

UHF | HF - Stationary Reader **Chainway - R1**

- Supports ISO 18000-6C / EPC C1G2 (UHF)
- Supports ISO 14443 A/B ISO15693, ISO18000-3 (HF)
- Integrated circularly polarized antenna
- Compact, lightweight design with LED and buzzer
- USB Type-C, plug-and-play, no driver required



UHF | RAIN - Stationary Reader RFID Reader/Writer

The Chainway R1 is a compact, high-performance RFID reader/writer designed for flexible desktop and integrated applications. Powered by the latest Impinj E-Series chipset with Gen2X support, it delivers reliable and fast UHF performance while also supporting HF technologies. The device fully complies with ISO18000-6C / EPC C1G2 for UHF and ISO14443 A/B, ISO15693, and ISO18000-3 for HF, ensuring broad compatibility across multiple RFID standards. Global UHF frequency support (EU, US, and other regions) enables worldwide deployment flexibility.

With its circularly polarized UHF antenna, adjustable output power up to 25 dBm, and stable short-range read performance, the R1 is optimized for applications requiring high accuracy and rapid tag response. Its plug-and-play USB Type-C interface allows quick installation without driver setup, enabling immediate operation in office and industrial IT environments. Visual and acoustic indicators via LED and buzzer provide clear operational feedback.

The R1 is ideally suited for logistics, access control systems, anti-counterfeiting solutions, production process control, and secure identification tasks. Its dual HF/UHF capability, compact form factor, and low power consumption make it a versatile and cost-effective solution for modern RFID-enabled workflows across commercial and industrial sectors.

Common Applications

- Warehouse and inventory automation
- Archives and document tracking
- Library RFID systems
- Production line and WIP tracking



TECHNICAL SPECIFICATIONS

Physical Characteristics

| | |
|--------------|-----------------------|
| Dimensions | 117 x 117 x 25mm |
| Weight | 170g |
| Interfaces | USB Type-C |
| Cable | 1.2 m |
| Notification | LED indicator, buzzer |

Power

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|---------------|---------------|
| Input Voltage | DC3.5 - 5.25V |
| UHF | 5W@25dBm |
| HF | 2W |
| Standby | 0.4W |

User Environment

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|-----------------|---------------|
| Operating Temp. | -25°C to 65°C |
| Storage Temp. | -40°C to 85°C |
| Humidity | 10% - 95% |

UHF RFID

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|--------------|-------------------------------------------------|
| Engine | Based on Impinj E Series chips |
| Impinj Gen2X | Supported |
| Protocol | ISO18000-6C / EPC C1G2 |
| Output Power | +1dBm to +25dBm adjustable Accuracy: +/- 1dB |
| Antenna | Circular Polarized Antenna |
| Frequency | 865-868MHz / 920-925MHz / 902-928MHz |
| R/W range | 15cm |

HF RFID

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|-----------|---------------------------------------------------------------------------------------------------------------|
| Protocol | ISO / IEC 14443A, ISO / IEC 14443B, ISO / IEC 15693, ISO/IEC18000-3 mode 3/EPC class-1 HF, JIS X 6319-4 |
| Frequency | 13.56MHz |
| R/W Range | 5cm |

PSAM

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|----------|----------------------|
| Slot | 2 slots |
| Protocol | ISO7816 T = 0, T = 1 |

