



MC50 UHF

UHF Mobile Computer



Chainway MC50 UHF is our newly launched 5G high-performance UHF RFID Reader. It has Integrated a self-developed Impinj E710 based UHF module which features a UHF Pistol Grip pattern for easy disassembly and reassembly. The top-of-the-class configuration comprises advanced Android 12, Octa-core processor, and optional ultra-large memory. It integrates barcode scanning, NFC, dual camera, and multiple wireless data connections, as well as 6-inch HD screen , high-capacity removable battery and IP67 sealing. It can bring a new level of cost efficiency to a broad range of industries including retail, logistics, and warehousing.



Specification

Physical Characteristics

Dimensions	165.0 x 83.8x 138.0mm / 6.49 x 3.30 x 5.43 in.
Weight	679g / 23.95oz. (device with battery)
Keypad	Power key, 2 scan keys, volume (+/-) keys
Battery	5000mAh removable main battery, 5200mAh removable pistol battery with / without Meter(Optional) support QC3.0 and RTC
Display	6-inch high definition display (18:9), 1440 x 720
Touch Panel	Corning Gorilla Glass, multi-touch panel, gloves and wet hands supported
Sensor	G_sensor, proximity sensor, light sensor, geomagnetic sensor, gyroscope
Notification	Sound, LED indicator, vibrator
Audio	2 microphones, 1 for noise cancellation; 1 speaker; 1 receiver
Card slot	1 for SIM card, 1 for SIM or TF card
Interfaces	USB Type-C, USB 3.1, OTG

Performance

CPU	Octa-core, 2.0GHz
RAM+ROM	4GB + 64GB / 6GB + 128GB (Optional)
Expansion	Supports up to 256GB TF card

Developing Environment

Operating System	Android 12;
SDK	Chainway 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 1.5m / 4.92ft. drops (at least 20 times) to the concrete across the operating temperature range
Tumble Specification	1000 x 0.5m / 1.64ft. falls at room temperature
Sealing	IP67 per IEC sealing specifications
ESD	±15 KV air discharge, ±8 KV conductive discharge

Communication

Vo-LTE	Support Vo-LTE HD video voice call
Bluetooth	Bluetooth 5.1
GNSS	GPS/AGPS, GLONASS, BeiDou, Galileo, internal antenna
WLAN	Support 802.11 a/b/g/n/ac/ax-ready, 2.4G/5G dual-band, IPV4, IPV6, 5G PA; Fast roaming: PMKID caching, 802.11r, OKC Operating Channels: 2.4G (channel 1~13), 5G (channel 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144, 149, 153, 157, 161, 165), Depends on local regulations Security and Encryption: WEP, WPA/WPA2-PSK(TKIP and AES), WAPI-PSK—EAP-TTLS, EAP-TLS, PEAP-MSCHAPv2, PEAP-LTS, PEAP-GTC, WPA3-Enterprise, WPA3-Enhanced Open, WPA3 Easy Connect, WPA3-Personal, etc.
WWAN	2G: 850/900/1800/1900 MHz 3G: 850/900/1900/2100MHz 4G: B1/B2/B3/B5/B7/B8/B20/B28A/B28B/B34/B38/B39/B40/B41 5G: N1/N3/N8/N28/N41/N78/N79

Data Collection

Camera

Rear Camera	16MP Autofocus with flash
Front Camera	5MP

NFC

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

UHF (Optional)

Engine	CM710-1 module based on Impinj E710
Frequency	865-868 MHz / 920-925 MHz / 902-928 MHz
Protocol	EPC C1 GEN2 / ISO18000-6C
Antenna	Circular Polarized Antenna (4 dBi)
Power	1W (30dBm, +5dBm to +30dBm adjustable) 2W Optional (33dBm, for Latin America, etc.)
Max Read Range	26m (Impinj MR6 tag, size 70 x 15mm) 28m (Impinj M750 tag, size 70 x 15mm) 30m (Alien H3 Anti-Metal tag, size 130 x 42mm)
Fastest Read Rate	1300+ tags/sec (Circular Polarized)
Communication Mode	Pin Connector

*Ranges and rates depend on tags and environment

Barcode Scanning (Optional)

2D Scanner	Zebra: SE4710; CM60;
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 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.

Optional Accessories

USB Cable, Adapter, Charging Cradle, Rugged Rubber Boot, etc.

*See details in accessory guide

Notice: Product specifications are subject to change without prior notice. / Model: MC50UHF / Update Date: 2024-01-03

CHAINWAY[®]

Shenzhen Chainway Information Technology Co., Ltd

Address: 9F, Building2, Phase 2, Gaoxinqi Industrial Park, Liuxian 1st Rd., Bao'an District, Shenzhen, Guangdong 518102, China

Tel: 0086-755-23223316

Fax: 0086-755-23223310

Email: sales@chainway.cn

Web: <http://www.chainway.net>