PART NUMBER RA-UC-SFF-252501

RFID Slim CP2525



FREQUENCY RANGE

0.902 to 0.928 GHz

GAIN, TYP

9.0 dBic

DIMENSIONS

258 × 258 × 14.5 mm

RFID Slim CP2525 is a compact, low-profile UHF RFID panel antenna covering 0.902 to 0.928 GHz in a 258 × 258 × 14.5 mm ABS enclosure. It provides 9.0 dBic typical gain with RHCP circular polarization and a 1.5 dB axial ratio, helping it read tags in varied orientations. VSWR of ≤ 1.1, 10 W power handling and an SMA Female connector suit warehouse, retail inventory, asset tracking, library and access control installations.

APPLICATIONS

- Warehouse Management
- Retail Inventory
- Asset Tracking
- Library Management
- Access Control

FEATURES

01 9.0 dBic typical gain across the 0.902 to 0.928 GHz UHF band

02 RHCP circular polarization with 1.5 dB axial ratio for varied tag orientation

03 Compact 258 × 258 × 14.5 mm ABS enclosure

04 VSWR ≤ 1.1 and 10 W maximum power handling

05 SMA Female connector for standard RFID reader cabling

Technical specifications

RA-UC-SFF-252501

ELECTRICAL SPECIFICATION

Operating frequency	902 to 928 MHz
Patch Type	Aluminum
Ground Type	Aluminum
Gain (typical)	9.0 dBic
Polarization	RHCP (or LHCP)
Axial Ratio (typical)	1.5 dB (Covering entire US band)
VSWR	≤ 1.1
Front to Back Ratio	> 20 dB
Impedance	50 Ω

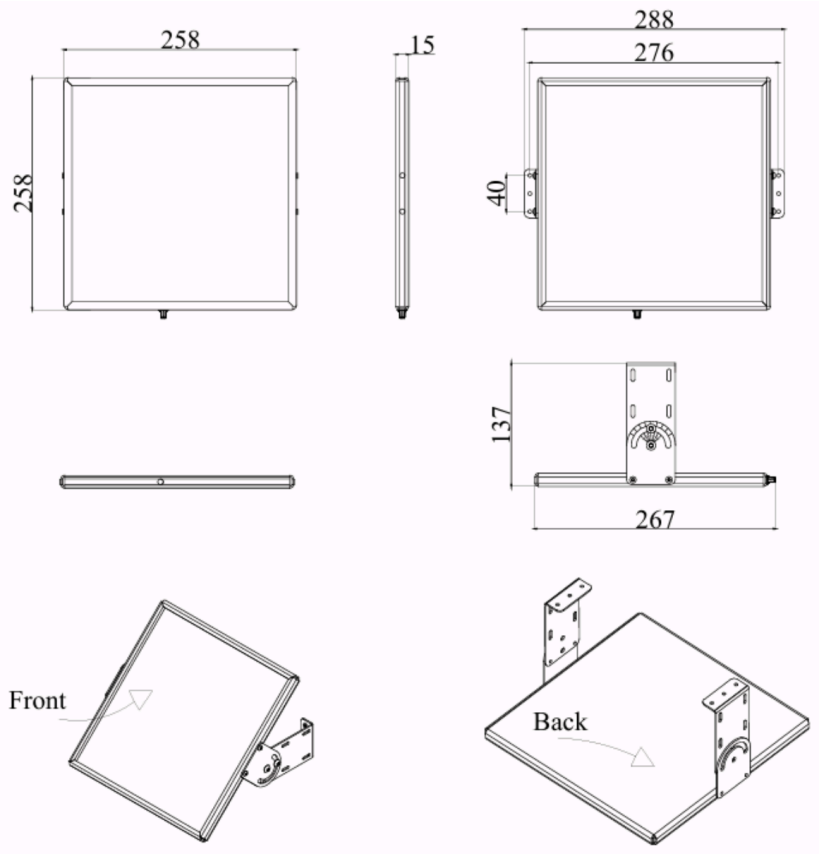
INTERFACE

Output Type	Coaxial
Connector	SMA
Connector Gender	Female

MECHANICAL SPECIFICATION

Cover	ABS
Size (L × W × H)	258 × 258 × 14.5 mm
Power max	10 W

OUTLINE DRAWING (MM)

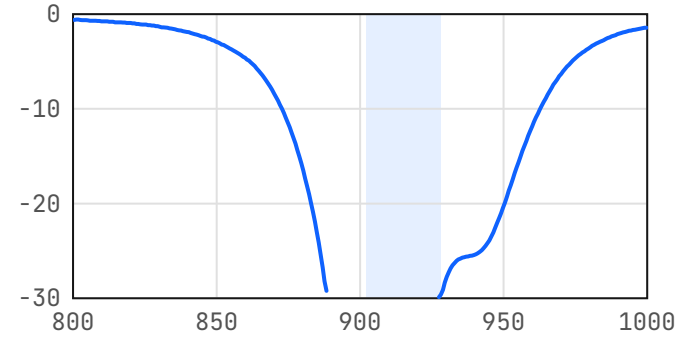


Specifications and drawing from the technical data sheet RA-UC-SFF-252501.

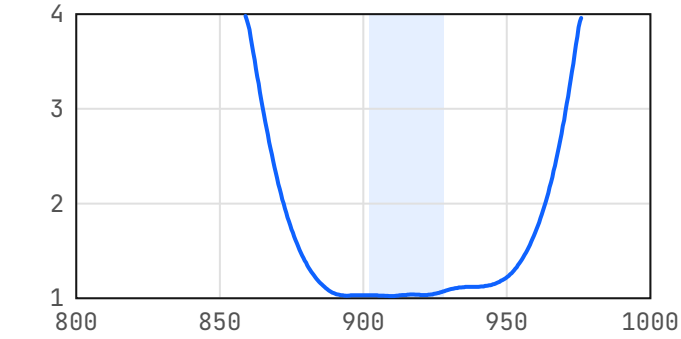
Typical test results

RA-UC-SFF-252501

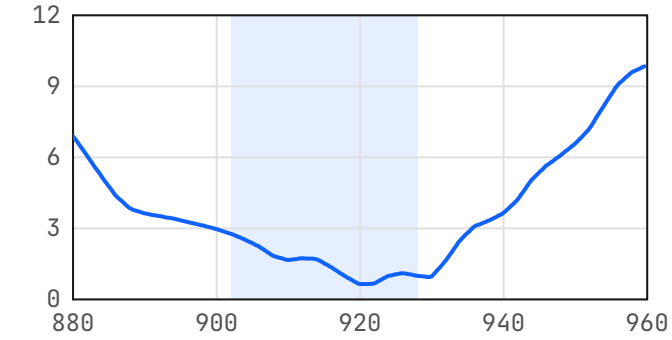
S11 (dB)



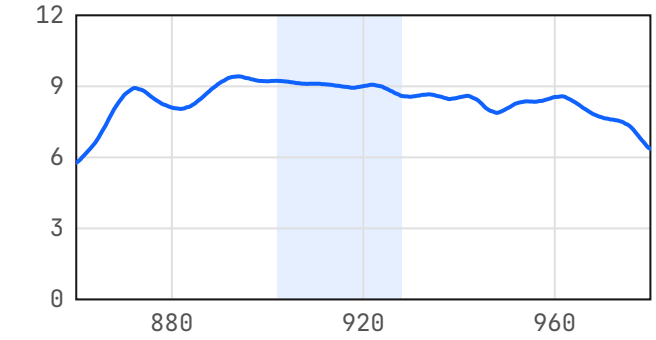
VSWR



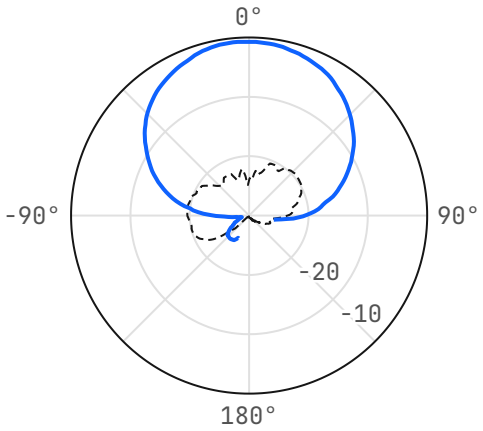
Axial ratio (dB)



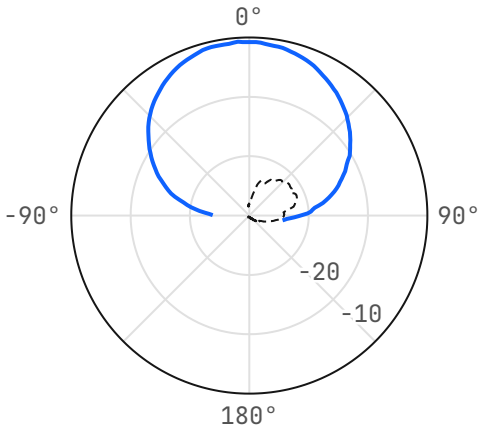
Realized gain (dBic)



Pattern, xz plane (dB)



Pattern, yz plane (dB)



RHCP ---- LHCP

Measured data, redrawn from the technical data sheet RA-UC-SFF-252501. Shaded band: 902 to 928 MHz. Radiation patterns are normalized and measured at 915 MHz.