



# SR12

## Mobile Computer



Android



4G



WiFi



Bluetooth



1D Barcode



2D Barcode



NFC



UHF



Camera



GPS

SR12 is a newly-developed rugged handheld computer with large screen and strong extensibility. Based on Android 9.0 OS, it is equipped with Qualcomm octa-core processor for high-speed processing. With 5.5-inch high-definition display, it is integrated with barcode scanning, NFC and other functions. The data collection device supports quick charge and UHF sled for good extensibility that can meet the needs in logistics, warehouse, manufacturing, retail, asset tracking, power patrol inspection, etc.



UHF



UHF Sled Reader



Pistol Grip

# Specification

## Physical Characteristics

<b>Dimensions</b>	160.0 x 76.0 x 15.5 mm / 6.3 x 2.99 x 0.61 in.
<b>Weight</b>	287 g / 10.12 oz. (device with battery)
<b>Keypad</b>	1 power key, 2 scan keys, 2 volume keys, 1 PTT key
<b>Battery</b>	4420 mAh (typ) / 4300 mAh (min) removable main battery, 5200 mAh optional pistol battery, support QC3.0 and RTC Standby: up to 490 hours (only main battery ; WiFi: up to 470h; 4G: up to 440h) Continuous use: over 12 hours (depending on user environment) Charging time: 2.5 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>	5.5-inch high definition full display (f8-9), IPS LTPS 1440 x 720
<b>Touch Panel</b>	Corning Gorilla Glass, 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 SIM or TF card
<b>Interfaces</b>	USB Type-C, USB 3.0, OTG, extended thimble

## Performance

<b>CPU</b>	Qualcomm 1.8 GHz Octa-core
<b>RAM+ROM</b>	3 GB + 32 GB 4 GB + 64 GB (optional)
<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
<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 1.8 m / 5.91 ft. drops (at least 20 times) to the concrete across the operating temperature range Multiple 2.4 m / 7.87 ft. drops (at least 20 times) to the concrete after installed rubber bumper
<b>Tumble Specification</b>	1000 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, 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.
<b>WWAN (Europe, Asia)</b>	2G: 850/900/1800/1900 MHz 3G: CDMA EVDO: BC0 WCDMA: 850/900/1900/2100MHz TD-SCDMA: A/F(B34/B39) 4G: B1/B3/B5/B7/B8/B20/B38/B39/B40/B41

<b>WWAN(America)</b>	2G: 850/900/1800/1900 MHz 3G: 850/900/1900/2100 MHz 4G: B2/B4/B5/B7/B12/B17/B38
<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>	Rear 13MP 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

### UHF1 (Optional)

<b>Engine</b>	CM2000-1 module based on Impinj Indy R2000
<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

### UHF2 (Optional, UHF Sled)

<b>Engine</b>	CM2000-1 module based on Impinj Indy R2000
<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 (3 dBi)
<b>Power</b>	1W (30 dBm, support +5~+30 dBm adjustable) 2W Optional (33 dBm, for Latin America, etc.)
<b>R/W range</b>	Up to 10 m (open outdoors, Impinj MR6 tag)
<b>Fastest Read Rate</b>	900+ tags/sec
<b>Communication Mode</b>	Pin Connector / Bluetooth

\*Ranges and rates depend on tags and environment

### Barcode Scanning (optional)

<b>2D Scanner</b>	Zebra: SE4710/SE2100; Honeywell: N6603; E3200; IA166S
<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; Rubber Bumper; Charging Cradle



Notice: Product specifications are subject to change without prior notice. / Model:SR12 / Update Date: 2021-12-30

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