



QUALICA-RD 80

Tablet Industrial

Qualica-RD 80 is a ruggedized Android 13 tablet, which can be used in logistics, inventory control, identity verification, vehicle control by UHF, etc. This device is of great help to increase productivity in stores.

It has a powerful Octa-core CPU, 8-inch HD display, 8700 mAh battery and extensive data capture options such as UHF-RFID, barcode scanning, NFC fingerprint recognition, etc.



SPECIFICATIONS

Physical Characteristics

Dimensions	250.8 x 152.0 x 15.0 mm / 9.87 x 5.98 x 0.59 in. (for standard version)
Weight	680 g / 23.99 oz. (for standard version)
Display	8" IPS LTPS 1920 x 1200
Touch Panel	Corning Gorilla Glass, multi-touch panel, gloves and wet hands supported
Power	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)
Expansion 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
Sensors	Gravity sensor; gyroscope; geomagnetic sensor; light / proximity sensor
Notification	Sound, LED indicator
Audio	1 microphone; 1 speaker;
Keypad	1 front key, 1 volume key, 1 power key, direction key (Optional)

Performance

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

Developing Environment

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

User Environment

Operating Temp.	-4 °F to 122 °F / -20 °C to 50 °C
Storage Temp.	-40 °F to 158 °F / -40 °C to 70 °C
Humidity	5% RH - 95% RH non condensing
Drop Specification	Multiple 1.5 m / 4.92 ft. drops to concrete across the operating temperature range
Tumble Specification	500 x 0.5 m / 1.64 ft falls at room temperature
Sealing	IP65 per IEC sealing specifications
ESD	±15 KV air discharge, ±8 KV conductive discharge

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	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

Data Collection

Camera

Rear Camera	13 MP Autofocus with flash
Front Camera	5 MP

Barcode Scanning (Optional)

Scan Engine	Zebra SE4710, Honeywell HS7
1D Symbolgies	UPC/EAN, Code128, Code39, Code93, Code11, Interleaved 2 of 5, Discrete 2 of 5, Chinese 2 of 5, Codabar, MSI, RSS, etc.
2D Symbolgies	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.

UHF RFID (Optional)

UHF

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

NFC

Frequency	13.56 MHz
Protocol	ISO14443A/B, ISO15693, NFC-IP1, NFC-IP2, etc.
Chips	M1 card (S50, S70), CPU card, NFC tags, etc.
Range	0-4 cm

Fingerprint (Optional)

Option 1 / 2

Sensor	TCS1 / TLKINC02
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Option 3

Sensor	Optical Morpho CBM-E3
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Option 4

Sensor	ARATEK A600
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* For detailed specification, please check P80 Fingerprint part.

PSAM (Optional)

Card slot	2 PSAM card slots
Protocol	ISO7816



Accessories (See details in the Accessories Guide)



AC Adapter



USB Cable



Wristband



Reinforced rubber cover (optional)

QUALICA-RD 80 UHF

Best UHF read performance



Specifications

UHF (Optional)

Engine	CM710-1 module based on Impinj E710
Frequency	865-868 MHz / 920-925 MHz / 902-928 MHz
Protocol	EPC C1 GEN2 / ISO18000-6C
Antenna	Circular polarization (3 dBi)
Energy	1W (30 dBm, +5 dBm to +30 dBm ajustable) 2W Optional (33dBm, for Latin America, etc.)
Read/write range	Up to 10 m (outdoor, Impinj MR6 label);
Reading speed	More than 900 labels/sec

*The reading range will vary depending on the operating environment.

QUALICA-RD 80 Biometrics

Fingerprint and facial recognition reading accuracy

Fingerprint TCS1 Capacitive



Fingerprint TLK1NC02



Fingerprint Optical fingerprint



Specifications

Fingerprint Reader (Optional)

Option 1

Sensor	TCS1 Capacitive
Detection area (mm)	12.8 × 18.0
Resolution (dpi)	508 dpi, 8-bit gray level
Certificates	FIPS 201, STQC
Format extraction	ISO 19794, WSQ, ANSI 378, JPEG2000
False fingerprint detection	SDK support
Security	AES key encryption, DES encryption of the communication channel with the host

Option 2

Sensor	TLK1NC02
Detection area (mm)	14.0 X 22.0
Resolution (dpi)	508 dpi, 256 bits gray level
Certificates	FIPS 201, FBI
Format extraction	ISO19794, WSQ, ANSI 378, JPEG2000
False fingerprint detection	SDK support
Security	AES key encryption, DES encryption of the communication channel with the host

Option 3

Sensor	Optical Morpho CBM-E3
Detection area (mm)	14.0 X 22.0
Resolution (dpi)	500 ppp, 256 niveles de grises
Certificates	FIPS PIV IQS / ISO 19794-4, MINEX & FIPS 201 complaint, STQC
Format extraction	ISO 19794-2/4, WSQ, ANSI 378, etc.
False fingerprint 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 template encryption, template signing, secure tunnel, etc.