

C71 Mobile Computer Optical Fingerprint



Chainway C71 is an Android rugged mobile computer. As a replacement of C70E, it is improved to enable optical fingerprint sensor CBM-E3. C71 is revolutionized to be FIPS 201 compliant, and enable secure data encryption and fake finger detection. With its powerful quad-core processor and wireless connections such as 4G, Bluetooth and Wi-Fi, optical fingerprint scanner, 1D/2D barcoding as well as other data capture options, including iris recognition and HF RFID/NFC, you can find this easy-to-deploy device an exceptionally valuable helper to increase working efficiency and productivity. C71 with abundant functions can best satisfy your different industrial needs.



Most Powerful Application Performance

Chainway C71 prides itself on Android 6.0 OS, quad-core processor, and 2GB of RAM, 16GB of ROM, plus 32GB SD card expansion.



Multiple Data Capture Options

C71 features class-leading 1D/2D barcode scanning, optional HF RFID/NFC and Iris recognition.



4G LTE — Faster Connectivity

With fast and stable 4G, Wi-Fi, Bluetooth connectivity, C71 will never interrupt your work both indoors and outdoors.



Rugged and Compact

With IP65 sealing, workers can still expect reliable performance when they drop it to the concrete carelessly, use it in dusty areas, or even get it wet.



Large Screen & Powerful Battery

It adopts 5.2" high-resolution IPS screen. It also supports operation with wet hands or gloves. 5000mAh battery allows a full day's non-stop work.



Optical Fingerprint Sensor

C71 can be configured with Optical Morpho CBM-E3 fingerprint module. Running powerful algorithms, it is FIPS 201 PIV, MINEX and STQC compliant with multiple template formats available and capable of fake fingerprint detection. It is also small in size, durable, immune to sunlight and resistant to electrostatic discharges, scratches and shocks. All make it to effortlessly capture a clear excellent image of the ridges and valleys of fingers.



Multiple Security Principles

Symmetric and asymmetric keys, random key generator, image and template encryption, and secure channel encryption are available to ensure the communication between C71 and distant / cloud server are protected. Enterprise administrator can easily control right of root or installing some software applications via authorization strategy or other MDM options.

About Chainway

As a leading "Internet of Things" company in China, Shenzhen Chainway Information Technology Co., Ltd is a professional provider of products and solutions of RFID and barcode technology. Founded in 2005, Chainway, a high-tech enterprise, has won several times the title of the Best Provider of RFID Readers. Thousands of clients from over 100 countries have experienced our products in retail, logistics, transportation, healthcare, finance, security and manufacturing, etc. Through our nationwide offices, overseas subsidiary and an extensive partner network, we aim to provide high quality service to our clients.



Physical Characteristics

Dimensions	164.2*78.8*17.5mm/6.46*3.10*0.69in (the thickest: 31.5mm/1.24in)
Weight	230-260g/8.11-9.17oz (dependent)
Display	5.2" IPS FHD 1920x1080
Touch Panel	Corning Gorilla Glass 3, multi-touch panel, gloves and wet hands supported
Power	Main battery: Li-ion, rechargeable, 5000mAh
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 buttons, 1 side button, 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	Chainway Development Kit (based on Morpho SDK)
Language	Java
Tool	Eclipse / Android Studio

User Environment

Operating Temp.	14°F to 122°F / -10°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
WWAN(Europe)	2G: 850/900/1800/1900MHz 3G: 850/900/1900/2100MHz 4G: B1, B3, B5, B7, B8, B20, B40
WWAN(America)	2G: 850/900/1800/1900MHz 3G: 850/900/1700/1900MHz 4G: B2, B4, B7, B12, B17
WWAN (China)	2G: 900/1800MHz 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

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 complaint, STQC
Format Extraction	ISO 19794-2/4, WSQ, ANSI 378, etc.
Security	FIPS 140-2 level 2, multiple security methods available, including image and templates encryption, template signature, secure tunneling, etc.

Camera

Camera	13MP autofocus camera with flash
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Barcode Scanning

1D Linear Scanner	Zebra SE965 / Honeywell N4313
1D Symbologies	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/Zebra SE4750MR/Honeywell N6603, etc.
2D Symbologies	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.

RFID (optional)

HF	
Frequency	13.56MHz
Protocol	ISO14443A/B, ISO15693
Chips	M1 card (S50/S70), M0 (Ultralight), M3 (Desfire D40/D41/D81), CPU_A card CPU_B card ICODE II, TI2048, LRI64K Others for customization
Range	3-8cm

Iris (optional)

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

NFC (optional)

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

Notice: Product specifications are subject to change without notice. / Model: C71 / Update Date: 2018-05-03

