

uTouch Advanced Identification Technology



uTouch Android/Linux All-in-One System is full featured with multiple identification technology, combined with Biometric + Contactless Smartcard + NFC, ideal for personal identification in various purpose smartcard and security solution, such as membership, Loyalty, POS, parking, healthcare etc



Secure Contactless Smart Cards + NFC Smart Phone

uTouch is powerful in RFID identification with multiple advanced secure contactless smart cards supported, as well as NFC tags and smart phone in long reading distance and fast speed, ideal for fast and secure personal identification and cashless payment

- 125 KHz/13.56MHz multiple smart cards ISO14443A/B, ISO15693, FeLiCa, HID iCLASS® and LEGIC compatible
- Read/write Mifare Classic®, Mifare Plus®, DESFire EV1®, Ultralight, Ultralight C, Ntag203
- Incremental authoritative high encryption: Cryptal, DES, 3DES, AES 128bit with added SAM encryption
- Fast reading speed up to 848kbps and 30-100mm long reading distance (depending on transponder)
- Other smartcard technology customization on request



uTouch Fingerprint Sensor

uTouch Android/Linux All-in-One System is designed with the robust fingerprint sensor, which is with advanced secure fingerprint authentication algorithm, as well as solid and scratch-free sensor surface, ideal for wet & dry fingers to capture reliable high quality fingerprint image for fast biometric identification.

NETWORK Enrollment

Quick fingerprint enrollment has been integrated into uTouch. To work with uTouch high resolution camera and wide touch screen, it's easy and fast to take picture, enroll few templates and type necessary information. All the templates, image and data are synchronized to central server for staff achieve management and distribute to other terminals for access control time attendance management.

uTouch Fingerprint Features

- Large sensing area
- Fast fingerprint enrollment & authorization online
- Fast Speed authentication with 0.76s (1:1000), 1:1 Verification in 600ms
- Each user with 1- 10 enrolled fingerprint templates
- Robust optical fingerprint 1:1 or 1: N (1900/9500)
- Store and match fingerprint template in RFID smart card with added privacy Access right with fingerprint template can be automatically distribute to any terminals online

Fingerprint Specification

Sensor	500 dpi optical sensor
Encryption	256-bit AFS Fingerprint data Encryption
CPU	533MHz DSP
Flash Memory	1MB (4MB Option)
EER	< 0.1%
Enrollment Time	< 600ms OP5/OC4/OH
1:1 Verification Time	< 600ms OP5/OC4/OH
1:1000 ID Time	< 760ms OP5/OC4/OH
Template Options	ISO19794-2, ANSI-378
Template Size	Configurable 256 to 384 Bytes (Default: 384 Bytes)
Template Capacity	1,900 @ 1 MB Flash; 9,500 @ 4 MB Flash
Log Capacity	-1,000,000 events
Fingerprint Data Encryption	256-bit AES

uTouch fingerprint sensor overcomes the problem of significantly compromised quality of fingerprint image (Figure 1) uploading to Host PC and have been equipped with the new technology to compress fingerprint images and quickly send high quality images via a low bandwidth network environment.

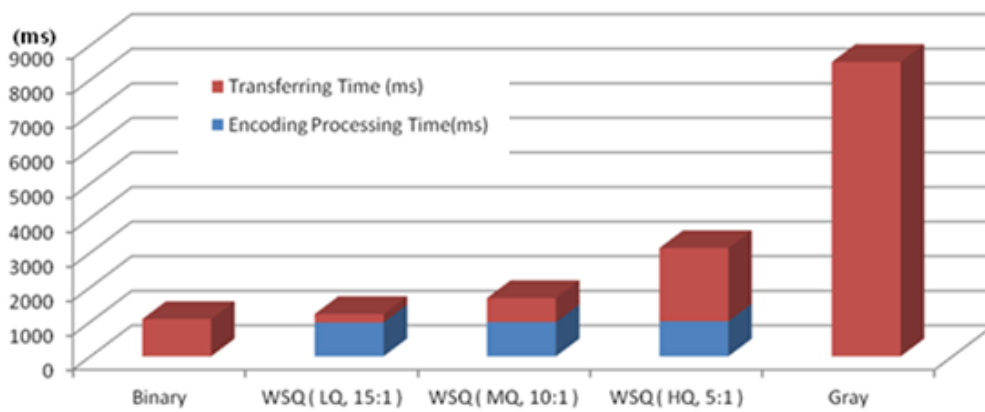
When compressing, the quality degradation is minimized (Figure 2), but the data size is lowered by 90%, reducing the time it takes to be sent by 90%, as well. Moreover, you can set the system to compress images in different levels, enabling you to appropriately adjust the transfer speed and the image quality according to its use (Figure 3).



[Figure 1] Compromised fingerprint image quality caused by binarization



[Figure 2] Different image qualities according to WSQ compression ratio (minimal difference)



[Figure 3] Comparison of transfer speeds of a single fingerprint image according to WSQ compression ratio:
In the case of a 15:1 compression ratio, the transfer speed is similar to that of a binary image, including the encoding



Product Datasheet

[Detailed Specification](#)



Product Video

[Solution Video](#)



PC/Pad Solution

[PC, PAD & Mobilephone](#)