

# SPECIFICATION

# FR520 Face Recognition Reader

WWW.MAG.COM.MY



### **Description**

MAG FR520 face recognition reader is a dynamic face recognition reader with advanced digital temperature measurement module. It support intelligent mask detection to alert and deny access for people without mask.

It is suitable for use in pedestrian gate or door access for office building, school, hospital, airport, condominium, factory, etc.

#### **Features**

- 1. Extra wide lighting (EWL). Even under high contrast or lower lighting conditions, it is still able to scan your face accurately.
- **2. 5 in 1 Face recognition reader.** FR520 offer maximum flexibility with 5 access mode which is face recognition, card, pin, QR code and fingerprint.
- **3. High user capacity up to 50,000 face.** With the high user capacity, it is ideal for usage in any big office, factory, school or any commercial building.
- **4. High fingerprint capacity up to 100,000 templates.** With the high fingerprint capacity, each user are able to enroll 2 fingerprint and it is ideal for usage in any big office, factory, school or any commercial building.
- **5. Temperature Scanning.** FR520 will deny access with alarm output and notification on LCD screen when detecting abnormal temperature up to 0.01 degree of accuracy at 0.5m in range.
- **6. Mask detection.** Reader can differentiate if the face is with or without the mask. FR320 can be set to deny access when the face is scanned without a mask.
- 7. Automatic Adaptive Distance Reading (AADR) technology. Automatically adjust detection area to accurately capture all critical biometric point even though when the face is moving. This is to ensure accurate recognition.
- **8.** Automatic Depth Measuring (ADM) technology. Able to detect face at front and back, but priority on the face at front. This is to minimize front-gating where an authorized people trying to cheat for access.

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- **9. Dual camera featuring IRSense and ColorSense technology.** Both technology work hand-in-hand to reject displayed face photo or video under low lighting environment. Additional LED light will be automatically illuminated in order to recognize face in dark environment condition.
- **10. Adjustable detection range.** If temperature scanning is disabled, the detection range can be adjusted up to 3 meters to cater different people traffic flow pattern at site. Temperature scanning work best at 0.5 meters.
- **11. Sleep mode function.** Reader will hibernate if there is no face detection after a prefix time. This help the reader display to be more long lasting. For crowded environment, you can set to wake up the reader only by touching the LCD screen instead of the default wake up upon scanning any face that passes by.

### **Technical Parameter**

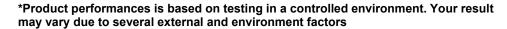
User Capacity	50000 ( 50k face, 50k card and 50k pin )
Fingerprint capacity	100,000 ( 1 user 2 fingerprint )
Event Record Capacity	500,000
Access Mode	Face, Card, PIN, fingerprint or QR code. Face + PIN, Face + Card, Face + QR code, Face + ( PIN/Card/QR ), PIN + Card, PIN + QR, Face + Fingerprint, Fingerprint + Card, Fingerprint + QR, Fingerprint + PIN.
Face Recognition Mode	1:N
Validation Display	Name, temperature and avatar (enrolled picture as thumbnail).
Real Time Face Detection	< 0.2sec, single face or multi face (5 faces) under normal sufficient lighting condition
Intelligent Function	Live person identification detection
Facial Scanning Range	Without live movement detection: 0.5-3m (normal sufficient lighting condition)  With live movement detection: 0.5-1.5m (normal sufficient
	lighting condition)
Temperature scanning range	0.5m ( ± 0.3°C) in normal indoor environment
Dual Camera	EWL ColorSense Camera and IRSense Camera
Dual Light	Smart LED light and infrared light
Display Screen	5 inch Full HD Capacitive touch screen
Mask Detection	Can disable, enable or set as compulsory.  Best detection with normal bright color face mask. Accuracy of recognition will decrease with fancy or black color face mask.
Operating System	LINUX System
False rejection rate (FRR)	<= 0.1% ( with actual face without face mask )
False approval rate (FAR)	<= 0.001% ( with actual face without face mask )
Relay Output	Lock Relay dry contact output (N.O, N.C and COM) Alarm Relay transistor output (-12V)
Relay Input	Door Sensor
USB	Yes,for updating firmware, download and upload data (standalone)
Push Button Input	Yes
Communication Interface	TCPIP or WIFI (stability is dependent on wireless signal quality)
External Wiegand Port	Yes, WG26/34 Output/Input
Power Supply	DC 12V, 2A
Working Temperature	−15°C to 45°C
Casing Material	Aluminium Alloy
Dimension (L x W x H)	188mm x 80mm x 20mm
Operating Environment	Indoor or under shade ( avoid direct heat and sunlight exposure )

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## **Dimension**











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