CHAINWAY

R7

UHF RFID Sled Reader

High-performance UHF RFID and barcode integration for efficient professional data capture

R7 is a professional UHF RFID reader for smartphones and PDAs, available in clip-on and magnetic versions for quick attachment and removal. Compatible with mainstream Android and iOS devices, it easily upgrades smart devices into professional data collection terminals. Supporting NFC fast pairing, Bluetooth, and Wi-Fi, R7 enables flexible and efficient data communication. Powered by an Impinj E-series chipset with Impinj Gen2X support, it delivers high-performance UHF reading with fast, accurate tag capture, wide coverage, over 1,300+ tags/sec bulk read rate, and a read range exceeding 30 meters in open environments. Its rugged, ergonomic design ensures reliability and ease of use across diverse applications.

Professional, Versatile Data Capture

R7 integrates **UHF RFID and barcode scanning** in a single device, delivering flexible data collection for warehousing & logistics, retail, manufacturing, asset management, and more. Powered by an **Impinj E-series chipset** with **Impinj Gen2X support**, it delivers fast, accurate UHF reading with **1,300+ tags/sec** throughput and **30 m+** read range, ensuring reliable high-efficiency operation.

Fast Expansion, Easy Device Upgrade

R7 offers **clip-on and magnetic** mounting options for quick attachment to **mainstream Android and iOS smartphones and PDAs**. It **adds RFID and barcode capabilities** without replacing existing devices, upgrading standard terminals into professional data collection tools while reducing deployment costs and improving scalability.

6700 mAh High-Capacity Battery

R7 is equipped with a **6,700 mAh replaceable battery**, supporting long-duration, high-intensity continuous use. An integrated **battery meter** provides accurate power monitoring, while the **quick-release battery cover** enables fast battery replacement for reliable field uptime.

Efficient, Reliable Connectivity

R7 supports **NFC tag fast pairing** for instant tap-to-connect device binding, significantly improving deployment and usability. It also supports **Bluetooth 5.0 and Wi-Fi 6**, balancing low-power short-range connectivity with high-speed data transmission across diverse applications. Reliable wireless performance ensures efficient, low-latency, and secure data communication.

Rugged, Industrial-Grade Design

R7 features a robust industrial design with a solid, professional appearance. It withstands **1.5 m drop tests and 1,000 × 0.5 m tumble tests**, delivering excellent impact resistance and durability to protect against drops and collisions, ensuring stable operation and long-term reliability in demanding environments.

Specification

Physical Characteristics	Material		PC + GF, die-cast aluminum
	Dimensions		Clip-on version: 157.01 × 85.22 × 162.41 mm / 6.18 × 3.35 × 6.39 in Magnetic version: 157.01 × 85.22 × 146.42 mm / 6.18 × 3.35 × 5.76 in
	Weight		Clip-on version: 642 g / 22.65 oz Magnetic version: 590 g / 20.81 oz
	Battery		6700mAh removable battery, with NTC temperature sensor and battery meter
	Interfaces		USB 2.0 Type-C; bottom 6-pin pogo-pin charging dock interface
	LED Indicator		1 battery status indicator, 1 × mode indicator, 1 × operating status indicator, 1 Bluetooth indicator, 1 × Wi-Fi indicator
	Audio		1 buzzer
	Buttons		1 power button, 1 scan button, 1 mode button (RFID / barcode mode switch)
	NFC Pairing		Supported
Communication	Bluetooth		Bluetooth 5.0
	Wi-Fi		Dual-band 2.4 GHz / 5 GHz, supports IEEE 802.11 a/b/g/n/ac/ax
Data Collection	Barcode Scanning (Optional)	2D Scanner	SE4107; NLS-N1; NLS-EM3596
		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 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.
	UHF RFID	Engine	Based on the Impinj E-series chipset
		Protocol	EPC global Class 1 Gen 2 / ISO 18000-63 RFID
		Impinj Gen2X	Supported
		Frequency Range and Maximum System Output Power	FCC: 902–928 MHz, 36 dBm (EIRP) EU1: 865.6–867.6 MHz, 35 dBm (EIRP) EU2: 915–921 MHz, 36 dBm (EIRP) China: 920.5–924.5 MHz, 35 dBm (EIRP)
		Power Adjustment Range	1–30, adjustable in 1 dB steps
		Antenna	Circularly polarized antenna
		Fastest Read Rate	1300+ tags/sec
		Max Read Range	30 m (Impinj M830 tags)
		* Read rates tested in low-interference lab; distances measured outdoors in open. Actual results may vary with environment and tags.	
Developing Environment	SDK		Supports Android / iOS / Windows

Environmental	Operating Temperature	-4°F to 122°F / -20°C to 50°C
	Storage Temperature	-40°F to 158°F / -40°C to 70°C
	Charging Temperature	32°F to 113°F / 0°C to 45°C
	Humidity	5%RH - 95%RH non condensing
	Drop Specification	Within the operating temperature range, the device withstands multiple 1.5 m / 4.92ft drops onto concrete on all six sides.
	Tumble Specification	1000 × 0.5m / 1.64ft. falls, IEC compliant
	Sealing	IP54
	ESD	± 15kV air discharge, ± 8kV contact discharge
Accessories	Standard	Power adapter, USB data cable, lanyard
	Optional	Charging dock, etc.

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Notice: Product specifications are subject to change without prior notice. | Model: R7 | Version: V2.0