

# Face recognition temperature detection intelligent terminal TSR-Z5



## TSR-Z5

--An intelligent human face recognition temperature detection terminal, is a face recognition access management device that uses infrared thermal imaging technology for temperature detection. The device terminal is equipped with Android system, built-in wide dynamic dual camera live anti-counterfeiting HD camera, night infrared plus positive white highlight fill light, temperature measurement module, integrated structure. It supports high-definition face warehousing, body temperature detection through face 1:n recognition or body temperature detection through human ID 1:1 recognition, body temperature alarm, real-time upload platform for personnel access and body temperature detection information; unattended, contact free mode, which can achieve more secure, efficient and orderly personnel control access.

- ◆ Accurate temperature measurement
- ◆ Rapid passage
- ◆ Data upload
- ◆ Multi way installation
- ◆ Voice broadcast temperature



## Product Parameters

	Main parameter	Detailed description
Original configuration	operating system	Android 7.1
	size	234mm *125mm *24.5mm
	weight	1.5KG
	CPU	4core RK3288
	ISP	Built in two-way ISP
	Memory	2GB
	storage	8GB
	screen	8 inch, full view IPS LCD. 1280*800
	Camera	200W dynamic dual camera, 4.0mm aperture, 0-2m focal length, automatic white balance.
	Fill-in light	Built in night infrared + professional white light high color LED face light source
	Temperature module	The measurement distance is 1m; the measurement accuracy is $\pm 0.3^{\circ}\text{C}$ to $\pm 0.5^{\circ}\text{C}$
	Interface	Audio output * 1, network port * 1, USB2.0 * 1, access control port * 1, RS232 interface * 2 (1 485 / 1 WG input, 1 WG output), OTG interface * 1, power port * 1
	Phonetic device	Built-in
	Card reading module (optional)	IC card reader, ID card reader
	Appearance	Aluminium alloy
	Power supply and consumption	DC12V/3A; $\leq 5\text{W}$
	work environment	Temperature: $- 10^{\circ}\text{C}$ - $+ 60^{\circ}\text{C}$ ; humidity: 10-90% relative humidity, no condensation
electromagnetic radiation	No frequency point exceeding the standard	
Protection level	IP64, waterproof and dustproof, outdoor with sunshade	
Performance specification	Performance list	Detailed description
	Recognition height	1.2-2.2 meters
	Recognition distance	0.5-5 meters
	Face angle	30 degrees left and right, 30 degrees up and down
	Face database	Stand alone support 20000 people, scalable (specific configuration according to demand)
	Face detection and tracking	10-20 meters
	Face feature extraction	50-200 meters
	In vivo detection	200 meters
	Feature comparison	500meters
Recognition accuracy	Accuracy rate $\geq 99.99\%$	

# System Introduction

## 1. Collect personnel information in various way

It can collect personnel information through three ways: management end, small program and ID card swiping, and carry out face comparison and real name temperature measurement.

## 2. Real name information and body temperature data correspond one by one

Automatic temperature measurement with face, matching personnel information and body temperature data, real-time upload to the system platform.

## 3. System data can be queried and exported at any time

The temperature information data of personnel can be viewed at any time on the platform, and can be quickly exported to form a table, which can be used for temperature data work report.

## 4. This is a holistic solution

From hardware to software, from small program to equipment to platform, it can be rapidly deployed to build a complete set of solutions for customers, and realize management data and intelligence.



system platform



Small program



## Hardware Advantage



### Dynamic binocular in vivo detection

The device is equipped with wide dynamic binocular live detection, which completely solves the deception of various photos on various carriers.



### Support night infrared, RGB double fill lamp

Built in night infrared and RGB double fill light, automatic fill light during face recognition, and can recognize face quickly and clearly at night and in dark and no light environment.



### Automatic alarm for abnormal temperature

If the person with abnormal temperature is recognized, the device's fill light turns red, the interface display turns red, and the voice broadcast temperature is abnormal.



### The scene of temperature measurement can be photographed and saved

During face recognition temperature measurement, the equipment automatically captures the photos of the on-site personnel and uploads them to the system, which can be queried in the system.

## Identify Detection Tips

## Fast detection and recognition, abnormal voice alarm

The recognition distance is 0.5m-1m, and the face recognition personnel can be quickly brushed, and the temperature test and mask wearing test can be carried out at the same time.



The temperature is normal. It's allowed to pass.



Temperature is abnormal, no passage.



No access without mask



Installation Mode



On Wall

Wall mounted installation, no need to match with other products, can be single wall mounted, simple and convenient, suitable for fixed place in and out temperature measurement.

Desktop type installation, with the use of base, can be placed on the desktop, suitable for the company's front desk, fixed entrance and exit.



On Desktop



On Gate

For gate type installation, the equipment shall be fixed on the gate, and the linkage access control shall be managed together, which is suitable for the users who have the gate or are ready to install the gat.

It is installed on the bracket. It is very simple to install, and can be moved and placed anytime, anywhere. This method is suitable for the entrance of temporary temperature measurement.



On Bracket



On Column

The column type installation, carried on the column cylinder, is stable and simple, suitable for small places such as wholesale mall and construction site.

## Application Scenario





Office Building



School



Construction site



Supermarket / Plaza



Hospital



government



factory



Bus



Community