UHF Planar Antenna

SPSPRDA2-P

The SPSPRDA2−P is an indoor, planar antenna optimized for use with Smart Passive Sensors™. This planar style antenna comes with a RP−SMA jack connector, enabling fast installation times. This antenna is designed to be placed on metal surfaces, making it ideal for applications such as datacenter management and industrial predictive maintenance where other antenna topologies may not be ideal.

This planar antenna functions in both the ETSI (865−868MHz) and FCC (902−928MHz) defined UHF bands. The free−space radiation pattern when mounted on a metal plane will be an off−axis toroid, some placement optimization may be required based on application environment.

Features

- Elliptical Polarization
- Compact Form Factor
- RP−SMA Jack Connector
- ABS Plastic with Foam Mounting Tape

Applications

- Data Centers
- Industrial Predictive Maintenance
- Facilities Management
- Cold−chain Logistics

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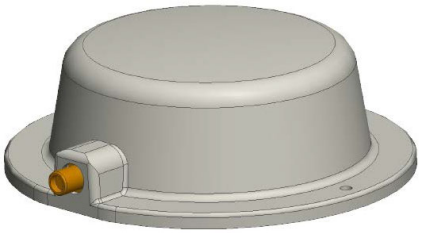

ANTENNA−SERVER RACK
CASE 889AA

ORDERING INFORMATION

Device	Package	Shipping
SPSPRDA2−P	Box	Box of 32

Table 1. STANDARD OPERATING CONDITIONS

Parameter	Rating	Unit
Operating Temperature Range	−40 to +85	°C

Table 2. ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Parameter	Min	Typ	Max	Unit
Frequency Range	865		928	MHz
Impedance		50		Ω
Peak Gain	4		6	dBi
SWR			2.0	

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

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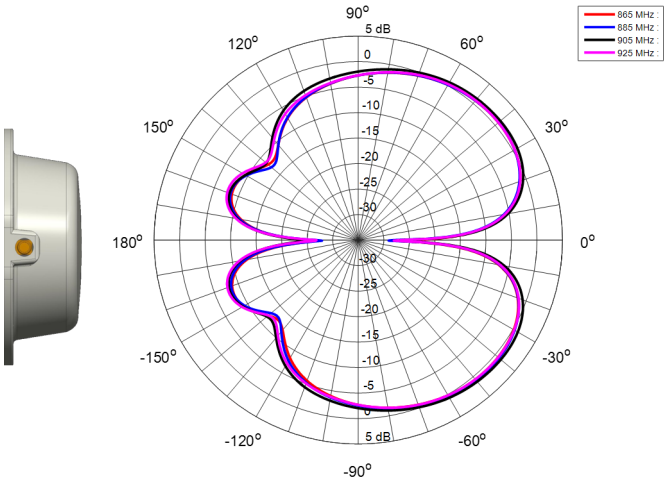


Figure 1. Azimuth Cut, held at θ = 90°: E_{TOTAL} Component

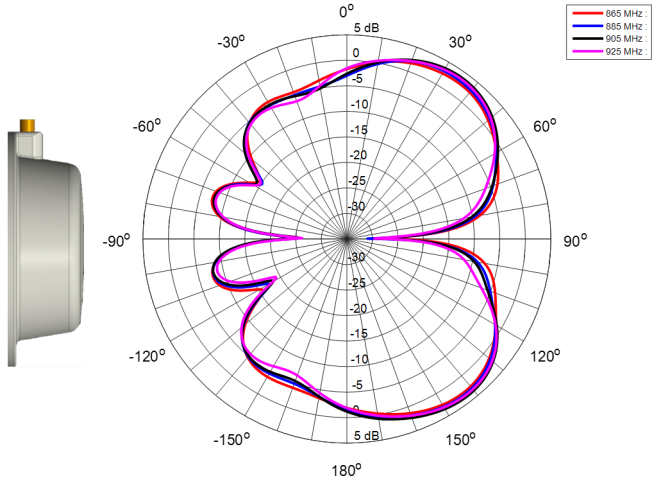


Figure 2. Elevation Cut, back to front: E_{TOTAL} Component

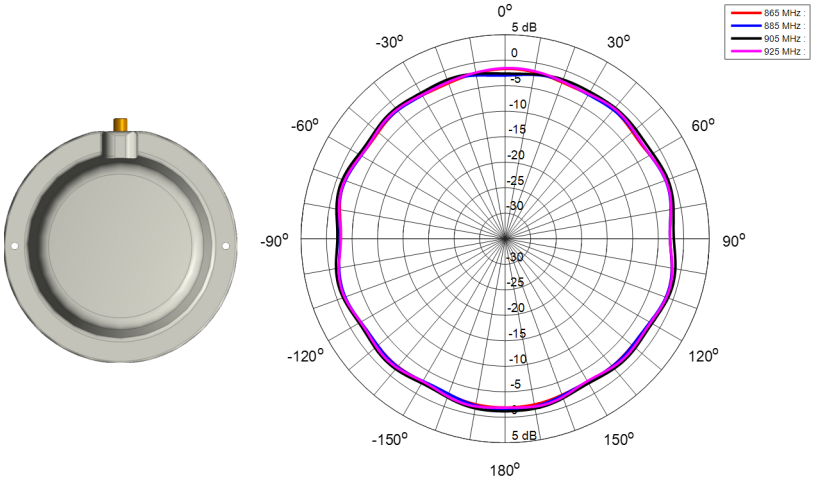
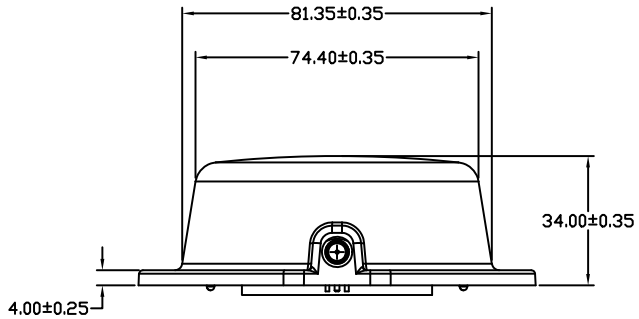


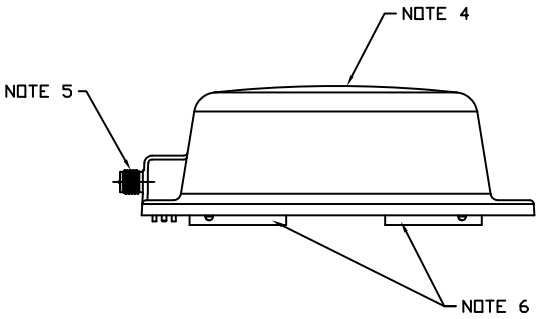
Figure 3. Elevation Cut, side to side: E_{TOTAL} Component

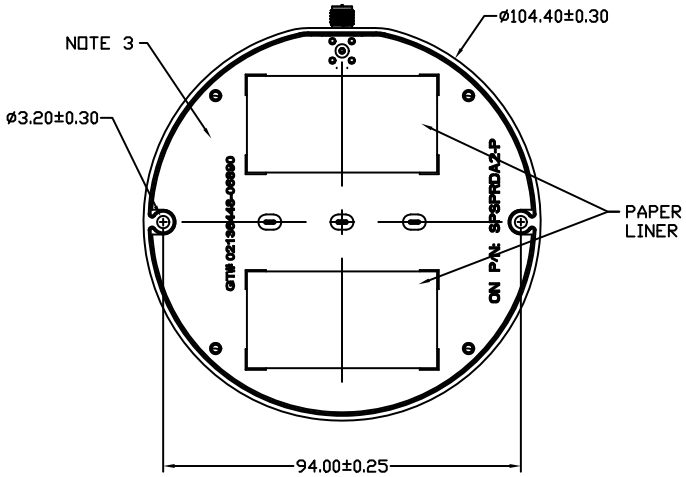
SPSPRDA2−P

PACKAGE DIMENSIONS

ANTENNA−SERVER RACK
CASE 889AA
ISSUE O







NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
2. CONTROLLING DIMENSION: MILLIMETERS
3. PCB BASE: FR4 MATERIAL
4. RADOME: BLACK POLYCARBONATE MATERIAL
5. CONNECTOR: RP−SMA, FEMALE, GOLD PLATED BRASS BODY
6. FOAM TAPE WITH PAPER LINER

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