



# TP80 Industrial Tablet



The device with abundant functions is an Android 9 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<br>Standby: over 500 hours<br>Continuous use: over 10 hours (depending on user environment)<br>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>     | USB 2.0 Type-C, OTG   |
| <b>Sensors</b>        | Accelerometer sensor; geomagnetic sensor, gyroscope   |
| <b>Notification</b>   | Sound, LED indicator  |
| <b>Audio</b>          | 1 microphone; 1 speaker; receiver   |
| <b>Keypad</b>         | 1 front key, 1 volume key, 1 power key, direction key (Optional)  |

## Performance

|                  |   |
|------------------|---|
| <b>CPU</b>       | Qualcomm 1.8 GHz Octa-core              |
| <b>RAM+ROM</b>   | 3 GB + 32 GB<br>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>              | 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 / 4.92 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;<br>Fast roaming: PMKID caching, 802.11r, OKC;<br>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;<br>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: 850/900/1800/1900MHz, GPRS, EDGE<br>3G: CDMA EVDO: BC0<br>TD-SCDMA: B34/B39<br>WCDMA: B1/B5/B8<br>4G: TDD-LTE: B34/B38/B39/B40/B41<br>FDD-LTE: B1/B3/B5/B7/B8/B20  |
| <b>WWAN(America)</b>       | 3G: B2/B4/B5<br>4G: FDD-LTE: B2/B4/B5/B7/B12/B13/B17/B28A/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 Symbolgies</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 Symbolgies</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 (Optional)

|                  |   |
|------------------|---|
| <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 / TLK1NC02 |
|---------------|-----------------|

### Option 2

|               |                       |
|---------------|-----------------------|
| <b>Sensor</b> | Optical Morpho CBM-E3 |
|---------------|-----------------------|

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

## PSAM (Optional)

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

## Accessories (See details in Accessory Guide)



AC Adaptor



USB Cable



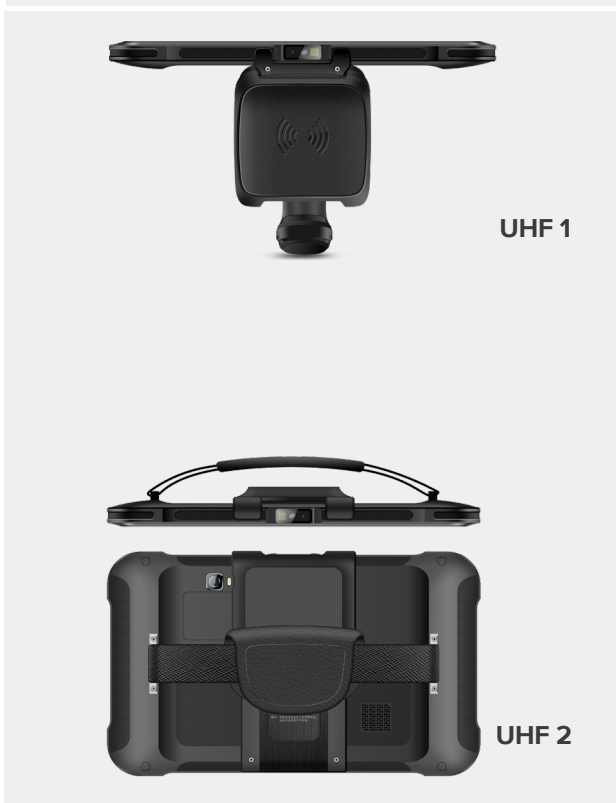
Wristband



Pistol(Optional)

# UHF

## Deliver Better-than-ever UHF Performance



### Specification

| UHF 1/2 (Optional) |   |
|--------------------|---|
| Engine             | Module based on Impinj E710<br>Module based on Impinj E510<br>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 (UHF 1, 4 dBi ; UHF 2, 3 dBi)   |
| Power              | 1W (30 dBm, +5 dBm to +30 dBm adjustable)<br>2W Optional (33dBm, for Latin America, etc.)       |
| R/W range          | UHF 1: Up to 15 m ; UHF 2: Up to 10 m (open outdoors, Impinj MR6 tag);                          |
| Fastest Read Rate  | 900+ tags/sec   |

\* Ranges and rates depend on tags and environment.

| UHF 3 (Built-in UHF, optional) |   |
|--------------------------------|---|
| Engine                         | Based on Impinj E310<br>Based on Impinj Indy R500 |
| Frequency                      | 865-868 MHz / 920-925 MHz                         |
| Protocol                       | EPC C1 GEN2 / ISO18000-6C                         |
| Antenna                        | 0 dBi   |
| Power                          | 1W (30 dBm, +5 dBm to +30 dBm adjustable)         |
| R/W range                      | 30 cm   |

\* Ranges and rates depend on tags and environment.

# Biometrics

## Accurate Fingerprint Reading and Facial Recognition



### Specification

| Fingerprint (Optional) |   |
|------------------------|---|
| Option 1               |   |
| Sensor                 | TCS1  |
| Sensing Area (mm)      | 12.8 × 18.0   |
| 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   |
| Option 2               |   |
| Sensor                 | TLK1NC02  |
| Sensing Area (mm)      | 14.0 X 22.0   |
| Resolution (dpi)       | 508dpi, 256-bit 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   |
| Option 3               |   |
| 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. |