



**27** Keys



**37** Keys



**47** Keys



# Mobile Computer



Android



4G



Wi-Fi



Bluetooth



1D Barcode



2D Barcode



NFC



UHF



Camera



GPS

This device is specialized for cold-chain warehousing, is an industrial-grade and smart handheld terminal with high performance. It could work normally and decode efficiently in low temperature and high relative humidity environment of  $-30^{\circ}\text{C}$  /  $-22^{\circ}\text{F}$  by equipments with 6400 mAh large-capacity battery of low temperature resistance and professional anti-condensation screen. Meanwhile it supports optional UHF, NFC and other functions, and features dual-band Wifi antenna intently optimizing for indoor applications and scenarios. All of these characteristics make this model perfect to be deployed in in/out storage, inventory and sorting for cold-chain environment and significantly improve work efficiency.



# Specification

Physical Characteristics	
Dimensions	202.0 x 72.5 x 32.0 mm / 7.95 x 2.85 x 1.26 in.
Weight	370g / 13.05oz. (SE4710) ; 404g / 14.25oz. (SE4850)
Keypad	Main keyboard (optional) : 27 keys / 37 keys / 47 keys; Side keys: 2 scan keys + 2 volume keys + 1 user-defined key
Battery	6400 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
	Continuous use: 5.5 hours (continuous scan at 500ms interval at -30 °C / -22°F)
Display	4-inch industrial-grade low-temperature-resistant capacitive touch screen, gloves and wet hands supported
	4-inch high definition display, 800*480
Touch Panel	Multi-touch panel, gloves and wet hands supported
Sensor	Accelerometer sensor, light sensor, proximity sensor, gravity sensor
Notification	Sound, LED indicator, vibrator
Audio	2 microphones, 1 for noise cancellation; 2 speakers; receiver
Card slot	1 slot for SIM card, 1 slot for TF card
Interfaces	USB Type-C, USB 3.1, OTG, extended thimble

Performance	
CPU	Octa-core, 2.0 GHz
RAM+ROM	3GB + 32GB / 4GB + 64GB
Expansion	Supports up to 256GB Micro SD (TF) card

Developing Environment	
Operating System	Android 11/13; GMS, 90-day security updates, Android Enterprise Recommended, Zero-Touch, FOTA, Soti MobiControl, SafeUEM supported. Committed support for a future upgrade to Android 18 pending feasibility
SDK	Software Development Kit
Language	Java
Tool	Eclipse / Android Studio

User Environment	
Operating Temp.	-22°F to 122°F / -30°C to 50°C
Storage Temp.	-40°F to 158°F / -40°C to 70°C
Humidity	5% RH to 95% RH (non condensing)
Drop Specification	Multiple 1.8 m / 5.9 ft. drops (at least 20 times) to the concrete across the operating temperature range
Tumble Specification	1000 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/ax-ready/d/e/h/i/k/r/v, 2.4G/5G dual-band, IPV4, IPV6, 5G PA;
	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 (Europe, Asia)	2G: 850/900/1800/1900MHz
	3G: CDMA EVDO: BC0
	WCDMA: 850/900/1900/2100MHz
	TD-SCDMA: A/F(B34/B39)
WWAN(America)	4G: B1/B3/B5/B7/B8/B20/B38/B39/B40/B41
	2G: 850/900/1800/1900MHz
	3G: 850/900/1900/2100MHz
	4G: B2/B4/B5/B7/B12/B13/B17/B28A/B28B/B38
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	Rear 13MP Autofocus with flash
NFC	
Frequency	13.56MHz
Protocol	ISO14443A/B, ISO15693, NFC-IP1, NFC-IP2, etc.
Chips	M1 card (S50, S70), CPU card, NFC tags, etc.
Range	2-4cm

UHF (Optional)	
Engine	Based on Impinj E710
Frequency	865-868MHz / 920-925MHz / 902-928MHz
Protocol	EPC C1 GEN2 / ISO18000-6C
Antenna	Circular Polarized Antenna (4dBi)
Power	1W (30 dBm, +5 dBm to +30 dBm adjustable)
	2W Optional (33 dBm, for Latin America, etc.)
R/W range	Up to 15m (open outdoors, Impinj MR6 tag)
Fastest Read Rate	1300+ tags/sec
Communication Mode	Pin Connector

\* Ranges and rates depend on tags and environment

Barcode Scanning (optional)	
2D Scanner	Zebra: SE4710/SE4750SR/SE4750MR/SE4750DP/SE4850; Honeywell: N6603/EX30
1D Symbolologies	UPC/EAN, Code128, Code39, Code93, Code11, Interleaved 2 of 5, Discrete 2 of 5, Chinese 2 of 5, Codabar, MSI, RSS, etc.
2D Symbolologies	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	