

Dual-Polarization 4G/5G MIMO Directional Panel Antenna

Cellular Antennas – Directional

PLTE6150M



Description

Dual-polarized dual-port directional panel antenna for coverage of 4G/5G frequency bands

Technologies

- 4G/5G Cellular

Features

- Optimal coverage – MIMO broadband directional coverage
- Rugged – Heavy-duty articulating mount; IP67-compliant waterproof vented design; Indoor and outdoor rated
- Ease of installation and connection: Dual slant polarized or V/H polarization mounting options; N Female bulkhead connectors
- Supports up to three rear-mounted brackets for GNSS or omnidirectional WiFi antennas



VenU® Dual-Polarization 4G/5G MIMO Directional Panel Antenna

Cellular Antennas – Directional

The PLTE6150M panel antenna offers 4G/5G multiband coverage, high gain, and a rugged housing design, with a heavy-duty mounting bracket for mast or wall mount installations. It is ideal for small cells, indoor/outdoor DAS systems, and Oil and Gas/Utility sites requiring a rugged and reliable 4G/5G cellular antenna solution. This antenna also supports up to three rear-mounted brackets for GNSS or omnidirectional WiFi antennas, enabling consolidated mounting while expanding coverage.

Features

- MIMO broadband directional coverage for industrial wireless, DAS, ODAS, and small cell applications
- N Female bulkhead connectors
- IP67* waterproof vented design
- Indoor and outdoor rated
- Dual-slant polarized or V/H polarization mounting options
- Includes heavy-duty articulating mount
- Supports up to three rear-mounted brackets for GNSS or omnidirectional WiFi antennas

Certifications



* When installed according to manufacturer's installation instructions.

Dual-Polarization 4G/5G MIMO

Directional Panel Antenna

Cellular Antennas – Directional

Standard Configuration

Model	PLTE6150M
Connector	2 x Type N Female
Mounting Method	Heavy-duty articulating mount suitable for pipe or wall installation is included
Radome	White, UL 94 UV-stable Polycarbonate

Electrical Specifications – RF Antenna

PLTE6150M

Frequency Range (MHz)	617-960			1695-5000			
Frequency Bands (MHz)	617-698	698-920	920-960	1695-2200	2300-2690	3300-4200	4400-5000
Gain (dBi)	5.6 / 7.2	7.2 / 8.5	8.1 / 5.8	7.1 / 8.0	7.4 / 8.2	9.5 / 8.8	10.5 / 11.5
Antenna Efficiency (%)	56 / 80	80 / 70	70 / 50	77 / 78	79 / 75	88 / 80	81 / 55
Polarization	Dual Slant $\pm 45^\circ$ / Horizontal & Vertical			Dual Slant $\pm 45^\circ$ / Horizontal & Vertical			
Nominal Impedance (Ω)	50			50			
VSWR	< 3.0	< 2.0	< 3.5	< 2.5	< 2.5	< 2.5	< 4.0
Azimuth 3dB Beawidth ($^\circ$)	75	65	59	60	58	57	42
Elevation 3dB Beawidth ($^\circ$)	73	60	60	57	57	55	39
Port-to-Port Isolation (dB)	> 20	> 25	> 30	> 30	> 30	> 25	> 20
Front to Back Ratio (dB)	> 16	> 17	> 19	> 29	> 32	> 26	> 30
Maximum Power Handling (W)	60			60			

Mechanical and Environmental Specifications

PLTE6150M

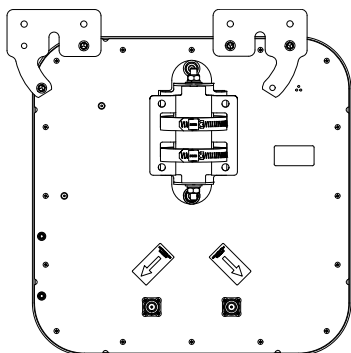
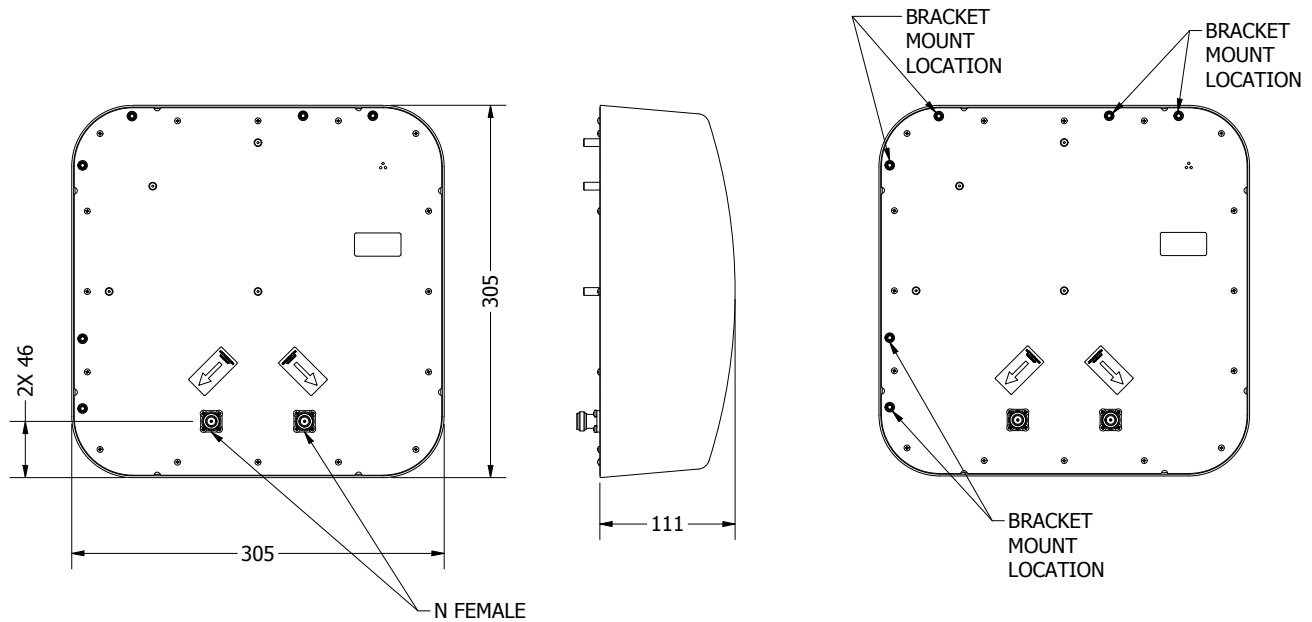
Dimensions (L x W x H)	12" x 12" x 4.4" in (30.48 x 30.48 x 11.18 cm)
Weight	2.0 lbs (0.907 kg)
Rated Wind	125 mph
Radome color	White
Temperature Range	-40°C to +85°C
Ingress Protection	IP67

Accessories

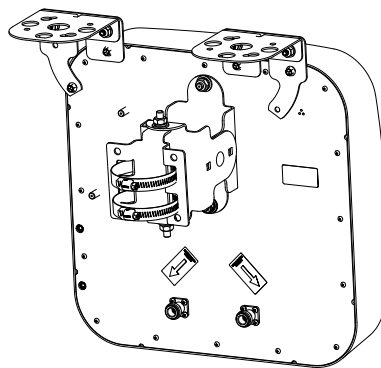
Part Number	Description
GNSS-L125-DH-TNC	Multiband Multi-Constellation GNSS-L1-L2-L5 antenna, 28 dB LNA Gain, TNC(f) connector
GNSS-L125-DH-NF	Multiband Multi-Constellation GNSS-L1-L2-L5 antenna, 28 dB LNA Gain, N(f) connector
GNSS-L1256-40TNC	Multiband Multi-Constellation GNSS-L1-L2-L5-L6 and Iridium antenna, 40 dB LNA Gain, TNC(f) connector
GNSS1-TMG-40N	Multi-Constellation GNSS-L1, 40 dB LNA Gain, N(f) connector
GNSS1-TMG-26N	Multi-Constellation GNSS-L1, 26 dB LNA Gain, N(f) connector
GPS-TMG-WMT-TJ	Mounting bracket kit for GNSS antennas
BOA24004NF	Omnidirectional antenna, 2.4-2.5 GHz, 4 DBI, N(f) connector
FPM-1013	Bracket Kit

Dual-Polarization 4G/5G MIMO Directional Panel Antenna

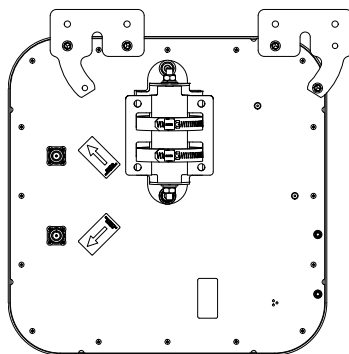
Cellular Antennas – Directional



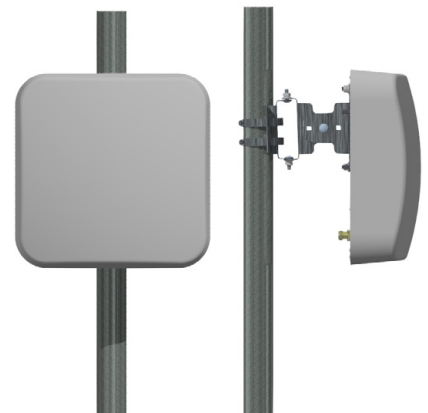
VERTICAL MOUNT



45 DEG MOUNT



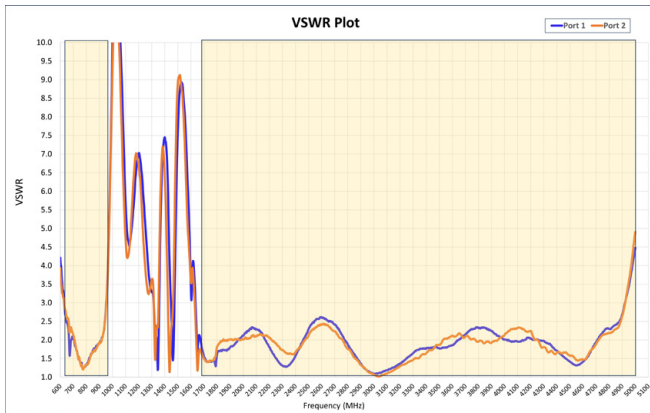
HORIZONTAL MOUNT



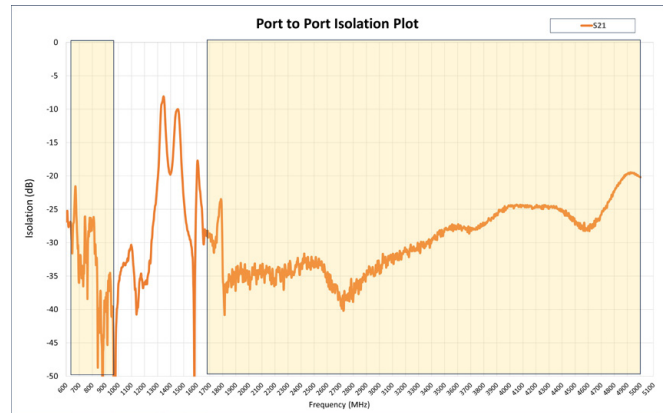
Dual-Polarization 4G/5G MIMO Directional Panel Antenna

Cellular Antennas – Directional

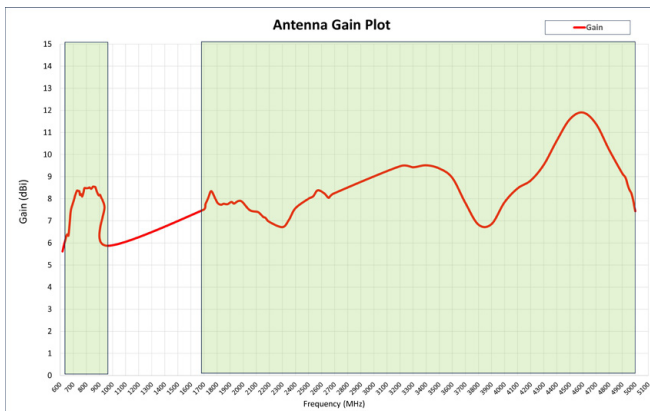
VSWR



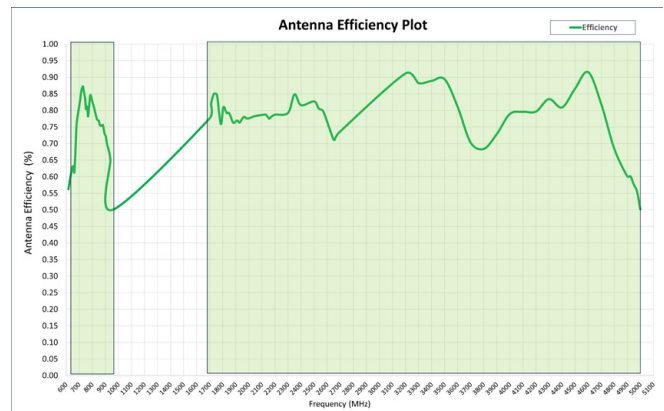
Port-to-Port Isolation



Antenna Gain



Antenna Efficiency



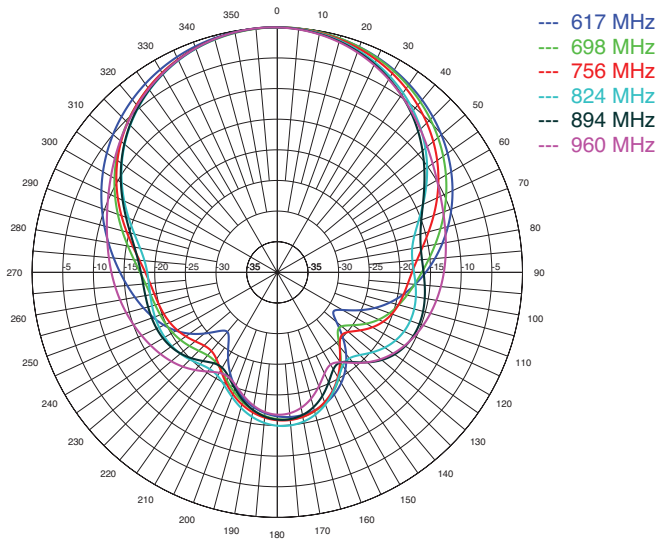
* All data measured at the end of the connector, without external cable attached.

Dual-Polarization 4G/5G MIMO Directional Panel Antenna

Cellular Antennas – Directional

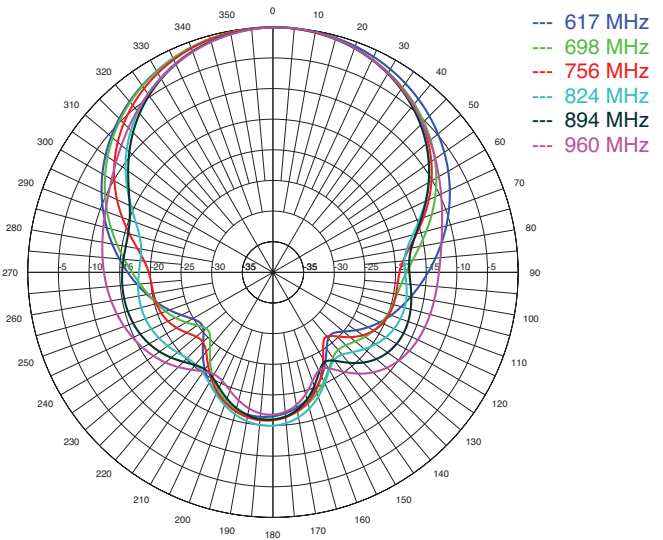
Azimuth (Horizontal)

617 - 960 MHz



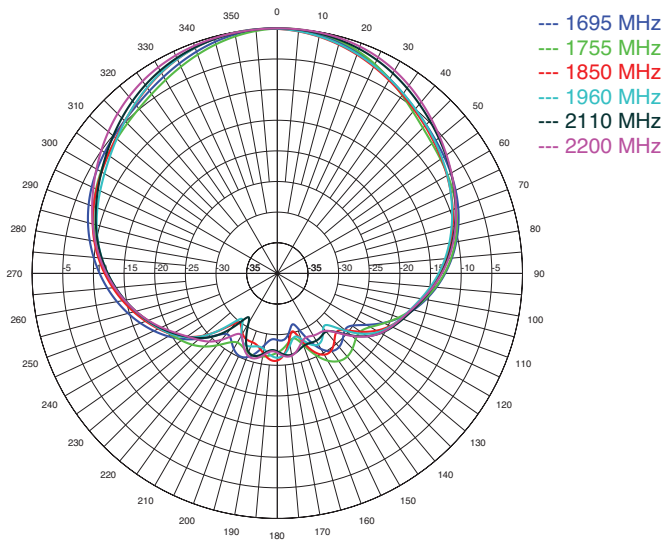
Elevation (Vertical)

617 - 960 MHz



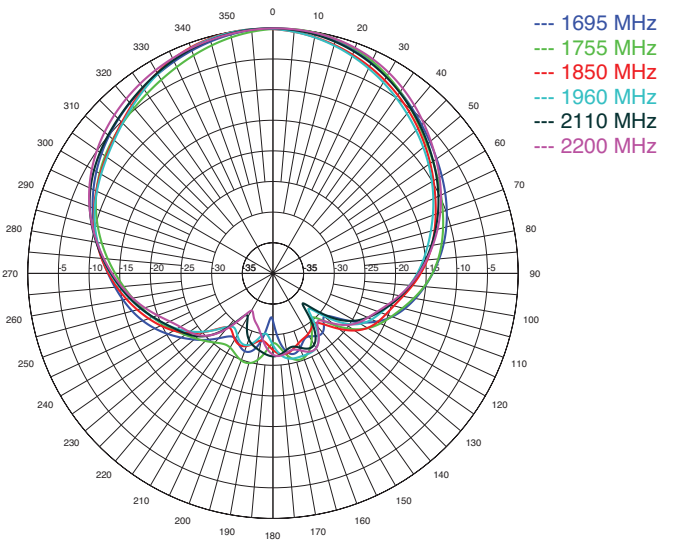
Azimuth (Horizontal)

1695 - 2200 MHz



Elevation (Vertical)

1695 - 2200 MHz

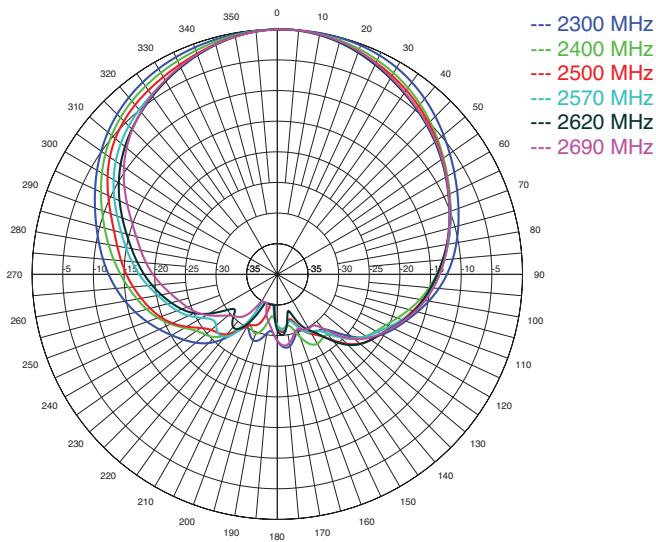


Dual-Polarization 4G/5G MIMO Directional Panel Antenna

Cellular Antennas – Directional

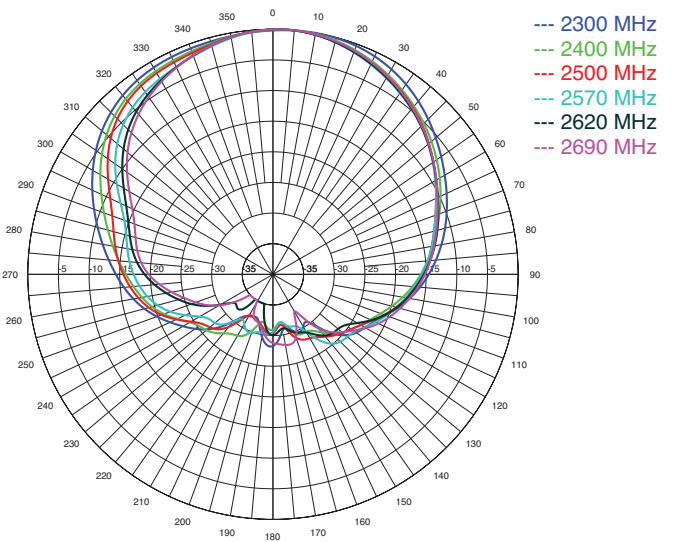
Azimuth (Horizontal)

2300 - 2690 MHz



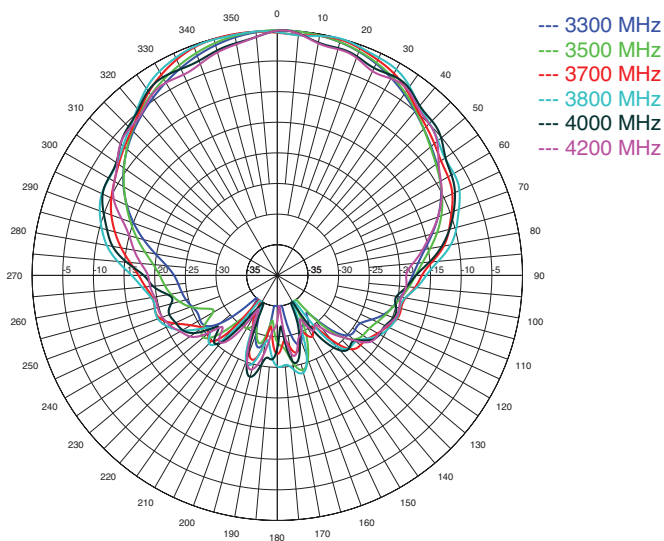
Elevation (Vertical)

2300 - 2690 MHz



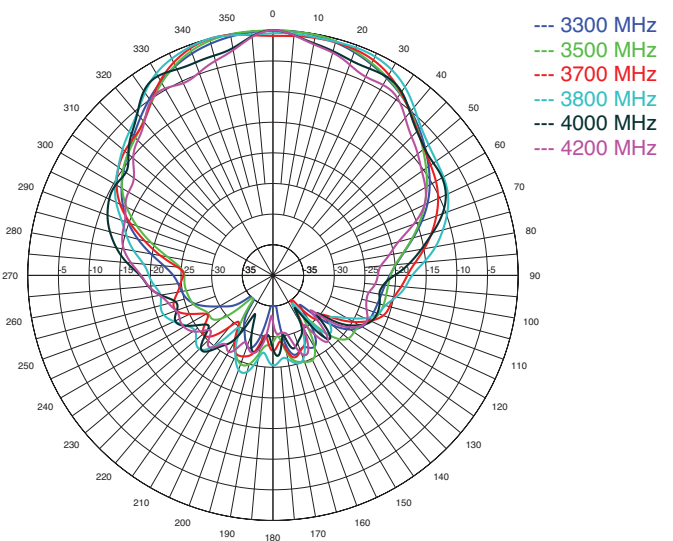
Azimuth (Horizontal)

3300 - 4200 MHz



Elevation (Vertical)

3300 - 4200 MHz

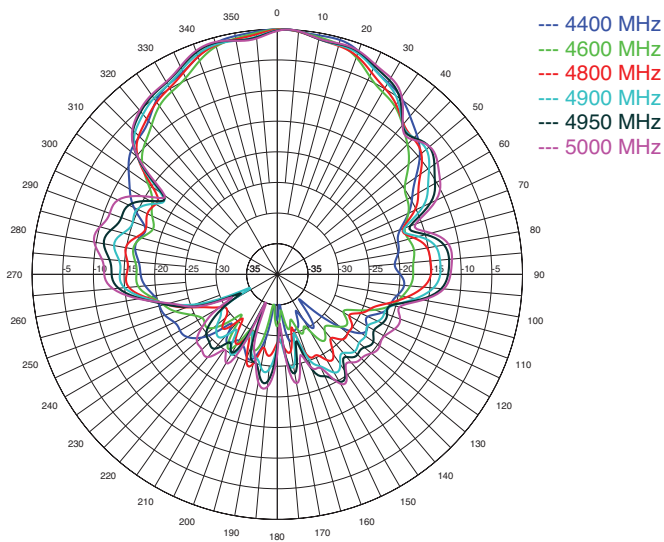


Dual-Polarization 4G/5G MIMO Directional Panel Antenna

Cellular Antennas – Directional

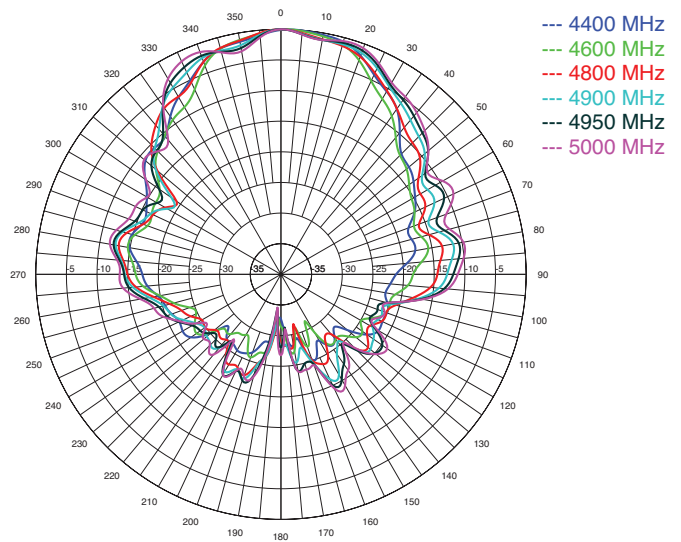
Azimuth (Horizontal)

4400 - 5000 MHz



Elevation (Vertical)

4400 - 5000 MHz



CONTACT US

**For more information about
this product contact your
sales representative or visit
> pctel.com/antenna-products**

Solving Complex Wireless Challenges

PCTEL, an Amphenol company, is a leading global provider of wireless technology solutions, including purpose-built antenna systems and test and measurement products. Trusted by our customers for decades, we solve complex wireless challenges to help organizations stay connected, transform, and grow.



PCTEL, Inc.

T: +1 630 372 6800 | pctel.com

Specifications subject to change without notice. PCTEL® is a registered trademark of PCTEL, Inc. ©2026 PCTEL, Inc. All rights reserved. Rev. A (July 2026)