Wall-mounted Living Face Recognition Terminal



Document modification history

Vision	Content	Revise	Review	Date
V1.0	First edition			2020-04-27

statement

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TM08-W

Living Face Recognition Terminal Wall-mounted Module of Temperature Measurement & Face Recognition

Introduction

TM08-W, Terminal Display vertical module of temperature measurement & face recognition uses Rockchip RK3288 / RK3399 / Qualcomm MSM8953 high-performance hardware platform, equipped with industrial-class binocular camera, live face recognition technology and infrared thermal imaging module to support face-withmask identify. It supports 1: 1 and 1: N face comparison and retrieval, face-with-mask recognition and human temperature detection. It supports automatic alarm for body temperature abnormality. It also supports expansion of various peripherals such as ID card readers, fingerprint readers, etc., which can be applied to gate passages and attendance system to achieve safe and efficient access control for personnel.



Standard

IC card / ID card

Applications

Can be used with access gates and attendance for communities, office buildings, schools, hotels, scenic spots, transportation hubs and other public service places.



Features

- 8-inch IPS full-view LCD display.
- Industrial-class appearance, waterproof and dustproof design which is stable and reliable.

Supports 30,000 face database. The 1: 1 comparison recognition rate is more than 99.7%, the
1: N comparison recognition rate is more than 96.7%@0.1% misrecognition rate, and the live detection

accuracy rate is 98.3%@1% misrejection rate. Face recognition pass speed is less than 1 second.

• Supports accurate face recognition and comparison while wearing a mask.

• Using industrial-grade binocular wide dynamic camera, night infrared and LED dual photo flood lamp.

◆ Support processors with strong performance: Rockchip RK3288 quad-core processor, Rockchip RK3399 six-core processor and Qualcomm MSM8953 octa-core processor.□

◆ Supports human body temperature detection and temperature display. The best temperature detection distance is 0.5 meters. The longest distance at which body temperature can be measured is 1 meter. The measurement error is plus or minus 0.5 °C.

• It only takes a few seconds for detection, and supports automatic alarm for body temperature abnormality.

• Attendance temperature measurement data is exported in real time.

• Supports various peripheral expansions such as ID card reader, fingerprint reader, IC card reader, two-dimensional code reader, etc.

- The documentation is complete and supports secondary development.
- Support system level, APP offline level, APP + background network level multiple API docking.

Parameters

	Model	TM08-W
	Resolution	2 million pixels
Camera	Туре	Binocular wide dynamic camera
	Aperture	F2.4
	Focusing distance	50-150cm
	White balance	auto
	Photo flood light	LED and IR dual photo flood light
	Size	8.0 inch IPS LCD screen
Screen	Resolution	800×1280
	Touch	Not supported (optional support)
Processor	CPU	RK3288 quad-core (optional RK3399 six-core, MSM8953 eight- core)
	Storage	EMMC 8G
	Network module	Ethernet and wireless (WIFI)
	Audio	2.5W / 4R speakers
	USB	1 USB OTG, 1 USB HOST standard A port
In the Course	Serial communication	1 RS232 serial port
Interface	Relay output	1 door open signal output
	Wiegand	One Wiegand 26/34 output, one Wiegand 26/34 input
	Upgrade button	Support Uboot upgrade button
	Wired network	1 RJ45 Ethernet socket
	Credit card reader	None (optional IC card reader, ID card, ID card)
	Face Detection	Supports detection and tracking of multiple people at the same
		time
	Face library	Up to 30,000
	1: N face recognition	Support
	1: 1 face comparison	Support
	Stranger detection	Support
Function	Identify distance	Support
	configuration	
	UI interface configuration	Support
	Upgrade remotely	Support
	Interface	Interfaces include device management, personnel / photo
		management, record query, etc.
	Deployment method	Support public cloud deployment, privatized deployment, LAN use, stand-alone use
Infrared	Temperature detection	Support
thermal	Temperature detection	1 meter (optimal distance 0.5 meter)
thermal		

imaging	distance	
module	Temperature	≤ ±0.5°C
	measurement accuracy	- 10.0 C
	Temperature	10°C~42°C
	measurement range	
	Thermal field of view	32 X 32℃
	Visitors' temperature is	
	normal and released	Support
	directly	
	Abnormal temperature	Support (temperature alarm value can be set)
	alarm	
	Power	DC12V (±10%)
	Operating temperature	0°C~60°C
General	Storage temperature	-20°C~60°C
parameters	Power consumption	13.5W (Max)
	Installation method	Screwed by wall mount bracket
	Size	Standard: 274.24*128*21.48 (mm)
	Size	IC card / ID card:296.18*132.88*25(mm)
Packing list	Machine * 1, power adapter * 1	manual * 1, certificate of conformity * 1

Appearance and size

IC card / ID card:



Fixed way

1. Fix the wall mount bracket to the wall installation position specified by the device with screws;

2. Fix the upper slot of the module device on the mainframe hook of the wall-mounting bracket, and fix the hole under the device with a combination screw below.



Wire interface definition



The interface of each terminal is defined as follows.

Relay

	Terminal electrical definition
Pin1	COM
Pin2	NO

Wigan input

	Terminal electrical definition
Pin1	D0_IN
Pin2	D1_IN
Pin3	12V
Pin4	GND

Wigan output

	Terminal electrical definition
Pin1	D0_OUT
Pin2	D1_OUT
Pin3	GND

232 serial port

	Terminal electrical definition
Pin1	232_RX1
Pin2	232_TX1
Pin3	GND