



# C5

## Handheld RFID Reader



Chainway C5 is an upgraded all-in-one high-performance UHF RFID Reader. It Integrates a self-developed Impinj E710 based UHF module, supporting Impinj Gen2X, offering industry-leading UHF performance. C5 adopts an integrated design, provides more stable UHF performance, and delivers higher durability. The superior system configuration of the mobile computer features the Android 11 / 13 platform, octa-core processor, optional mass internal memory and a large capacity removable battery. C5 also supports 2D scanning, NFC, fingerprint recognition and other functions, which enables it to be widely used in scenarios like banking, public security, warehousing, retail, logistics and other industries.



# Specification

## Performance

CPU	Octa-core, 2.3GHz
RAM+ROM	3GB + 32GB / 4GB +64GB (Optional)
Expansion	Supports up to 256GB Micro SD (TF) card
Operating System	Android 11/13

## Communication

WLAN	802.11 a / b / g / n / ac, 2.4G / 5G dual-band
WWAN	2G: GSM (B2 / B3 / B5 / B8)
	3G: WCDMA (B1 / B2 / B4 / B5 / B8) CDMA2000 ECDO: BC0
	4G: B1 / B2 / B3 / B4 / B5 / B7 / B8 / B12 / B17 / B20 / B28A / B28B / B38 / B39 / B40 / B41
Bluetooth	5.0
Vo-LTE	Support
GNSS	GPS / AGPS, GLONASS, BeiDou, Galileo

## Physical Characteristics

Dimensions	177.0 x 80.2 x 14.8mm / 6.97 x 3.15 x 0.58in
Weight	626g / 22.08oz. (device with battery)
Display	5-inch (Fingerprint), 1280 x 720 / 6-inch, 2160 x 1080
Touch Panel	Multi-touch panel, gloves and wet hands supported;
Battery	6700mAh / 13400mAh removable pistol battery
	Built in 100mAh backup battery, supporting battery hot swap
Card slot	2 slots for PSAM card (optional); 1 slot for Nano SIM card, 1 slot for Nano SIM or TF card
Interfaces	USB 2.0 Type-C, OTG, Type-C headphones supported
Audio	1 microphone; 1 speakers; 1 receiver
Notification	Sound, LED indicator, vibrator
Keypad	1 power key, 2 scan keys, 1 user-defined key, 2 volume keys (+/-)
Sensor	Gravity sensor, proximity sensor, light sensor, geomagnetic sensor (optional), gyroscope (optional)

## Developing Environment

SDK	Software Development Kit
Language	Java
Tool	Eclipse / Android Studio

## User Environment

Operating Temp.	-20 °C to 50 °C / 4 °F to 122 °F
Storage Temp.	-40 °C to 70 °C / -40 °F to 158 °F
Humidity	5%RH to 95%RH (non condensing)
Drop Specification	Multiple 1.5m / 4.9ft. drops to the concrete across the operating temperature range
Tumble Specification	1000 x 0.5m / 1.64 ft. falls at room temperature
Sealing	IP65 per IEC sealing specifications
ESD	±15KV air discharge, ±8KV conductive discharge

## Data Collection

### Camera

Front camera	5MP
Rear camera	Rear 13MP Autofocus with flash

### UHF

Impinj Gen2X	Supported
Protocol	EPCglobal Gen 2 (ISO18000-6C)
Frequency	865-868MHz / 920-925MHz / 902-928MHz
Engine	CM710-1 module based on Impinj E710
Output power	1W (30dBm, +5dBm to +30dBm adjustable)
	2W Optional (33dBm, for Latin America, etc.)
Antenna	Circular polarization; 5dBi / 4dBi (NFC supported)
Max Read Range	5dBi
	30m (Impinj MR6 tag, size 70 x 15mm)
	32m (Impinj M750 tag, size 70 x 15mm)
	33m (Alien H3 Anti-Metal tag, size 130 x 42mm)
Fastest Read Rate	4dBi
	22m (Impinj MR6 tag, size 70 x 15mm)
	26m (Impinj M750 tag, size 70 x 15mm)
	27m (Alien H3 Anti-Metal tag, size 130 x 42mm)
1300+ tags / sec (Circular Polarized)	

\* Ranges and rates depend on tags and environment

### Fingerprint (Optional)

Sensor	TLK1NC02
Sensing Area (mm)	14.0 X 22.0
Resolution (dpi)	508dpi, 256 greylevel
Certifications	FIPS 201, FBI
Format Extraction	ISO19794, WSQ, ANSI 378, JPEG2000
Fake Finger Detection	Support by SDK
Security	AES, DES key encryption of the host communication channel

### 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

### Barcode Scanning (Optional)

2D Scanner	CM60; Zebra: SE4710
1D Symbolologies	UPC / EAN, Code128, Code39, Code93, Code11, Interleaved 2 of 5, Discrete 2 of 5, Chinese 2 of 5, Codabar, MSI, RSS etc.
2D Symbolologies	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.

### Accessories

USB Cable, Adapter, Charging Cradle for device (optional), Charging Cradle for Pistol Battery (optional), etc.

\* Please check details in accessories guide

Notice: Product specifications are subject to change without prior notice. / Model: C5 / Update Date: 2024-12-04

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