PART NUMBER RA-UC-SFF-1202501

RFID Slim CP12025



FREQUENCY RANGE

0.902 to 0.928 GHz

MAX GAIN

14.8 dBic

DIMENSIONS

1218 × 258 × 12.5 mm

RFID Slim CP12025 is an elongated, low-profile UHF RFID panel antenna covering 0.902 to 0.928 GHz in a 1218 × 258 × 12.5 mm acrylic enclosure. A 14.8 dBic maximum gain and LHCP/RHCP circular polarization with a typical 1.5 dB axial ratio help it read tags in varied orientations. VSWR of ≤ 1.2, 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 14.8 dBic maximum gain across the 0.902 to 0.928 GHz UHF band

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

03 12.5 mm thin 1218 × 258 mm acrylic enclosure for low-profile mounting

04 VSWR ≤ 1.2 and 10 W maximum power handling

05 SMA Female connector for standard RFID reader cabling

Technical specifications

RA-UC-SFF-1202501

ELECTRICAL SPECIFICATION

Operating frequency	902 to 928 MHz
Patch Type	Aluminum
Ground Type	Aluminum
Max Gain	14.8 dBic
Polarization	LHCP (or RHCP)
Axial Ratio (typical)	1.5 dB
VSWR	≤ 1.2
Front to Back Ratio (typical)	20 dB
3-dB beamwidth (XZ plane)	14 deg
3-dB beamwidth (YZ plane)	62 deg

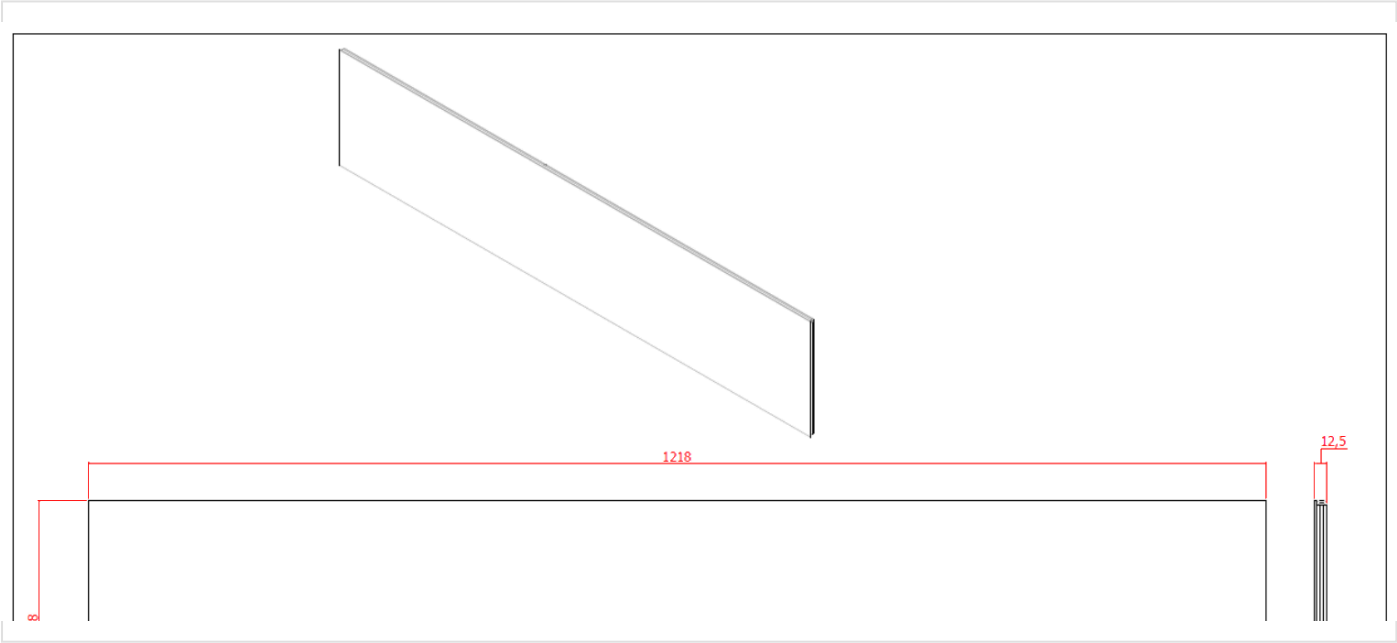
INTERFACE

Output Type	Coaxial
Connector	SMA
Connector Gender	Female

MECHANICAL SPECIFICATION

Cover	ABS
Size (L × W × H)	258 × 1218 × 12.5 mm
Power max	10 W

OUTLINE DRAWING (MM)

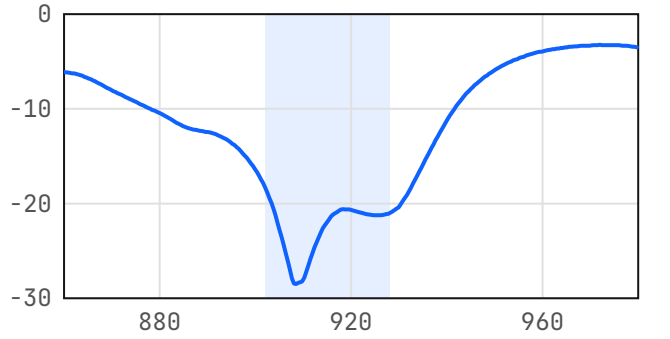


Specifications and drawing from the technical data sheet RA-UC-SFF-1202501 v2.

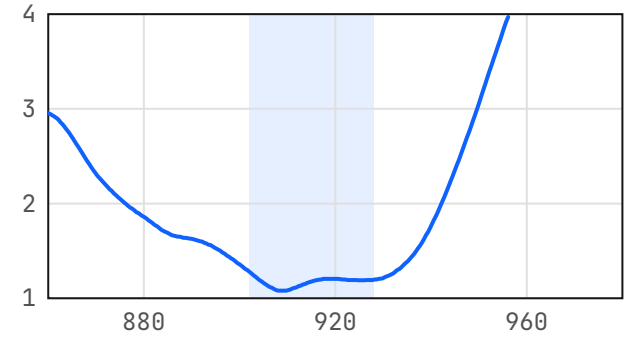
Typical test results

RA-UC-SFF-1202501

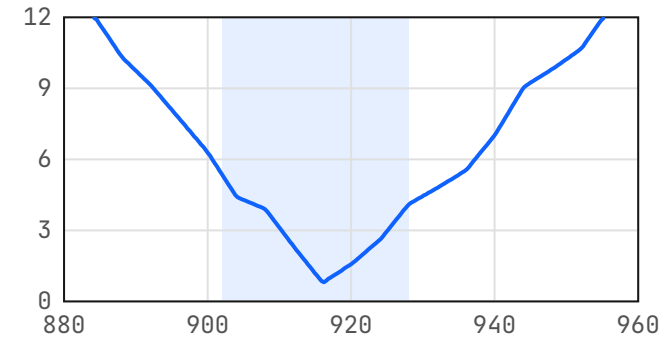
S11 (dB) MHz



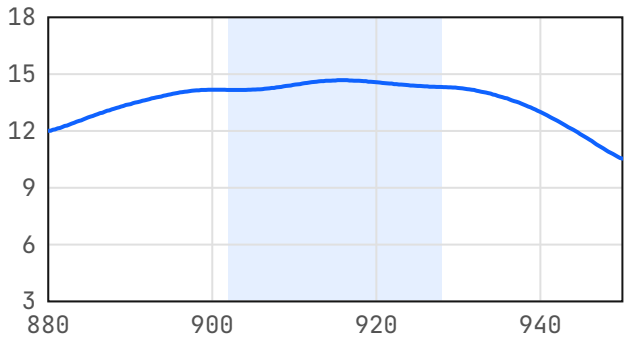
VSWR MHz



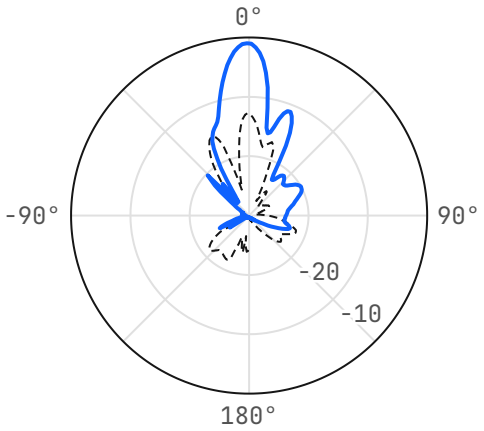
Axial ratio (dB) MHz



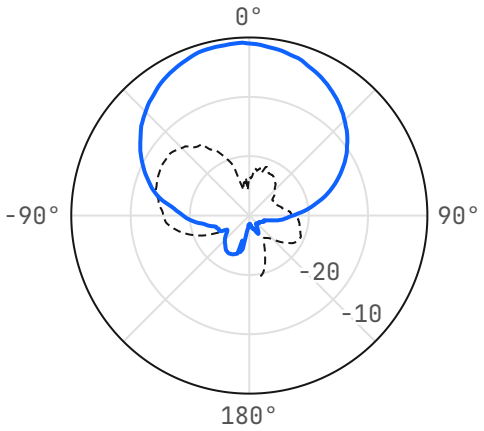
Realized gain (dBic) MHz



Pattern, xz plane (dB)



Pattern, yz plane (dB)



LHCP ---- RHCP

Measured data, redrawn from the technical data sheet RA-UC-SFF-1202501 v2. Shaded band: 902 to 928 MHz. Radiation patterns are normalized and measured at 915 MHz.