PCTEL®
471 Brighton Drive | Bloomingdale IL | 60108

Bi-Directional Train Top Antenna

RoHS COMPLIANT

The 74-133201-01 bi-directional antenna is designed to survive high vibration rail installations, including roof mounting on locomotive and passenger cars.

Features

- Dual feed, dual slant ± 45°, linear polarization
- Designed for metallic or non-metallic roof mounting, no ground plane required
- Extremely rugged purpose built for rail and metro applications
- Symmetrical patterns, maintains same pattern performance over each polarization
- High port-to-port performance correlation
- Designed to meet EN50155 & AAR certification requirements

74-133201-01

STANDARD CONFIGURATION

Model	Cable	Connector	Mount
74-133201-01	Sold Separately	QMA Female	Through-hole stud mounting for 1-inch holes

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Gain*	Typical VSWR	Bandwidth	Beamwidth (Free Space, Non-Metallic Ground Plane)	Beamwidth (Ground Plane Mounted Peformance)	Port-to-Port Isolation	Nominal Impedance	Polarization
10-13 dBi*	<2:1 (max 2.5:1)	4.9-5.9 GHz	H-Plane 42° E-Plane 28°	H-Plane 39° E-Plane 21°	> 22 dB	50 ohms	Dual Slant 45°, Linear

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS (ALL MODELS)

Dimensions	Weight	Temperature Range	Housing Antenna Material	Ingress Protection
8.3 x 5.5 x 3.3 inches (210 x 140 x 85 mm)	2.7 lbs	-40°C to +85°C	Aluminum, hard coat anodized	IP56

* Gain is ground plane dependent; more gain can be achieved with larger ground plane.
U.S. Patent Pending

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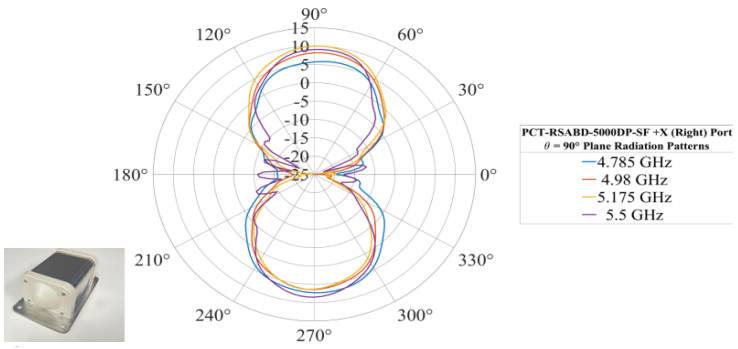
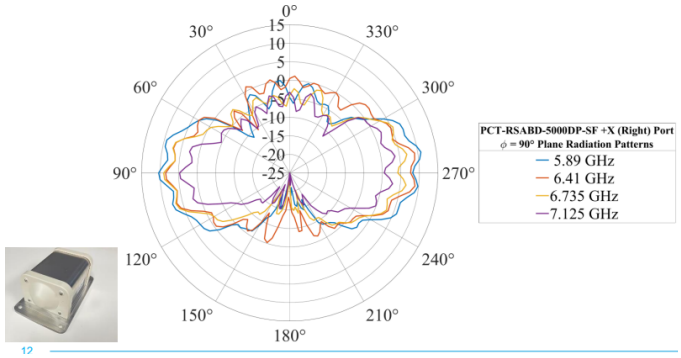
Radiation Patterns

RoHS COMPLIANT

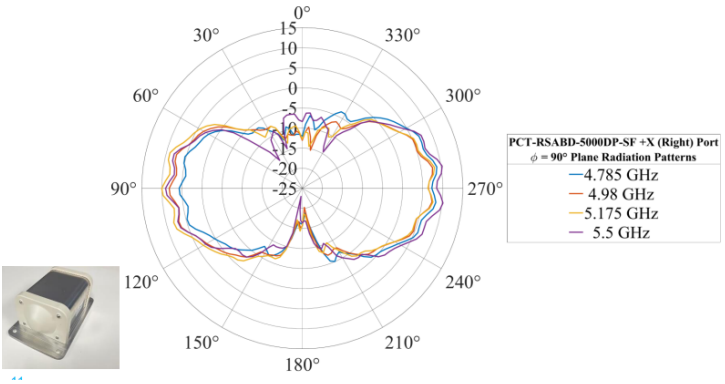
PCT-RSABD-5000DP-SF +X (Right) Port θ = 90° Realized Gain



PCT-RSABD-5000DP-SF +X (Right) Port ϕ = 90° Realized Gain



PCT-RSABD-5000DP-SF +X (Right) Port ϕ = 90° Realized Gain



PCT-RSABD-5000DP-SF +X (Right) Port θ = 90° Realized Gain