



# UR1A

Integrated RFID Reader

Chainway UR1A is a high-performance single-channel fixed RFID reader. Employing self-developed high-performance module based on Impinj E Series chips, and working together with integrated high-performance antenna, UR1A delivers outstanding UHF performance with the added benefits of Impinj Gen2X. The reader supports RS-232, RJ45 and GPIO communication interfaces. UR1A is applicable widely in warehousing, archives management, library management, banking, production line management and other fields.



# Specification

## Physical Characteristics

<b>Dimensions</b>	270 x 270 x 77mm / 10.63 x 10.63 x 3.03in (9dBi) 130 x 130 x 60mm / 5.12 x 5.12 x 2.36in (6dBi)
<b>Weight</b>	2230g / 78.66oz (9dBi) 620g / 21.87oz (6dBi)
<b>Material</b>	Plastic + Aluminum Alloy
<b>Input Voltage</b>	DC 9V – 12V
<b>Power Supply</b>	DC (12V), POE (802.3af 13W), POE+ (802.3at 25.5W)
<b>Standby Current</b>	< 30mA
<b>Work Current</b>	800mA +/-5% @ DC 12V Input
<b>Comm Interface</b>	RS-232, RJ45, GPIO
<b>Baud Rate</b>	115200bps
<b>Cooling Mode</b>	Air cooling
<b>Communication Method</b>	10/100 Base-T Ethernet (RJ45)

## User Environment

<b>Operating Temp.</b>	-25°C to 65°C / -13°F to 149°F
<b>Storage Temp.</b>	-40°C to 85°C / -40°F to 185°F
<b>Sealing</b>	IP65 per IEC sealing specifications
<b>Humidity</b>	10%RH - 95%RH non condensing

## RFID UHF

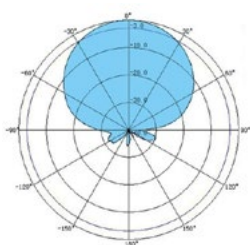
<b>Engine</b>	Based on Impinj E Series chips
<b>Impinj Gen2X</b>	Supported
<b>Protocol</b>	EPC global UHF Class 1 Gen 2 / ISO 18000-6C
<b>Frequency</b>	865-868MHz / 920-925MHz / 902-928MHz
<b>Output Power</b>	1W (30dBm, support +5~+30dBm adjustable) 2W Optional (33dBm, support +10~+33dBm adjustable, for Latin America, etc.)
<b>Output Power Precision</b>	+/- 1dB
<b>Output Power Flatness</b>	+/- 0.2dB
<b>Receive Sensitivity</b>	< -84dBm
<b>Fastest Read Rate</b>	1300+ tags/sec
<b>RSSI</b>	Supported
<b>Ambient Temp Monitor</b>	Supported

## Antenna 1

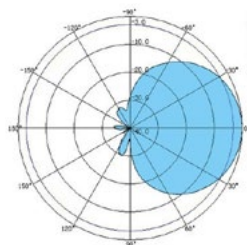
<b>Frequency</b>	865-868MHz / 920-925MHz / 902-928MHz
<b>Polarization Mode</b>	RHCP (Right-handed Circular Polarization)
<b>Gain</b>	9dBi
<b>Horizontal Angle</b>	60°
<b>Vertical Angle</b>	55°
<b>VSWR</b>	≤ 1.3
<b>FBR</b>	17dB
<b>Characteristic Impedance</b>	50Ω
<b>Maximum Input Power</b>	20w
<b>Lightning Protection</b>	DC Ground

## Antenna 2

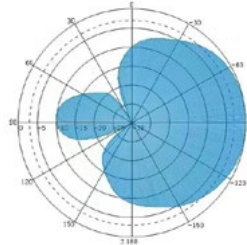
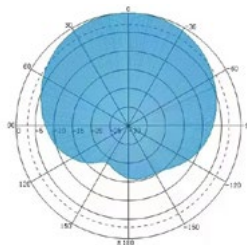
<b>Frequency</b>	865-868MHz / 920-925MHz / 902-928MHz
<b>Polarization Mode</b>	RHCP (Right-handed Circular Polarization)
<b>Gain</b>	6dBi
<b>Horizontal Angle</b>	105°
<b>Vertical Angle</b>	95°
<b>VSWR</b>	≤ 1.3
<b>FBR</b>	≥ 20dB
<b>Characteristic Impedance</b>	50Ω
<b>Maximum Input Power</b>	20w
<b>Lightning Protection</b>	DC Ground



9dBi



6dBi



Notice: Product specifications are subject to change without prior notice. / Model: UR1A / Update Date: 2025-09-15

**CHAINWAY**<sup>®</sup>

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