 inch Screen TFT (Thin Film Transistor)
<b>Speaker</b>	Voice Prompt
<b>Language</b>	Multi Language: English, Spanish, etc.
<b>Face Capacity</b>	50K
<b>Verification &amp; Identification Speed</b>	Less than 0.1 seconds for Thermal and less than 0.2 seconds for Facial
<b>Face Anti Spoofing</b>	Printed photo, Electronic display of a facial photo, Replaying video, 3D face masks, etc.
<b>Facial Recognition Accuracy Rate</b>	Greater than 99.9%
<b>Forehead Thermometer Range &amp; Accuracy</b>	95°F ~ 113°F, ±0.5°F
<b>Work Range</b>	1.5 feet to 5 feet
<b>Transaction Storage</b>	100K
<b>Infrared Thermography Camera</b>	Uncooled Infrared Focal Plane Junction Detectors Array Sensor 160*120 (ATF-1612), 120*90 (ATF-1290)
<b>Facial Recognition Camera</b>	Dual 1080p Starlight CMOS sensors for visible light and near infrared light
<b>Communication</b>	RS232/485, TCP/IP, USB-Host, USB-Client, RJ45 Connection
<b>Interface for Access Control</b>	3rd Party Electric Lock, Exit Button, Alarm
<b>Power Supply</b>	12V DC 2A
<b>Device Operating Temperature</b>	Face ID: 14°F ~ 122°F, Temperature Measurement: 50°F ~ 95°F
<b>Operating Humidity</b>	0%~90%
<b>Dimension</b>	4.803" x 8.897" x 1.319"

## Dimensions



## Optional accessories

### Wall-mount

