

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 basic, magnetic and clip-on version 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 basic, magnetic and clip-on 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	Basic / Magnetic version: 157.01 × 85.22 × 146.42 mm / 6.18 × 3.35 × 5.76 in Clip-on version: 157.01 × 85.22 × 162.41 mm / 6.18 × 3.35 × 6.39 in		
	Weight	Basic version: 578 g / 20.39 oz Magnetic version: 590 g / 20.81 oz Clip-on version: 642 g / 22.65 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 (Optional)	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.

CHAINWAY

Shenzhen Chainway Information
Technology Co., Ltd

Email:
sales@chainway.net

Web:
<https://www.chainway.net>

Address:
9F, Building2, Phase 2, Gaoxinqi Industrial
Park, Liuxian 1st Rd., Shenzhen,
Guangdong 518102, China

Notice: Product specifications are subject to change without
prior notice. | Model: R7 | Version: V2.1