



## Fingerprint Smart Card



A smart card that verifies the user with fingerprints, allowing exclusive access to pre-registered users only. This provides customers a higher level of security compared to conventional identification methods.

### General Description

- A powerful capacitive fingerprint sensor module with USB and GPIO interface.
- Composed mainly by fingerprint sensor and MCU embedded recognition algorithms.
- Ultra-thin thickness, low-power consumption, high-speed and highly -accurate fingerprint recognition make it particularly suitable for application of smart cards.
- Cermet-like coating provides up to 6H hardness and protects sensor against scratch, impact and daily wear-and-tear.

### Fingerprint Card Access



Fingerprint setup

Pay by fingerprint card

Authorize through fingerprint

- System for fingerprint authentication => On card
- Location of fingerprint extraction => In card
- Location of fingerprint authentication => In card
- Protection of privacy => By user’s discretion



### Specification



Product:	Fingerprint Active Card	Fingerprint Passive Card
Power Source:	Embedded Rechargeable Battery	Energy Harvesting from RFID Field
Battery Cycle Life:	300 times	without battery
Communication Frequency:	125kHz or 13.56MHz	
Contactless RFID chips:	HID Prox, EM, HID iClass standard Mifare Classic, DesFire EV1, FeliCa	HID iClass standard Mifare Classic, DesFire EV1, FeliCa
Dimensions:	ISO7816-1, type ID-1, 85.6mm(W)x54mm(H)x0.74-0.84mm(D)	
Card Material:	PVC or PET or PETG through dynamic bending & torsion test	
Operating Temperature:	0°C ~45°C	
Storage Temperature:	-20°C~50°C	
Extended Humidity:	65 ~ 90% RH	
Sensing Area:	8 x 8mm ; 160 x 160pixel	
Sensor Pixel Size:	50 x 50um	
Special Resolution:	508 DPI	
ADC Pixel Resolution:	8 Bits Gray Scale	
FRR / FAR:	2% / 1/10000	
ESD:	+/- 8KV (Contact mode)	