

MDF201

Fingerprint Module



MDF201 optical fingerprint module is a high performance security fingerprint module launched by Fingerprint Technology, supporting Windows, Android, embedded devices semiconductor fingerprint identification module, with fingerprint acquisition, feature processing, fingerprint comparison, search and feature storage to meet fingerprint identification needs, the product uses standard USB/UART communication, with SDK development kit.

It has outstanding performance in ease of use and durability index, stable sensor and long service life, good adaptability to high and low temperature, sand and other harsh conditions, combined with our fingerprint algorithm, it can collect and have good comparison effect on dry, cracked, dirty and wet finger conditions normally.

Exquisite structure: 59.0x31.8x13.6mm ultra-thin structural design

Clear image: With residual fingerprint suppression function and LFD anti false fingerprint technology, it can capture high-definition fingerprint images

Efficient collection: Adopting optical distortion free fingerprint imaging technology, the collection speed is fast

Authoritative certification: Compliant with FBI PIV Mobile ID FAP20 in the United States;

International standards: Comply with international standards such as ISO19794-2, ISO19794-4, NIST imaging, ANSI378, and WSQ;

Public Security Standard: GA/T 1011-2012 General Technical Requirements for Fingerprint Collection of Resident Identity Cards

Easy development: Standard UART/USB interface, source code SDK available

Product specification

Electrical Parameters	
Supply Voltage	5V (typical), the range is: 4.2V-7.0V
Supply current	3.3V (custom version), range is: 3.0V-3.6V
Lowest power consumption	60mA (typical), peak current: 80mA
Maximum power consumption	Standby 5uA
Fingerprint image recording time	Operating state 64mA
Operating temperature	<0.5sec
Storage temperature	-30°C~+70°C
Working Humidity	-40°C~+80°C
Operating Humidity	20%-90%
Performance Parameters	
Window size	165x21.0(W x L mm)
Effective Size	17.6 x 23.0mm(W x H mm)
Housing size	59.0x31.8x13.6mm
Image size	300*400pixel
Image pixels	500DPI
Matching method	Comparison method (1:1) Search method (1:N)
Fingerprint feature	512 bytes
Fingerprint template	512 bytes
Storage capacity	1000pcs
Security Level	256-bit AES fingerprint data encryption technology
False Recognition Rate (FAR)	<0.001% (at security level 3)
False Rejection Rate (FRR)	<0.005% (at security level 3)
Search Time	<1.0 sec (at 1:1000, average value)
Communication Interface	UART (TTL logic level) or USB1.1 compatible
Communication baud rate (UART)	(9600×N)bps, where N=1-12 (default factory N=6, i.e. 57600bps)
Special function	With fingerprint self-learning function