

4.9 GHz to 6.4 GHz, 65 Degree Sector Antenna, 17 dBi, 2-Port, +/-45 Slant

**KPP-5DP65S-45** 



#### **Features**

- High-performance gain and patterns that are stable over a wide bandwidth
- Interference mitigation with highly suppressed side-lobes and superior front-to-back that allows channel reuse
- Universal radio bracket with quick-release slot/clip design is compatible with many AP radios
- Applications
- Wireless MIMO LAN systems & IEEE 802.11n applications
  Point-to-multipoint (PtMP) requiring sectorial coverage
- 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

- · Ultra-wide bandwidths for world-wide markets
- Integrated hoisting hook for added safety and convenient installation
- · Null fill improves coverage near the tower
- -9 to 20 Degrees Mechanical Tilt
- Mobile WiMAX Wireless Internet Provider "cell" sites
- High-density deployments requiring frequency reuse to achieve high capacity and data rates
- · Macro base station or small cell deployments

#### Description

The KP-5DP65S-45 is a 5 GHz ProLine Sector Antenna with a 3 dB beamwidth of 65°, high gain of 17.0 dBi, two ports with + / - 45 slant polarization, and operates over an ultra-wide bandwidth of 4.9 GHz to 6.4 GHz. The sector antenna has an aesthetically small footprint and delivers consistent gain in its coverage area.

This sector antenna offers side lobes suppression and a front to back over 30 dB while retaining a high gain that outpeforms assymetric horn antennas of the same 3dB azimuth beamwidth. The highly suppressed side lobes and superior front to back allows for channel (frequency) reuse and can reach high levels of spectral efficiency in the most challenging and noisy environments. The polarization is + /- 45 slant, making the sector compatible with many 4.9 GHz to 6.4 GHz single or dual polarization 2 x 2 MIMO radios.

The antenna comes with rugged powder-coated aluminum brackets and features an Integrated hoisting hook for added safety and convenient installation. The sector antenna features a heavy-duty UV-resistant ABS radome and annodized aluminum reflector for all-weather operation. This ProLine Sector antenna antenna is packaged with a rugged universal radio bracket that is compatible with many popular Cambium, Ubiquiti, Mimosa, and Baicells radios and can be retrofitted for many more.

#### Configuration

Design
Band Type
Radiation Pattern
Polarization
Connector Type
Number of Ports
Lightning Protection
Housing Material and Plating

Sector Single Directional ±45 Deg. Slant N Female 2

RF connector grounded to reflector and mounting bracket Anodized aluminum

#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	4.9		6.4	GHz
Input VSWR		1.5:1		
Impedance		50		Ohms

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 6.4 GHz, 65 Degree Sector Antenna, 17 dBi, 2-Port, +/-45 Slant KPP-5DP65S-45



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Gain	17		dBi
Electrical Downtilt	0		Degrees
Input Power		100	Watts

#### Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	4.9 to 5.4	5.4 to 5.9	5.9 to 6.4			GHz
Gain	16	17	17.5			dBi
Horizontal HPBW	65	60	55			Degrees
Horizontal Squint (±)	1	1	1			Degrees
Vertical HPBW	8.5	8	7.8			Degrees
Electrical Downtilt	0	0	0			Degrees
Cross Polar Ratio HPBW	15	15	15			dB
Port Isolation	28	24	23			dB
Front to Back Ratio	38	40	34			dB
VSWR Max	1.7:1	1.7:1	2:1			

#### **Mechanical Specifications**

Radome Material Housing Material

Size

Length Width Height Mounting Mast Diameter

Weight

**UV** resistant PVC Anodized aluminum

16.9 in [429.26 mm] 5 in [127 mm] 2.7 in [68.58 mm]

0.75 to 4.5 in [19.05 to 114.30 mm]

9.9 lbs [4.49 kg]

#### **Environmental Specifications**

**Temperature** 

Operating Range Mechanical Tilt Wind Survivability -40 to +60 deg C

20 Degrees 125 MPH [201.17 KPH]

#### **Plotted and Other Data**

Notes:

2

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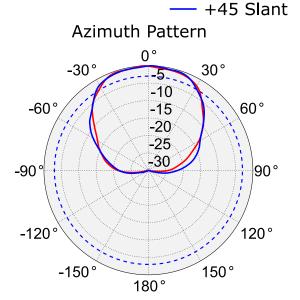


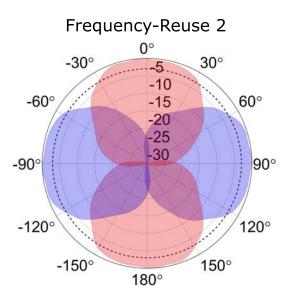
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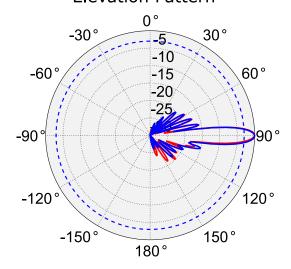


#### **Typical Radiation Pattern**

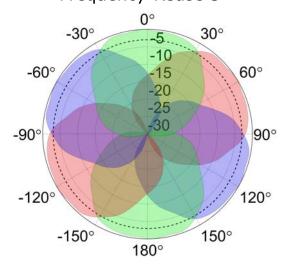




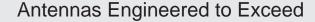
# -45 Slant Elevation Pattern



## Frequency-Reuse 3



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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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URL: https://www.kpperformance.com/KPP-5DP65S-45-p.aspx

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#### KPP-5DP65S-45 CAD Drawing

