



FINGERPRINT



Mobile Computer

Fingerprint



Android



4G



WiFi



Bluetooth



Fingerprint



1D Barcode



2D Barcode



IRIS



NFC



Camera



GPS

This device is an Android rugged mobile computer. It is improved to enable capacitive fingerprint sensor TCS1/TCS2 and optical sensor CBM-E3. It is revolutionized to be FIPS 201 compliant, and enable secure data encryption and fake finger detection. This mobile computer with biometric functions can best satisfy your needs of identity verification. It is ideal for population census and national election.



Specification

Physical Characteristics

Dimensions	164.2*78.8*17.5mm/6.46*3.10*0.69in; (Capacitive the thickest: 24.5mm/0.96in); (Optical the thickest: 31.5mm/1.24in)
Weight	<314g/11.08oz
Display	5.2" IPS FHD 1920x1080
Touch Panel	Corning Gorilla Glass, multi-touch panel, gloves and wet hands supported
Power	Main battery: Li-ion, rechargeable, 5000mAh Standby: over 350 hours Continuous use: over 12 hours (depending on user environment) Charging time: 3-4 hours (with standard adaptor and USB cable)
Expansion Slot	1 slot for SIM card, 1 slot for SIM or TF card
Interfaces	USB 2.0 Type-C, OTG
Audio	Speaker, 2 microphones
Keypad	4 front keys, 1 power key, 2 scan keys, 1 multifunctional key
Sensors	Gravity sensor, light sensor, proximity sensor, vibration motor

Performance

CPU	Cortex-A53 Quad-core 1.3GHz
RAM+ROM	2GB+16GB
Expansion	Supports up to 32 GB Micro SD card

Developing Environment

Operating System	Android 6.0
SDK	Software Development Kit
Language	Java
Tool	Eclipse / Android Studio

User Environment

Operating Temp.	-4°F to 122°F / -20°C to 50°C
Storage Temp.	-40°F to 158°F / -40°C to 70°C
Humidity	5%RH - 95%RH non condensing
Drop Specification	Multiple 1.8m/5.9ft drops (at least 20 times) to the concrete across the operating temperature range
Tumble Specification	1000 x 0.5m/1.6ft falls at room temperature
Sealing	IP65 per IEC sealing specifications
ESD	±8KV air discharge, ±4KV conductive discharge

Communication

WLAN	IEEE802.11 a/b/g/n, 2.4G/5G dual-band, internal antenna 2G: 850/900/1800/1900MHz
WWAN(Europe)	3G: 850/900/1900/2100MHz 4G: B1, B3, B5, B7, B8, B20, B40 2G: 850/900/1800/1900MHz
WWAN(America)	3G: 850/900/1700/1900MHz 4G: B2, B4, B7, B12, B17 2G: 900/1800MHz
WWAN (China)	3G: 900/1900/2000/2100MHz 4G: B1, B3, B5, B38, B39, B40, B41
WWAN (Others)	Depending on the country's ISP
Bluetooth	Bluetooth 4.0, BLE
GNSS	GPS/AGPS, GLONASS, BeiDou; internal antenna

Data Collection

Fingerprint

Option 1

Sensor	TCSI/TCS2 Capacitive
Sensing Area (mm)	12.8x18; 10.4x14.4
Resolution (dpi)	508 dpi, 8-bit greylevel
Certifications	FIPS 201, STQC
Format Extraction	ISO 19794, WSQ, ANSI 378, JPEG2000
Fake Finger Detection	Support by SDK
Security	AES, DES key encryption of the host communication channel

Option 2

Sensor	Optical Morpho CBM-E3
Sensing Area (mm)	14x22
Resolution (dpi)	500 dpi, 256 greylevel
Certifications	FIPS PIV IQS / ISO 19794-4, MINEX & FIPS 201 compliant, STQC
Format Extraction	ISO 19794-2/4, WSQ, ANSI 378, etc.
Fake Finger Detection	Latex, Gelatin, Plasticine, Kapton, Transparent Film, Silicone, Rubber, Play-doh, Graphite Or Paper
Security	FIPS 140-2 level 2, multiple security methods available, including image and templates encryption, template signature, secure tunneling, etc.

Camera

Rear Camera	13MP Autofocus with flash
Front Camera (optional)	5MP camera

NFC

Frequency	13.56MHz
Protocol	ISO14443A/B, ISO15693, NFC-IP1, NFC-IP2, etc.
Chips	M1 card (S50, S70), CPU card, NFC tags, etc.
Range	2-4cm

Barcode Scanning (optional)

1D Linear Scanner	Zebra SE965 / Honeywell N4313
1D Symbolgies	UPC/EAN, Code128, Code39, Code93, Code11, Interleaved 2 of 5, Discrete 2 of 5, Chinese 2 of 5, Codabar, MSI, RSS, etc.
2D Imager Scanner	Zebra: SE4710 / SE4750 / SE4750MR; Honeywell: N6603
2D Symbolgies	PDF417, MicroPDF417, Composite, RSS, TLC-39, Datamatrix, QR code, Micro QR code, Aztec, MaxiCode; Postal Codes: US PostNet, US Planet, UK Postal, Australian Postal, Japan Postal, Dutch Postal (KIX), etc.

Iris (optional)

Rate	<150ms
Range	20-40cm
FAR	1/10000000

*Iris is alternative to front camera.

Accessories



Cradle (Optional)



AC Adaptor



USB Cable