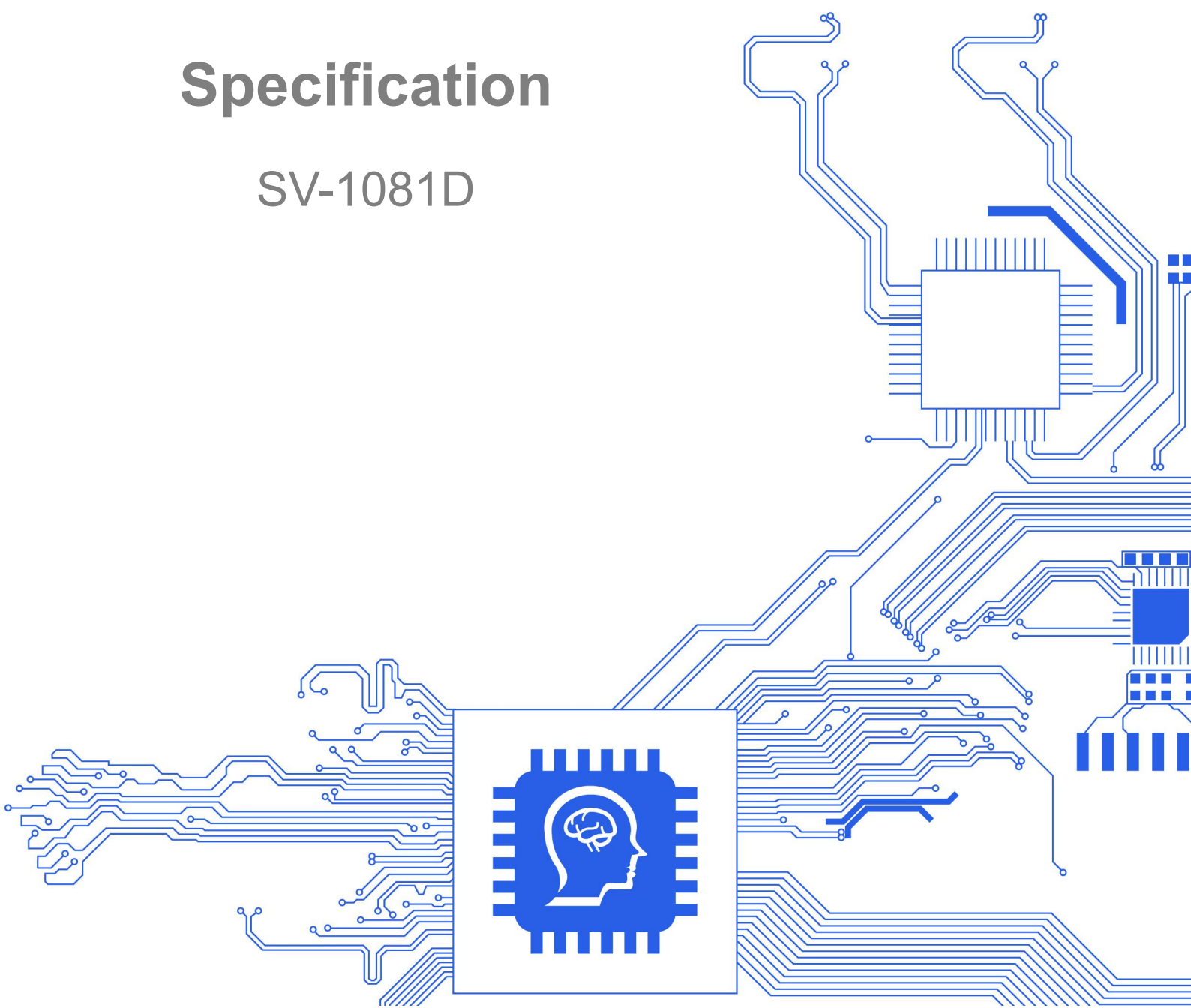


# Pass Management Vertical Module of Temperature Measurement & Face Recognition

## Specification

SV-1081D



## Document modification history

Vision	Contents	Revise	Review	Date
V1.0	First edition			2020-03-20

# SV-1081D

## Pass Management Vertical Module of Temperature Measurement & Face Recognition

### Introduction

SV-1081D, pass management 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-with-mask identify**. 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.



### 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.

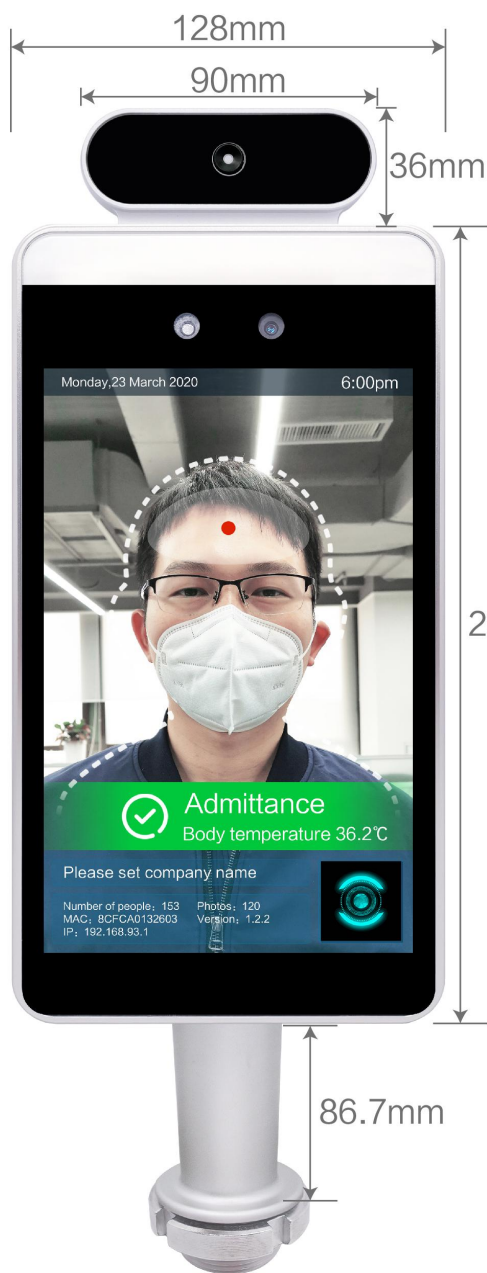
## Parameters

	Model	SW-1081D
Camera	Resolution	2 million pixels
	Type	Binocular wide dynamic camera
	Aperture	F2.4
	Focusing distance	50-150cm
	White balance	auto
	Photo flood light	LED and IR dual photo flood light
Screen	Size	8.0 inch IPS LCD screen
	Resolution	800×1280
	Touch	Not supported (optional support)
Processor	CPU	RK3288 quad-core (optional RK3399 six-core, MSM8953 eight-core)
	Storage	EMMC 8G
Interface	Network module	Ethernet and wireless (WIFI)
	Audio	2.5W / 4R speakers
	USB	1 USB OTG, 1 USB HOST standard A port
	Serial communication	1 RS232 serial port
	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
Function	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
	Identify distance configuration	Support
	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 thermal	Temperature detection	Support
	Temperature detection	1 meter (optimal distance 0.5 meter)

imaging module	distance	
	Temperature measurement accuracy	$\leq \pm 0.5^{\circ}\text{C}$
	Temperature measurement range	$10^{\circ}\text{C} \sim 42^{\circ}\text{C}$
	Thermal field of view	32 X 32°
	Visitors' temperature is normal and released directly	Support
	Abnormal temperature alarm	Support (temperature alarm value can be set)
	General parameters	Power
Operating temperature		$0^{\circ}\text{C} \sim 60^{\circ}\text{C}$
Storage temperature		$-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$
Power consumption		13.5W (Max)
Installation method		Gate bracket installation
Size		Standard: 274.24*128*21.48 (mm) 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

Standard:



Infrared thermal imaging module

heat sink

Height adjustment

Speaker



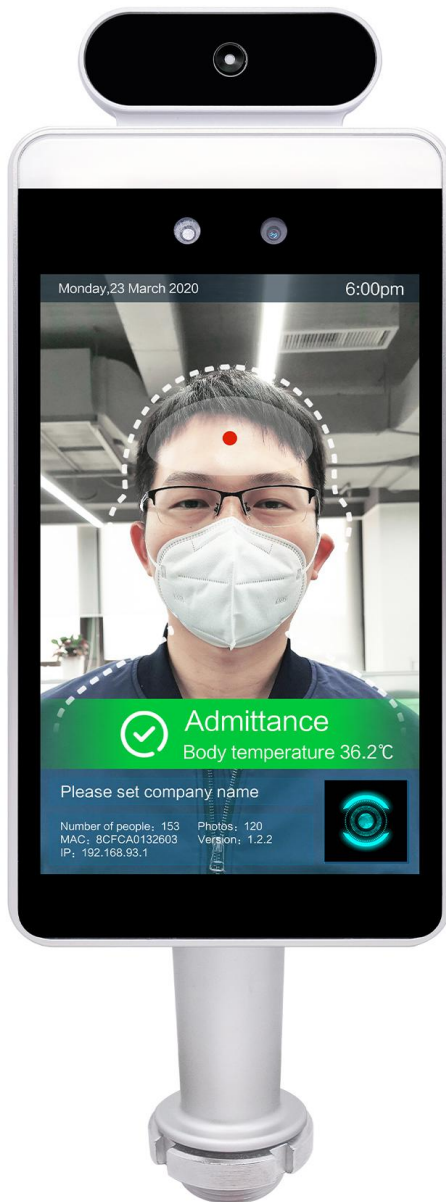
IC card / ID card:



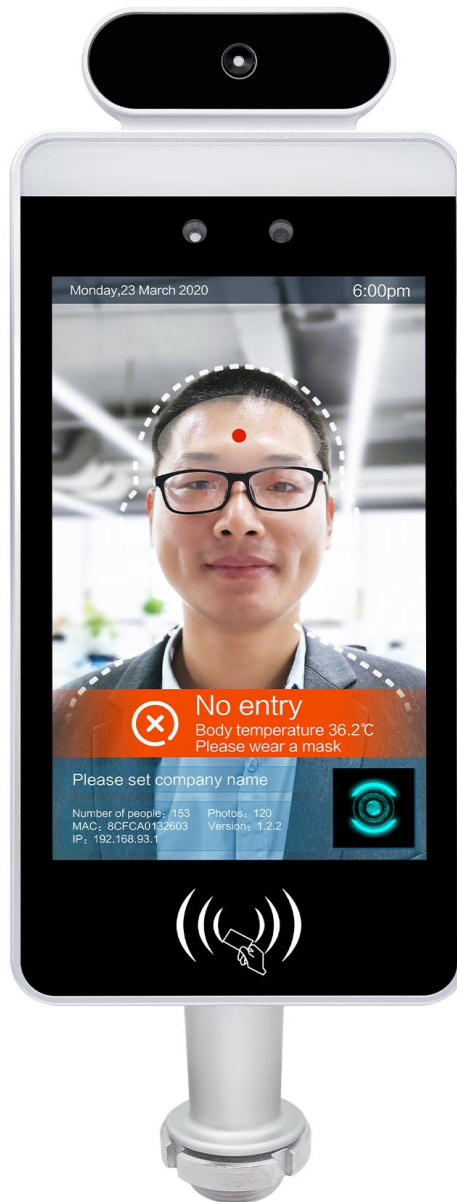


## Fixed way

It is mainly used for gates and is fastened by screw base.

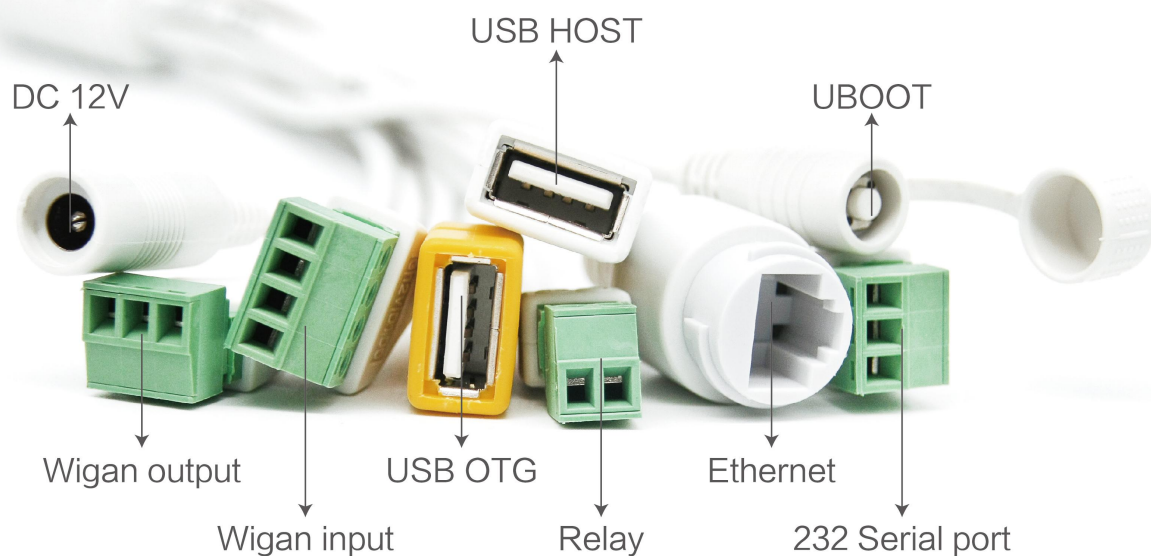


Standard



IC card / ID card

## Wire interface definition



The interface of each terminal is defined as follows.

### ■ Relay

	Terminal electrical definition
<b>Pin1</b>	COM
<b>Pin2</b>	NO

### ■ Wigan input

	Terminal electrical definition
<b>Pin1</b>	D0_IN
<b>Pin2</b>	D1_IN
<b>Pin3</b>	12V
<b>Pin4</b>	GND

### ■ Wigan output

	Terminal electrical definition
<b>Pin1</b>	D0_OUT
<b>Pin2</b>	D1_OUT
<b>Pin3</b>	GND

### ■ 232 serial port

	Terminal electrical definition
<b>Pin1</b>	232_RX1
<b>Pin2</b>	232_TX1
<b>Pin3</b>	GND