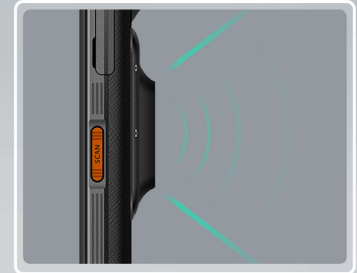




## UHF RFID



# Mobile Computer



## UHF RFID



Android



4G



WiFi



Bluetooth



UHF



1D Barcode



2D Barcode



IRIS



NFC



Camera



GPS

SF509 is an Android rugged mobile computer. It can be configured with internal UHF module with 1.5dBi circularly polarized antenna. With its powerful processor and wireless connections, you can find this easy-to-deploy device an exceptionally valuable helper to increase working efficiency and productivity in retail, logistics and healthcare.



# Specification

Performance	
CPU	Cortex-A53 2.5 / 2.3 GHz Octa-core
RAM+ROM	3 GB + 32 GB / 4 GB + 64 GB (optional)
Expansion	Supports up to 128 GB Micro SD card
Operating System	Android 8.1; GMS, FOTA, Soti MobiControl, SafeUEM supported Android 11; GMS, FOTA, Soti MobiControl, SafeUEM supported. Committed support for a future upgrade to Android 12, 13, and Android 14 pending feasibility

Communication	
Android 8.1	
WLAN	IEEE802.11 a/b/g/n/ac, 2.4G/5G dual-band, internal antenna
WWAN (China)	2G: 900/1800 MHz
	3G: WCDMA: B1,B8
	CDMA2000 EVDO: BCO
	TD-SCDMA: B34,B39
4G: B1,B3,B5,B8,B34,B38,B39,B40,B41	
WWAN (Europe)	2G: 850/900/1800/1900MHz
	3G: B1,B2,B4,B5,B8
	4G: B1,B3,B5,B7,B8,B20,B40
WWAN(America)	2G: 850/900/1800/1900 MHz
	3G: B1,B2,B4,B5,B8
	4G: B2,B4,B7,B12,B17,B25,B66
WWAN (Others)	Depending on the country's ISP
Bluetooth	Bluetooth v2.1+EDR, 3.0+HS, v4.1+HS
GNSS	GPS/AGPS, GLONASS, BeiDou; internal antenna

Android 11	
WLAN	IEEE802.11 a/b/g/n/ac, 2.4G/5G dual-band, internal antenna
WWAN	2G: GSM850/GSM900/DCS1800/PCS1900
	3G: WCDMA: B1/B2/B4/B5/B8 CDMA2000 EVDO: BCO TD-SCDMA: A/F
	4G: B1/B2/B3/B4/B5/B7/B8/B12/B17/B20/B28A/B28B/ B34/B38/B39/B40/B41
Bluetooth	Bluetooth 5.0
GNSS	GPS/AGPS, GLONASS, BeiDou; internal antenna

Physical Characteristics	
Dimensions	164.2 x 78.8 x 175 mm / 6.46 x 3.10 x 0.69 in.
Weight	< 321 g / 11.32 oz.
Display	5.2" IPS LTPS 1920 x 1080
Touch Panel	Corning Gorilla Glass, multi-touch panel, gloves and wet hands supported
Power	Main battery: Li-ion, rechargeable, 5000mAh
	Standby: over 350 hours
	Continuous use: over 12 hours (depending on user environment)
	Charging time: 3-4 hours (with standard adaptor and USB cable)
Expansion Slot	1 slot for Nano SIM card, 1 slot for Nano SIM or TF card
Interfaces	USB 2.0 Type-C, OTG, TypeC headphones supported
Sensors	Light sensor, proximity sensor, gravity sensor
Notification	Sound, LED indicator, vibrator
Audio	2 microphones, 1 for noise cancellation; 1 speaker; receiver
Keypad	4 front keys, 1 power key, 2 scan keys, 1 multifunctional key

Developing Environment	
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 1.8 m / 5.9 ft. drops (at least 20 times) to the concrete across the operating temperature range
Tumble Specification	1000 x 0.5m / 1.64 ft. falls at room temperature
Sealing	IP67 per IEC sealing specifications
ESD	±15 KV air discharge, ±6 KV conductive discharge

Data Collection	
UHF RFID	
Engine	CM-Q module; Module based on Impinj E310
Frequency	865-868 MHz / 920-925 MHz / 902-928 MHz
Protocol	EPC C1 GEN2 / ISO18000-6C
Antenna	Circular polarization (1.5 dBi)
Power	1 W (+19 dBm to +30 dBm adjustable)
R/W range	4 m

\* Ranges and rates depend on tags and environment

Camera	
Rear Camera	13 MP Autofocus with flash
Front Camera (optional)	5 MP camera
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	2-4 cm

Barcode Scanning (optional)	
1D Linear Scanner	Zebra: SE965; Honeywell: N4313
1D Symbologies	UPC/EAN, Code128, Code39, Code93, Code11, Interleaved 2 of 5, Discrete 2 of 5, Chinese 2 of 5, Codabar, MSI, RSS, etc.
2D Imager Scanner	Zebra: SE4710 / SE4750 / SE4750MR; Honeywell: N6603
2D Symbologies	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.

Iris (optional)	
Rate	< 150 ms
Range	20-40 cm
FAR	1/10000000
Protocol	ISO/IEC 19794-6, GB/T 20979-2007

Accessories	
Standard	AC Adaptor, USB Cable, Lanyard, etc.
Optional	Cradle, Holster, etc.

\* For detailed specification, please check Accessory Guide.