

EM-4010

Compact Fingerprint Module

Low power consumption
Strong wet/dry fingers adaptation



Aratek EM-4010 capacitive fingerprint module delivers superior image, and its good performance enables it a reliable solution for many identity verification applications. EM-4010 worldwide advanced module is cored with ARM and has features of compact volume, low power consumption, fast capture speed, strong wet/dry fingers adaptation, high fake finger rejection rate. EM-4010 supports UART/USB protocol which enables easy integration and development.

Features

- **Powerful Kernel:** exclusive 3 - bit ARM kernel with dominant frequency up to 144MHz
- **Compact Volume:** simple structure, suitable for volume limited products
- **Fake Finger Rejection:** live-scan technology to reject fake fingers
- **Strong Adaption:** good adaption for wet/ dry fingers
- **Correction and Authentication:** support auto correction and 360 degree rotation authentication
- **Easy to Develop:** USB and UART supported
- **Cloud Platform:** seamlessly join in Aratek TrustLink™ biometrics authentication platform
- **System Compatibility:** support embedded development, Linux, Android and Windows

Applications

- ATM, POS, PDA
- Access Control
- Consumer Electronics
- Information Security
- Time Attendance
- Voter ID Verification
- Mobile Identification
- Government Benefit Deliveries, etc.

Physical Parameter

Sensor Size	23*35mm
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Performance Parameter

Sensor Name	ARS4010
Sensor Type	Capacitive
Capture Method	Press
Platen Size	14.25*19.3mm
Sensing Area	12.8*18mm
Image Size	256*360pixel
Image Resolution	500 dpi
Gray Scale	8 bits, 256 level
Enrollment Time	<3s
Matching Time	<0.1s (1: 1), <0.5s (1: N, 100)
FAR	<0.0001%
FRR	<1%
Fingerprint Feature	384 bytes
Fingerprint Template	768 bytes

Communication Mode

Interface	UART, USB1.0/2.0
Baud Rate	115200bps (default)

Electrical Parameter

Work Voltage	3.6-5V
Work Current	50mA
Standby Current	35mA

Electrical Parameter

Work Temperature	0℃~55℃
Storage Temperature	-40℃~60℃
Work Humidity	20~90% R.H
Storage Humidity	17~96%

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