
















# P80

## Industrial Tablet

-   
Android
-   
4G
-   
WiFi
-   
Bluetooth
-   
RFID
-   
1D Barcode
-   
2D Barcode
-   
PSAM
-   
NFC/HF
-   
Fingerprint
-   
InfraRed
-   
Camera
-   
GPS

Chainway P80 with abundant functions is an Android 9.0 rugged tablet. With its powerful Qualcomm CPU, 8 inch high-definition screen, 8000 mAh battery and comprehensive data capture options like UHF RFID, barcode scanning, HF RFID/ NFC, fingerprint recognition, etc., you can find this easy-to-deploy device a valuable helper to increase productivity in retail, logistics, warehousing, identity verification, meter reading, etc.



# Specification

Physical Characteristics	
<b>Dimensions</b>	250.8 x 152.0 x 15.0 mm / 9.87 x 5.98 x 0.59 in. ( for standard version )
<b>Weight</b>	700 g / 24.69 oz. ( for standard version )
<b>Display</b>	8" IPS LTPS 1920 x 1200 / IPS LTPS 1280 x 800
<b>Touch Panel</b>	Corning Gorilla Glass, multi-touch panel, gloves and wet hands supported
<b>Power</b>	Main battery: Li-ion, rechargeable, 8000 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)
<b>Expansion Slot</b>	1 slot for SIM card, 1 slot for SIM / TF card, Optional dual PSAM card slots
<b>Interfaces</b>	USB 3.0 Type-C, OTG
<b>Audio</b>	Speaker, microphone
<b>Keypad</b>	1 front key, 1 volume key, 1 power key, direction key (Optional)
<b>Sensors</b>	Gravity sensor, Gyroscope, Accelerometer sensor

Performance	
<b>CPU</b>	Qualcomm 1.8 GHz Octa-core
<b>RAM+ROM</b>	2 GB + 16 GB / 3 GB + 32 GB / 4 GB + 64 GB
<b>Expansion</b>	Supports up to 128 GB Micro SD card

Developing Environment	
<b>Operating System</b>	Android 9.0; GMS, Android Enterprise, Zero-Touch, FOTA, Soti MobiControl, SafeUEM supported
<b>SDK</b>	Chainway Software Development Kit
<b>Language</b>	Java
<b>Tool</b>	Eclipse / Android Studio

User Environment	
<b>Operating Temp.</b>	-4 °F to 122 °F / -20 °C to 50 °C
<b>Storage Temp.</b>	-40 °F to 158 °F / -40 °C to 70 °C
<b>Humidity</b>	5% RH - 95% RH non condensing
<b>Drop Specification</b>	Multiple 1.5 m / 4.9 ft drops to concrete across the operating temperature range
<b>Tumble Specification</b>	500 x 0.5 m / 1.64 ft falls at room temperature
<b>Sealing</b>	IP65 per IEC sealing specifications
<b>ESD</b>	±15 KV air discharge, ±8 KV conductive discharge

Communication	
<b>WLAN</b>	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, 132,136,140,144,49,153,157,161,165),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.
<b>WWAN (Europe, Asia)</b>	2G: B3/B5/B8 3G: CDMA EVDO: BC0 TD-SCDMA: B34/B39 WCDMA: B1/B5/B8 4G: TDD-LTE: B38/B39/B40/B41 FDD-LTE: B1/B3/B5/B7/B8/B20
<b>WWAN(America)</b>	3G: B2/B4/B5 4G: B2/B4/B5/B7/B12/B13/B17/B28b

<b>Vo-LTE</b>	Support Vo-LTE HD video voice call
<b>Bluetooth</b>	Bluetooth 4.2/4.1+HS/4.0/3.0+HS/2.1+EDR
<b>GNSS</b>	GPS/AGPS, GLONASS, BeiDou, Galileo, internal antenna

## Data Collection

Camera	
<b>Rear Camera</b>	13 MP Autofocus with flash
<b>Front Camera</b>	8 MP

Barcode Scanning (Optional)	
<b>Scan Engine</b>	Zebra SE4710 (standard), Zebra SE4850 (optional)
<b>1D Symbologies</b>	UPC/EAN, Code128, Code39, Code93, Code11, Interleaved 2 of 5, Discrete 2 of 5, Chinese 2 of 5, Codabar, MSI, RSS, etc.
<b>2D Symbologies</b>	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)

UHF	
<b>Frequency</b>	865-868 MHz / 920-925 MHz / 902-928 MHz

\* For detailed specification, please check P80 UHF part.

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

## Fingerprint (Optional)

Option 1	
<b>Sensor</b>	TCS1 / TCS2 Capacitive

Option 2	
<b>Sensor</b>	Optical Morpho CBM-E3

\* For detailed specification, please check P80 Fingerprint part.

## InfraRed (Reserved)

<b>Wavelength</b>	940 nm
<b>Frequency</b>	38 kHz
<b>Range</b>	> 4 m
<b>Protocol</b>	DLT_645-2007, DLT_645-1997

## PSAM (Optional)

<b>Card slot</b>	2 PSAM card slots
<b>Protocol</b>	ISO7816

## Accessories (See details in Accessory Guide)



AC Adaptor



USB Cable



Wristband



Pistol (Optional)

Notice: Product specifications are subject to change without prior notice. / Model: P80 / Update Date: 2020-06-02

# P80 UHF

Deliver Better-than-ever UHF Performance



## Specification

UHF(Optional)	
Engine	CM2000-1 module based on Impinj Indy R2000
Frequency	865-868 MHz / 920-925 MHz / 902-928 MHz
Protocol	EPC C1 GEN2 / ISO18000-6C
Antenna	Circular polarization (default UHF, 3 dBi ; UHF with pistol grip, 4 dBi)
Power	1W (30 dBm, +5 dBm to +30 dBm adjustable) 2W Optional (33dBm, for Latin America, etc.)
R/W range	>25 m (indoors); >15 m (open outdoors, Impinj MR6 tag);
Fastest Read Rate	900+ tags/sec

\* Ranges and rates depend on tags and environment.

# P80 Biometrics

Accurate Fingerprint Reading and Facial Recognition



**FINGERPRINT**  
TCS1 Capacitive

**FINGERPRINT**  
TCS2 Capacitive

**FINGERPRINT**  
Optical Fingerprint

## Specification

Fingerprint (Optional)	
<b>Option 1</b>	
Sensor	TCS1/TCS2 Capacitive
Sensing Area (mm)	12.8 × 18.0; 10.4 × 14.4
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
<b>Option 2</b>	
Sensor	Optical Morpho CBM-E3
Sensing Area (mm)	14 x 22
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.
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.