



# Mobile Computer



Android



4G



WiFi



Bluetooth



1D Barcode



2D Barcode



NFC



UHF



Camera



GPS

This is a rugged handheld computer with robust performance. Built with Android 9.0 / 11.0 OS and Qualcomm Octa-Core processor, it supports 27 keys / 37 keys / 47 keys optional keypad, abundant accessories like trigger handle, and features powerful removable battery. And it delivers optional barcode scanning, RFID, NFC, etc. This mobile computer can fulfill applications in logistics, warehousing, retail, etc.



# Specification

## Physical Characteristics

<b>Dimensions</b>	202.0 x 72.5 x 32.0 mm / 7.95 x 2.85 x 1.26 in.
<b>Weight</b>	370g / 13.05oz. (SE4710) ; 404g / 14.25oz. (SE4850)
<b>Keypad</b>	Main keyboard (Optional) : 27 keys / 37 keys / 47 keys; Side keys: 2 scan keys + 2 volume keys + 1 user-defined key
<b>Battery</b>	6700 mAh removable main battery, 5200 mAh optional pistol battery, support QC3.0 and RTC; Built in 100mAh backup battery, supporting battery hot swap, improving reliability and ensuring user data security
	Standby: up to 680 hours (only main battery ; WiFi: up to 560h; 4G: up to 560h)
	Continuous use: over 12 hours (depending on user environment)
	Charging time: 3.5 hours (charge device by standard adaptor and USB cable)
<b>Speaker</b>	Support
<b>Vibrator</b>	Support
<b>Microphone</b>	2 Microphones, 1 for noise reduction
<b>Display</b>	4-inch high definition full display, IPS LTPS 800 x 480
<b>Touch Panel</b>	Multi-touch panel, gloves and wet hands supported
<b>Sensor</b>	Gravity sensor, proximity sensor, light sensor, accelerometer sensor, vibration motor
<b>Indicator LED</b>	Power, charging, status indicator
<b>Card slot</b>	1 slot for SIM card, 1 slot for TF card
<b>Interfaces</b>	Android 9.0: USB Type-C, USB 3.0, OTG, extended thimble Android 11.0: USB Type-C, USB 3.1, OTG, extended thimble

## Performance

<b>CPU</b>	Qualcomm 1.8 / 2.0 GHz Octa-core
<b>RAM+ROM</b>	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, 90-day security updates, Android Enterprise, Zero-Touch, FOTA, Soti MobiControl, SafeUEM supported Android 11.0; GMS, built-in support for a future upgrade through Android 12 which complies with GMS and Android Enterprise Recommended
<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 to 95% RH (non condensing)
<b>Drop Specification</b>	Multiple 1.8 m / 5.9 ft. drops (at least 20 times) to the concrete across the operating temperature range
<b>Tumble Specification</b>	1000 x 0.5 m / 1.64 ft. falls at room temperature
<b>Sealing</b>	IP67 per IEC sealing specifications
<b>ESD</b>	±15 KV air discharge, ±8 KV conductive discharge

## Communication

<b>Vo-LTE</b>	Support Vo-LTE HD video voice call
<b>Bluetooth</b>	Android 9.0: Bluetooth 4.2/4.1+HS/4.0/3.0+HS/2.1+EDR Android 11.0: Bluetooth 5.1
<b>GNSS</b>	GPS/AGPS, GLONASS, BeiDou, Galileo, internal antenna

	Support 802.11 a/b/g/n/ac/d/e/h/i/k/r/v, 2.4G/5G dual-band, IPV4, IPV6, 5G PA; Fast roaming: PMKID caching, 802.11r, OKC
<b>WLAN</b>	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.
<b>WWAN</b>	2G: 850/900/1800/1900 MHz 3G: CDMA EVDO: BC0
<b>(Europe, Asia)</b>	WCDMA: 850/900/1900/2100 MHz TD-SCDMA: A/F(B34/B39) 4G: B1/B3/B5/B7/B8/B20/B38/B39/B40/B41
<b>WWAN(America)</b>	2G: 850/900/1800/1900MHz 3G: 850/900/1900/2100MHz 4G: Android 9.0: B2/B4/B5/B7/B12/B17/B38 Android 11.0: B2/B4/B5/B7/B12/B13/B17/B28A/B28B/B38

## Data Collection

### Camera

<b>Rear Camera</b>	Rear 13 MP Autofocus with flash
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### NFC

<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

### UHF (Optional)

<b>Engine</b>	Based on Impinj Indy R2000; Based on Impinj E710(coming soon)
<b>Frequency</b>	865-868 MHz / 920-925 MHz / 902-928 MHz
<b>Protocol</b>	EPC C1 GEN2 / ISO18000-6C
<b>Antenna</b>	Circular Polarized Antenna (4 dBi)
<b>Power</b>	1W (30 dBm, +5 dBm to +30 dBm adjustable) 2W Optional (33 dBm, for Latin America, etc.)
<b>R/W range</b>	Up to 15 m (open outdoors, Impinj MR6 tag)
<b>Fastest Read Rate</b>	900+ tags/sec
<b>Communication Mode</b>	Pin Connector

\*Ranges and rates depend on tags and environment

### Barcode Scanning (optional)

<b>2D Scanner</b>	Zebra: SE4710/SE4750SR/SE4750MR/SE4750DP/SE4850; Honeywell: N6603/EX30
<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.

### Optional accessories(See details in Accessory Guide)

Separate handle with one button;
Handle + battery (handle battery 5200 mAh, one button) ;
UHF back clip + handle (5200 mAh, one button) ;
Wrist Strap; Charging Cradle