

Fi5L-P1

Integrated Face Recognition & Thermal Body Temperature Detection Panel



Body Temperature
Detection Module

Indicate Body
Temperature

Access Right
Indication



Objectives

- Remotely measure body temperature by means of **medical grade thermal sensor**
- Emit **voice alert** in case of abnormal body temperature detected
- Concurrently process facial recognition for **visitor accreditation**
- Capture face, access and temperature **data for future analysis**
- **Minimize physical contact** between staff and visitors
- Enhance **higher efficiency in visitor management** at high people traffic spots, for e.g. building entrances, schools, shopping malls, restaurants, etc, during health control

Professional Design

High Performance A.I. Chip

- Advanced neural network processing unit with capacity up to 1000Gops

Powerful Recognition Algorithm

- Face recognition accuracy 99% or above
- Recognize the face even with mask on
- Make voice alert to wear mask if no mask is detected (optional)

Quick Temperature Detection

- Detection done in less than 70ms

Comprehensive Report

- Access report showing name, time, temperature, successful access or not and picture comparison (optional)

Expandable Design for More Integrated Access Control Functions

- Link with access controllers for more time attendance and event visitor management
- Trigger opening of door / turnstile when integrated with full access control system
- Add sanitizing machine and stand if needed

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Technical Specifications:

Model	Fi5L-S1
Hardware & Platform	
Processor	28nm processor, equipped 1Tops AI computing capability, support 4-megapixel@30fps
Operating System	Linux
Sensor	Medical grade thermal heat map sensing, unique algorithm for temperature compensation based on measuring distance and surrounding temperature
Camera	1/2.8" progressive scanning CMOS
DDR	4GB
Flash	8GB eMMC
Screen Display	5" IPS screen, 720 x 1280 resolution; 1920 x 1080: pixel
Operation Capacity	
Front End Storage	20,000 (with images)
Library Capacity	Support 50,000 images
Ambient Light	0 - 50,000 Lux with compensation light automatically on in case of insufficient lighting
Verification	
Verification Angle	360° verification angle
Unmasked Face Recognition Rate	> 99.5%; False Recognition Rate < 1%
Verification Time	≤ 70ms
Detection Rate w/o Mark	> 99.5%; False Recognition Rate < 1%
Face Recognition Rate with Mask	> 95%; False Recognition Rate < 1%
Temperature Measuring Distance	Max. 0.5 m
Face Detection Range	0.3 – 0.5 m
Verification Mode	1:1; 1:N
Authentication Mode	Face / Card



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Operational Features

Offline Operation	Support
Voice Notification	Support
Real Time Clock	Support
Card Reader	IC Card Reader
Languages	English / Simplified Chinese / Traditional Chinese / Japanese
Voice Alert	English / Cantonese / Putonghua / Spanish
Access Control Support	Weigand 26 or 34 bit / Relay

Interface

RJ45	x 1, TCP/IP 100M Ethernet interface
Wiegand Output	D0, D1
RS485	x 2
Alarm Input	x 2
Relay	NO, NC
Card Slot	MicroSD, Support 64G
Video Output	HDMI

Environmental

Operating Temperature	-20 °C ~ to +70 °C
Operating Humidity	20% to 90%

Power

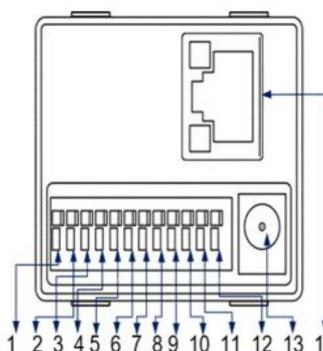
Power Supply	DC 12V, ± 25%
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Certification

Rating	CE,
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Physical

Dimension	179 (L) x 132.5 (W) x 28 (H) mm
Weight	2 Kg



1	RS485A	8	ALARM ON (relay normally close end)
2	RS485B	9	ALARM COM (central tapping end)
3	GND	10	ALARM OFF (relay normally open end)
4	WEIGAND 1	11	GND_IN (12V power ground)
5	WEIGAND 0	12	12V0_IN (12V power supply)
6	GND	13	POWER (power supply interface)
7	ALARM IN	14	RJ45

Design and specifications are subject to change without notice