

4.9 GHz to 6.4GHz, 2-Foot Parabolic, Cambium ePMP13L Adapter

KP-5PDE13L-2



Features

- This horn antenna is packaged with KP-5PDA-EPMP13L radio adapter
- Stable gain and patterns over ultra-wide bandwidth of 4.9 - 6.4 GHz
- Optimized F/B & side-lobe suppression minimizes interference
- Quick connect waveguide allows rapid change of polarization and installation
- Installs in minutes to reduce service calls and installation time
- Integrated handle / hoisting hook for added safety and convenient installation
- Heavy-duty bracket with fine elevation and azimuth adjustment beamwidths
- Adjustable horizontal / vertical or $\pm 45^\circ$ slant polarization that is compatible with all 5 GHz CPE radios
- Quick-connect waveguide allows polarization to be adjusted and quick change of adapters without tools
- Mounts to any size mast from 0.75" to 4.5"

Applications

- Wireless MIMO LAN systems & IEEE 802.11n applications
- Point-to-point (PtP) for backhaul or client premise equipment (CPE)
- Supports public safety (4.9 GHz), U-NII-1, 2, 3, and 4 (5.15-5.925 GHz), and up to 6.4GHz for world-wide market
- Mobile WiMAX Wireless Internet Provider "cell" sites
- High-density deployments requiring frequency reuse to achieve high capacity and data rates
- Last-mile connection

Description

The KP-5PDE13L-2 is a 2-foot, 29 dBi parabolic antenna operating from 4.9 GHz to 6.4GHz. This antenna includes the KP-5PDA-EPMP13L radio adapter which is designed specifically for the Cambium ePMP1000, ePMP3000L, and Force 300CSM radios.

This 2-foot 5GHz ProLine Parabolic Antenna is engineered to suppress side-lobes and back-lobes and is excellent at rejecting interference. With this antenna's over 29 dBi gain and 40 dBi front to back ratio, the operator will maximize the potential of the radio by improving signal strength and reducing the noise floor in the point-to-point (PtP) link. Our parabolic antennas are perfectly suited for high density PtP client-premise equipment or backhaul applications. Their port isolation and cross polarization are over 28 dB which is essential in maximizing throughput from multi input multi output (MIMO) multiplexing schemes.

The KP-5PDE13L-2 features high-grade, powder-coated aluminum reflector, mounting brackets, and hardware which allow up to 20 degrees of azimuth and elevation mechanical tilt and supports pole diameters of 0.75 in to 4.5 in. These rugged antennas are built a grade above the rest and rated to survive up to 125mph. The reflectors are made from dent-resistant, high grade aluminum that is powder-coated a light-grey color. The antennas integrated and removable red handle can be used to carry or hoist the antenna for safer installation. The quick connect waveguide allows changing out the adapter for quick radio swap outs without the need to remove the antenna or tools. The antenna supports both Horizontal/Vertical and Dual ± 45 Degree Slant polarization schemes which can be changed in the field through a simply rotation of the adapter.

The KP-5PDA-EPMP13L is a push-in adapter that features simplified installation with patented, quick-connect waveguide technology to the antenna and a durable housing to snap in the radio without any additional cables or taping. The weatherproof adapter is built to withstand challenging environments subject to intense UV, rain, snow, and ice and is highly reliable over a longer product lifetime.

Configuration

| | |
|-------------------|----------------------|
| Application Band | 5 GHz |
| Band Type | Single |
| Radiation Pattern | Directional |
| Polarization | H/V or 45 Deg. Slant |
| Number of Ports | 2 |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:
[4.9 GHz to 6.4GHz, 2-Foot Parabolic, Cambium ePMP13L Adapter KP-5PDE13L-2](#)

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Lightning Protection
 Housing Material and Plating

RF connector grounded to mounting bracket
 Anodized Aluminum, Powder Coat

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-----------------|---------|---------|---------|-------|
| Frequency Range | 4.9 | | 6.4 | GHz |
| Input VSWR | | 1.5:1 | | |
| Impedance | | 50 | | Ohms |
| Input Power | | | 100 | Watts |

Specifications by Band

| Description | Band 1 | Band 2 | Band 3 | Band 4 | Band 5 | Units |
|------------------------|-------------|-------------|-------------|--------|--------|---------|
| Range | 4,900-5,400 | 5,400-5,900 | 5,900-6,400 | | | MHz |
| Gain | 27.5 | 28.7 | 29.8 | | | dBi |
| Horizontal HPBW | 5.2 | 4.7 | 4.4 | | | Degrees |
| Vertical HPBW | 5.3 | 4.7 | 4.3 | | | Degrees |
| Cross Polar Ratio HPBW | 30 | 32 | 28 | | | dB |
| Port Isolation | 30 | 30 | 23 | | | dB |
| Front to Back Ratio | 40 | 40 | 40 | | | dB |
| VSWR Max | 1.7:1 | 1.5:1 | 1.8:1 | | | |

Mechanical Specifications

Housing Material
 Housing Plating/Color

Anodized Aluminum
 Powder Coat

Size

Length
 Width
 Height
 Mounting Mast Diameter
 Weight

15.5 in [393.7 mm]
 25 in [635 mm]
 23.7 in [601.98 mm]
 0.75 to 4.5 in [19.05 to 114.30 mm]
 20 lbs [9.07 kg]

Environmental Specifications

Temperature

Operating Range
 Wind Survivability
 Wind Loading

-40 to +60 deg C
 125 MPH [201.17 KPH]
 Frontal, 222 lbf

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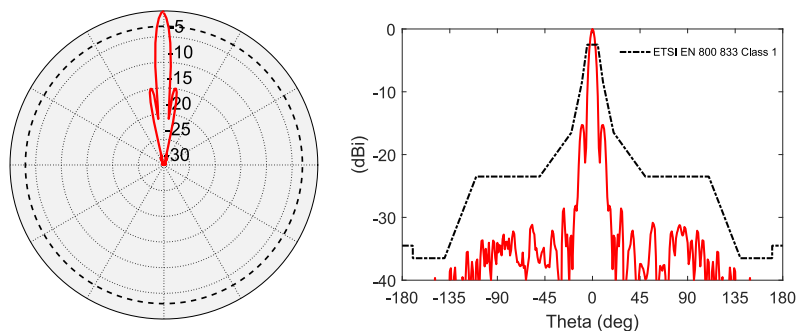


Plotted and Other Data

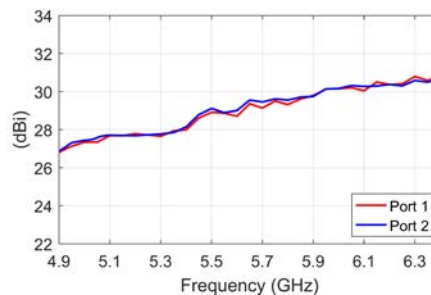
Notes:

Typical Radiation Pattern

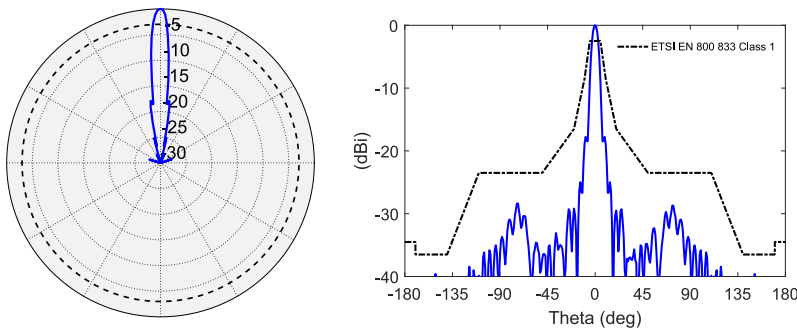
Azimuth Pattern



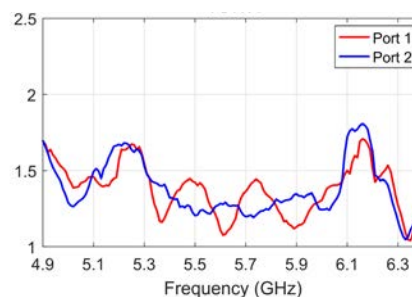
Gain



Elevation Pattern



VSWR



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Appendix

Electrical Downtilt: Angle in the antenna's elevation pattern in which the maximum gain occurs.

Gain: Antenna's average gain.

Front to Back Ratio @ 180°±30°: Average difference between the antenna's maximum gain and the maximum gain in the antenna's back lobe over ±30° angles.

Cross-polarization Ratio (dB): Typical difference between the co-polarization and cross-polarization gain across the sector's 3 dB Beam Width.

Dedicated to serving the needs of the Wireless Internet Service Provider (WISP) market, KP Performance Antennas offers purpose built products that reliably perform in the field. KP Performance Antennas product line consists of Yagi, Grid, Omni, Dish and other style antennas that operate in the 900 MHz, 2.4 GHz, 3 GHz, and 5 GHz frequencies.

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KP-5PDE13L-2 CAD Drawing

