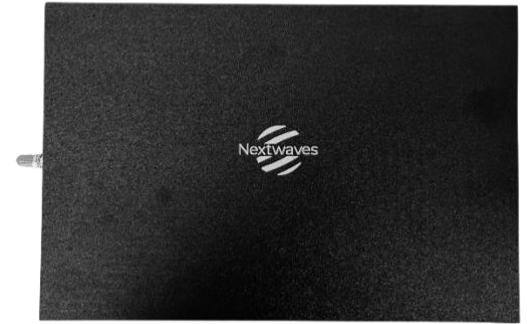




Universal RFID Near Field Antenna 840-960 MHz

Technical Data Sheet

RA-W-SFN-302001

Product Information

SKU	RA-W-SFN-302001
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Description

Our near field RFID antenna operates in the globally recognized 860-960 MHz range, used in RFID applications across all countries. Optimized for short-range applications requiring precise tag reading, our product is designed to reliably read tags within a range of 150mm or less, depending on the reader's power and environment. It can also resist interference from surrounding tags, ensuring accurate reading even when tags are up to 100mm apart. Additionally, it performs well near metals and liquids and can read through most types of packaging, something far field RFID cannot achieve, making it ideal for retail, healthcare, access control, and industrial asset management...

Features

- Universal frequency band for RFID (860-960 MHz)
- Effectively resists interference from surrounding tags within 100mm. Salt-water and UV resistant enclosure
- Can read tags affixed to metals, liquids, and through most types of packaging, including bags and boxes...

Application Areas

- **Retail Checkout Systems:** Streamlining the checkout process by enabling fast and accurate scanning of items at point-of-sale locations.
- **Healthcare Asset Tracking:** Monitoring and managing medical equipment, ensuring that critical devices are readily available and reducing loss.
- **Inventory Management:** Enhancing inventory accuracy and efficiency by tracking items in warehouses or stockrooms with precise, close-range readings.
- **Access Control:** Securing entry points by using RFID tags on identification cards, allowing quick access to authorized personnel.
- **Supply Chain Management:** Improving logistics and tracking of products throughout the supply chain, ensuring real-time visibility and accountability.
- **Event Management:** Facilitating attendee check-in and tracking participant movement at events, conferences, and festivals for enhanced security and engagement.

Electrical Specification

Frequency Bands:	860 - 960 MHz
Peak Gain:	-2 dBi
VSWR:	<1.3:1 full band
Max Power Handling:	2W or 33 dBm
Input Impedance:	50 Ω
Connector:	SMA Female

Mechanical Specification

Antenna dimension:	300 x 200 x 12 (mm)
Packaged dimension:	350 x 250 x 15 (mm)
Antenna weight:	500 g
Packaged Weight:	800g
Radome Material:	Aluminium (Bottom) Plasitc (Top)
Radome Colour:	Black

Antenna Performance Plots

Voltage Standing Wave Ratio (VSWR) is a measure of how efficiently radio-frequency (RF) power is transmitted from a power source, through a transmission line, and into a antenna. VSWR is used to quantify how well the impedance. A **VSWR of 1:1** indicates a perfect match, meaning **100%** power is transmitted without reflection of the load matches the impedance of the transmission line.

