FACE RECOGNITION THERMAL IMAGING 4 IN 1
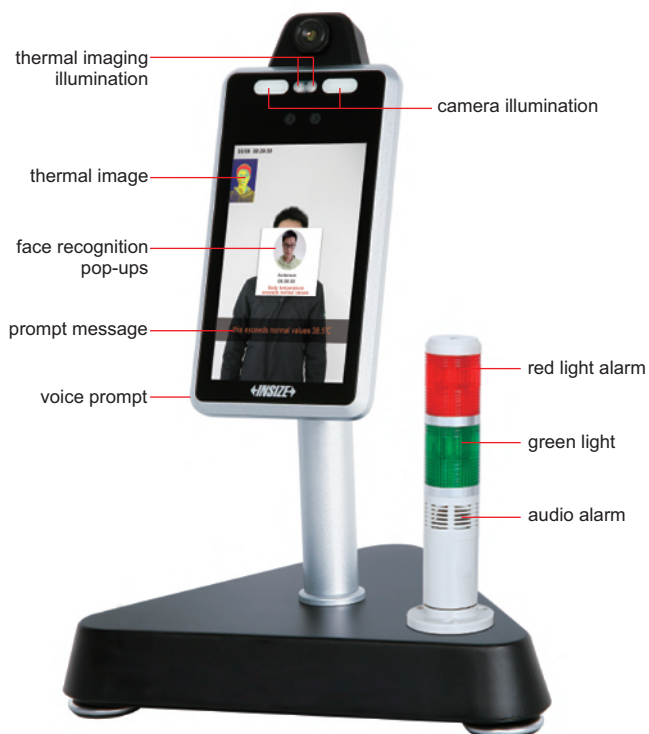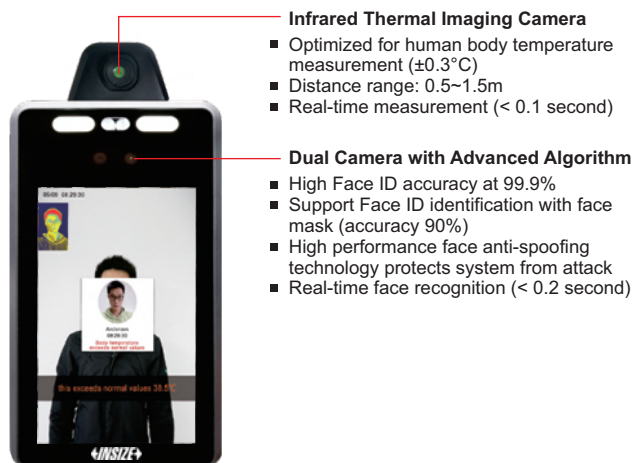
- **ACCESS CONTROL VIA FACIAL RECOGNITION**
- **TIME STAMP ATTENDANCE**
- **HUMAN BODY TEMPERATURE METER**
- **MASK DETECTION**

CODE ATF-1612

thermal imaging illumination

camera illumination

thermal image

face recognition pop-ups

prompt message

voice prompt

red light alarm

green light

audio alarm

Infrared Thermal Imaging Camera
- Optimized for human body temperature measurement (±0.3°C)
- Distance range: 0.5~1.5m
- 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)

- This system introduces a highly advanced built-in facial recognition algorithm and high resolution infrared thermal imaging camera allowing accurate temperature measuring. This brand new technology will identify someone by face, 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 measurement.

Access Control

Time Stamp Attendance

|	ID	Name	Gender	Age	Phone	Time	Temperature
1	001501	Anderson	0	29	-	2020_05_09-10:02:40	35.97
2	001502	polo	0	30	-	2020_05_09-10:02:41	35.95
3	001503	lily	1	26	-	2020_05_09-10:02:43	35.94
4	001504	nich	0	35	-	2020_05_09-10:02:55	36.11
5	001505	Aimly	1	34	-	2020_05_09-10:02:57	35.99
6	001516	hamer	0	28	-	2020_05_09-10:03:15	36.06
7	001507	Aaron	0	27	-	2020_05_09-10:03:17	36.00
8	001508	Barbara	1	31	-	2020_05_09-10:03:19	35.47
9	001509	Robert	0	39	-	2020_05_09-10:03:21	35.95
10	001510	Richrad	0	34	-	2020_05_09-10:03:22	35.83
11	001511	Amanda	1	23	-	2020_05_09-10:03:23	36.05
12	001512	Henry	0	26	-	2020_05_09-10:03:25	36.18
13	001513	Martin	0	22	-	2020_05_09-10:03:26	35.88
14	001514	Mike	0	33	-	2020_05_09-10:03:28	35.84
15	001515	Kenny	0	31	-	2020_05_09-10:03:30	35.89
16	001506	Carol	1	30	-	2020_05_09-10:03:31	35.93
17	001517	Daisy	1	28	-	2020_05_09-10:03:32	36.05
18	001518	Emma	1	39	-	2020_05_09-10:03:33	35.94
19	001519	Jack	0	42	-	2020_05_09-10:03:34	36.14
20	001520	Louis	0	46	-	2020_05_09-10:03:35	36.18
21	001521	kevin	0	35	-	2020_05_09-10:03:40	35.92
22	001522	Owen	0	31	-	2020_05_09-10:03:41	35.94
23	001523	kay	1	29	-	2020_05_09-10:03:42	35.94

Application

school/campus

public transportation

airport
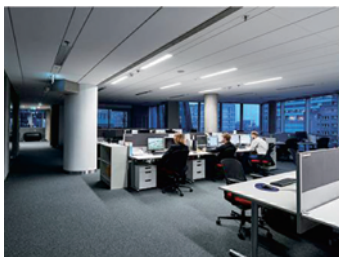
office
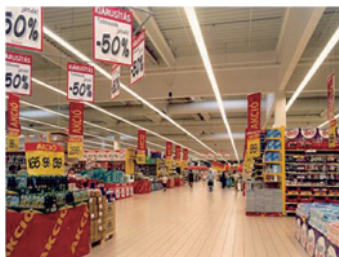
shopping mall

hospital

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 thermal imaging 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.
  The new technology comes pre-calibrated and has automatic temperature calibration through software and algorithm when the camera is turned on every time. This eliminates the need for a calibration system generally referred to as a black body. This eliminates not just added cost but human error when attempting to calibrate.

- **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.
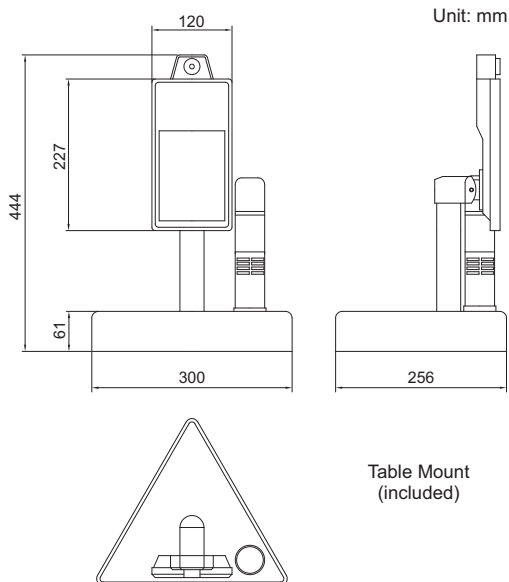
Use:

- It is for indoor use only.
- It detects one person each time.
- The accuracy is +/- 0.3°C, while the accuracy of mercurial thermometer is 0.1°C. This system is used to make a primary temperature measurement.
- Set alarms for "Access not Allowed", "Abnormal Temperature", and/or "No Mask". Alarms are both visual and audible.
- For hospital / restaurant / hotel / retail store, etc., it can be used as thermal detector and/or mask detector. No need to input facial pictures in advance. It will alert you when the forehead temperature is above the preset target (for example, 37.3°C) , for people with or without marks. It can also detect if people wear or not wear masks.
- A plant or school can have this set up at entrance for access control and time stamp attendance, as well as temperature and mask detection. Input face pictures taken with a cell phone in advance for facial recognition. The readings can be monitored in an office.

ALARM

Situation	Alarm	
ABNORMAL TEMPERTURE	prompt message:	body temperature is abnormal XX°C (in red)
	voice prompt:	abnormal body temperature
	sound and light alarm:	red light + audio alarm
WITHOUT MASK	prompt message:	without a mask
	voice prompt:	please wear a mask
	sound and light alarm:	red light + audio alarm
FACE NOT IN DATABASE	no face recognition pop-ups	
	no voice prompt	
	sound and light alarm:	red light + audio alarm
NO PROBLEM	prompt message:	body temperature is normal XX°C (in green)
	face recognition pop-ups	
	voice prompt:	check in successfully
	sound and light alarm:	green light

SPECIFICATION

Operation system	Linux
Display	7 inch screen TFT
Speaker	voice prompt
Language	multi language: English, Spanish, etc.
Face database capacity	50K
Verification & identification speed	less than 0.1 seconds for thermal and less than 0.2 seconds for facial
Face anti spoofing	printed photo, electronic display of a facial photo, replaying video, 3D face masks, etc.
Facial recognition accuracy rate	>99.9%
Forehead thermometer range & accuracy	35°C~45°C, ±0.3°C
Work range	0.5~1.5m
Infrared thermal imaging camera	Uncooled infrared focal plane junction detectors array sensor Resolution: 160x120
Facial recognition camera	dual 1080p starlight CMOS sensors for visible light and near infrared light
Communication	RS232/485, TCP/IP, USB-Host, USB-Client, RJ45
Power supply	12V DC 2A
Device operating temperature	face ID: -10°C~50°C temperature measurement: 10°C~35°C
Operating humidity	0%~90%

Unit: mm

120
227
444
61
300
256

Table Mount
(included)

Wall-mount
(included)