

UHF | RAIN - Handheld Reader **CHAINWAY - P80 UHF**

- RAIN RFID (UHF EPC Class1 Gen2, ISO 18000-63) compliant
- Android 13 OS
- 5G, WiFi, Bluetooth, GPS
- Up to 10m reading range
- IP65 protection



UHF | RAIN - Handheld Reader Android 13 - Operating System

Chainway P80 is an Android 13.0 rugged tablet with abundant functions. With Qualcomm Octa-Core CPU, 8-inch THD screen, 8000 mAh battery and comprehensive data capture options like UHF RFID, barcode scanning, HF RFID/NFC, Iris and fingerprint recognition, etc.

The rugged tablet can meet requirements in industrial fulfillments, such as retail, logistics, power, warehousing, transportation and so forth.

P80 deploys Chainway self-developed UHF RFID module CM, which delivers excellent RFID reading and writing capabilities. Supporting protocols of EPC C1 GEN2 / ISO18000-6C and various frequency bands, P80 can read all kinds of RFID tags with high accuracy and speed in asset management, toll road, warehousing, finance, etc.

Common Applications

- Inventory Control
- Asset Tracking
- Predictive Maintenance
- Industrial Automation
- Defence Industry



TECHNICAL SPECIFICATIONS

UHF | RAIN (optional)

Engine	CM710-1 module based on Impinj E710
Operating Frequency	865-868 MHz / 920-925 MHz / 902-928 MHz
Supported Standards	EPC C1 GEN2 / ISO18000-6C
RF Power	1W (30dBm, +5dBm to +30dBm adjustable) 2W Optional (33dBm, for Latin America, etc.)
Antenna Gain	+5dBm to +30dBm adjustable
Antenna Type	Circular polarization (3 dBi)
Max. Read Range	Up to 10 m (open outdoors, Impinj MR6 tag)

Communication

WLAN	Support 802.11 a/b/g/n/ac/d/e/h/i/k/r/v, 2.4G/5G dual-band, IPV4, IPV6
	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,etc.
WWAN (Europe, Asia)	2G: 850/900/1800/1900MHz, GPRS, EDGE
	3G: CDMA EVDO: BC0 WCDMA: B1/B2/B5/B8
	4G: TDD-LTE: B34/B38/B39/B40/B41 FDD-LTE: B1/B2/B3/B4/B5/B7/B8/B12/B13/B17/ B20/B28
Vo-LTE	Support Vo-LTE HD video voice call
Bluetooth	Bluetooth 5.1
GNSS	GPS/AGPS, GLONASS, BeiDou, Galileo, internal antenna

Camera

Rear Camera	13MP Autofocus with flash
Front Camera	5MP

Physical Characteristics

Dimension	250.8 x 152.0 x 15.0 mm (for standard version)
Weight	680 g (for standard version)
Keypad	1 front key, 1 volume key, 1 power key, direction key (Optional)
Battery	Main battery: Li-ion, rechargeable, 8700 mAh Standby: over 500 hours Continuous use: over 10 hours (depending on user environment) Charging time: 5-7 hours (with standard AC adaptor and USB cable)
Display	8" IPS LTPS 1920 x 1200
Touch Panel	Corning Gorilla Glass, multi-touch panel, gloves and wet hands supported
Sensor	Gravity sensor; gyroscope; geomagnetic sensor; light / proximity sensor
Notification	Sound, LED indicator
Audio	1 microphone; 1 speaker
Card slot	1 slot for Micro SIM card, 1 slot for Micro SIM / TF card (Optional dual PSAM card slots)
Interfaces	USB 2.0 Type-C, OTG

TECHNICAL SPECIFICATIONS

Performance Characteristics

CPU	2.0 GHz Octa-core
RAM+ROM	4 GB + 64 GB
Expansion	Supports up to 256 GB Micro SD card

User Enviroment

Operating Temp.	-20 °C to +50 °C
Storage Temp.	-40 °C to +70 °C
Humidity	5% RH - 95% RH (non condensing)
Drop Specification	Multiple 1.5 m drops to concrete across the operating temperature range
Tumble Specification	500 x 0.5m (falls at room temperature)
Sealing	IP65 per IEC sealing specifications
ESD	±15 KV air discharge, ±8 KV conductive discharge

Drivers & Support

Operating System	Android 13; GMS & AER, 90-day security updates, Zero-Touch, FOTA, Soti MobiControl, SafeUEM supported
SDK	Chainway Software Development Kit
Language	Java
Tool	Eclipse / Android Studio

Barcode Scanning (Optional)

Scan Engine	Zebra SE4710, Honeywell HS7
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.

Fingerprint (optional)

Option 1 / 2	Sensor: TCS1 / TLK1NC02
Option 3	Sensor: Optical Morpho CBM-E3
Option 4	Sensor: ARATEK A600

PSAM (optional)

Card slot	2 PSAM card slots
Protocol	ISO7816

Part No. / Model

TBA	P80
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