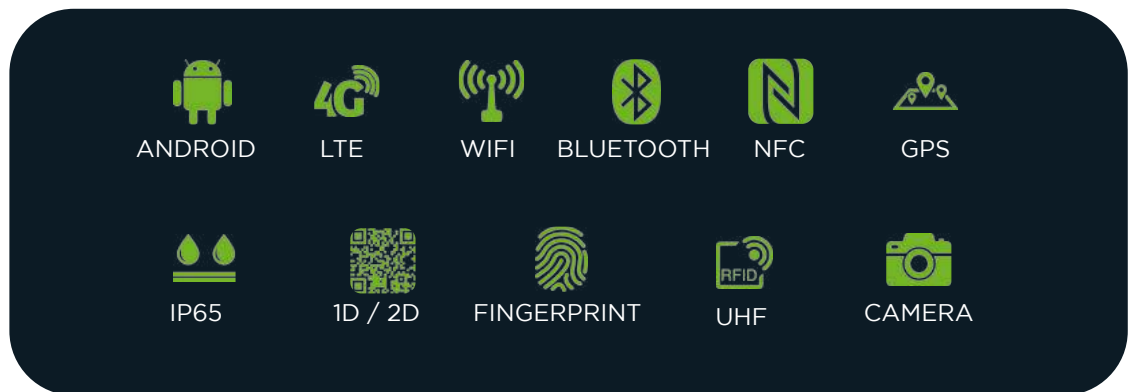


# P80

## 8" Industrial Android Tablet



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, Iris and 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..



# P80 Specifications



## Physical Characteristics

<b>Dimensions</b>	250 * 152 * 15mm
<b>Weight</b>	700g
<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 Micro SIM card, 1 slot for Micro SIM / TF card, Optional dual PSAM card slots
<b>Interfaces</b>	USB2.0 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>	Accelerometer sensor; light sensor; proximity sensor; geomagnetic sensor; gyroscope

## Performance

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

## Developing Environment

<b>Operating System</b>	Android 9; GMS, 90-day security updates, 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>	-20°C to 50°C
<b>Storage Temp.</b>	-40°C to 70°C
<b>Humidity</b>	5%RH - 95%RH non condensing
<b>Drop Specification</b>	Multiple 1.5m drops (at least 20 times) to the concrete across the operating temperature range
<b>Sealing</b>	IP65 per IEC sealing specifications
<b>ESD</b>	±15KV air discharge, ±6KV conductive discharge

## Barcode Scanning (Optional)

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

## Communication

<b>WLAN</b>	Support 802.11 a/b/g/n/ac/d/e/h/i/v/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),WAPIPSK-EAP-TTLS,EAP-TLS, PEAP-MSCHAPv2, PEAP-LTS,PEAPGTC,
<b>Vo-LTE</b>	Support Vo-LTE HD video voice call 2G: GSM850/GSM900/DCS1800/PCS1900 3G: WCDMA: B1/B2/B4/B5/B8 CDMA2000 EVDO: BCO
<b>WWAN(Europe)</b>	TD-SCDMA: A/F 4G: B1/B2/B3/B4/B5/B7/B8/B12/B17/B20/B28A/B28B/B34/B38/B39/B40/B41 Android 8.1: Bluetooth 2.1+EDR, 3.0+HS, 4.1+HS Android 11: Bluetooth 5.0
<b>Bluetooth</b>	Android 11: Bluetooth 5.0
<b>GNSS</b>	GPS/AGPS, GLONASS, BeiDou with internal antenna

## RFID (Optional)

<b>UHF Frequency</b>	865MHz-868MHz / 920MHz-925MHz / 902MHz-928MHz (* For detailed specification, please check P80 UHF part.
----------------------	--

## NFC

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

## HF (Optional)

<b>Frequency</b>	13.56MHz
<b>Protocol</b>	ISO14443A/B - ISO15693
<b>Chips</b>	M1 card (S50/S70), M0 (Ultralight), M3 (Desfire D40/D41/D81), CPU_A card, CPU_B card, ICODE II, TI2048, LRI64K, Others for customizations
<b>Range</b>	3-8cm (* HF RFID is alternative to NFC - Read/write Range and Reading Rates depend on tags and environments

## Camera

<b>Rear Camera</b>	13MP Autofocus with flash
<b>Front Camera (Optional)</b>	5MP

## Fingerprint (Optional)

<b>Option 1 Sensor</b>	TCS1/TCS2 Capacitive
<b>Option 2 Sensor</b>	Optical Morpho CBM-E3 (* For detailed specification, please check P80 Fingerprint part..

TechSigno srl is an independent company that build RFID system and intelligent objects for multimedia, industrial, transportation, medical, and wireless applications. Working closely with our customers, we meet the specific made-to-order demands of our customer to achieve maximum functionality, efficiency, reliability and therefore satisfaction.

TechSigno Srl  
Via del Boschi, 2/13 - 33040 Pradamano (UD) - ITALY  
T. +39 0432 603604 @ info@techsigno.com

# P80 Specifications



UHF 1



UHF 2

## RFID (Optional)

### UHF Option 1-2

<b>Engine</b>	CM710-1 module based on Impinj E710 CM510-1 module based on Impinj E510 CM2000-1 module based on Impinj Indy R2000
<b>Frequency</b>	865MHz-868MHz / 920MHz-925MHz / 902MHz-928MHz
<b>Protocol</b>	EPC Cl GEN2 / ISO18000-6C
<b>Antenna</b>	Circular polarization UHF Option 1, 4 dBi UHF Option 2, 3 dBi
<b>Power</b>	1W (30 dBm, +5 dBm to +30 dBm adjustable) 2W Optional (33dBm, for Latin America, etc.)
<b>Read/Write Range</b>	3m

(\*) Read/write Range and Reading Rates depend on tags and environments

### UHF Option 3 Built In Antenna

<b>Engine</b>	CM310-1 module based on Impinj E310 CM500-1 module based on Impinj Indy R500
<b>Frequency</b>	865MHz-868MHz / 920MHz-925MHz / 902MHz-928MHz
<b>Protocol</b>	EPC Cl GEN2 / ISO18000-6C
<b>Antenna</b>	OBi Circular Polarization
<b>Power</b>	1W (30 dBm, +5 dBm to +30 dBm adjustable)
<b>Read/Write Range</b>	30 cm



Fingerprint Option 1



Fingerprint Option 2



Fingerprint Option 3

## Fingerprint (Optional)

### Option 1

<b>Sensor</b>	TCSI/TCS2 Capacitive
<b>Sensing Area (mm)</b>	12,8*19 / 10,4*14,4
<b>Resolution (dpi)</b>	508dpi 8-bit greylevel
<b>Certification</b>	FIPS 201, STQC
<b>Format Extraction</b>	ISO19794, WSQ, ANSI 378, JPEG 2000
<b>Fake Finger Detection</b>	Support by SDK
<b>Security</b>	AES, DES Key encryption of the host communication channel

### Option 2

<b>Sensor</b>	Optical Morpho CBM-E3
<b>Sensing Area (mm)</b>	14x22
<b>Resolution (dpi)</b>	500 dpi, 256 greylevel
<b>Certification</b>	FIPS PIV IQS / ISO19794-4, MINEX & FIPS 201 complaint, STQC
<b>Format Extraction</b>	ISO 19797-2/4, WSQ, ANSI 378, etc.
<b>Fake Finger Detection</b>	Latex, Gelatin, Plasticine, Kapton, Transparent Film, Silicone, Rubber, Play-doh, Graphite Or Paper
<b>Security</b>	FPS 140-2 level 2, multiple security methods available, including image and templates encryption, template signature, secure tunneling, etc.

TechSigno srl is an independent company that build RFID system and intelligent objects for multimedia, industrial, transportation, medical, and wireless applications. Working closely with our customers, we meet the specific made-to-order demands of our customer to achieve maximum functionality, efficiency, reliability and therefore satisfaction.

TechSigno Srl  
Via dei Boschi, 2/13 - 33040 Pradamano (UD) - ITALY  
T. +39 0432 603604 @ info@techsigno.com