

Product Data Sheet

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KPP-5PD90S-45

4.9 GHz to 6.4 GHz, 90 Degree Sector Antenna, 17.0 dBi, 2-Port, ±45 Slant

- 0° fixed electrical downtilt
- ProLine sector with stable and high gain over a wide bandwidth
- Interference mitigation with azimuth and elevation side-lobe suppression
- Ideal for 4-sector frequency-reuse two

Electrical Specification

Frequency Band	MHz	4900-5400	5400-5900	5900-6400
Gain	dBi	15.5±0.5	16.5±0.5	17.0±0.5
Polarization		Slant (±45°)	Slant (±45°)	Slant (±45°)
Horizontal HPBW	Degree	100±5	90±5	80±5
Horizontal Squint	Degree	±3	±3	±2
Vertical HPBW	Degree	6.5±0.3	6.0±0.3	5.5±0.3
Electrical Downtilt	Degree	0	0	0
Front-to-Back Ratio @ 180°±30°	dB	30	35	32
Upper Side Lobe Suppression (+20°)	dB	17	17	16
Cross-polarization Ratio over HPBW	dB	15	15	14
VSWR		1.7 typ 2 max	1.5 typ 1.7 max	1.5 typ 2 max
Return Loss	dB	12 typ 10 max	14 typ 12 max	14 typ 10 max
Port-to-Port Isolation	dB	25	25	23
Max. Input Power per Port	W	50	50	50
Impedance	Ohms	50	50	50

Mechanical Specifications

RF Connector Type	N-type Female
RF Connector Quantity	2
RF Connector Position	Bottom of radome
Electrical Grounding	RF connector grounded to reflector and mounting bracket
Radome Material	UV resistant PVC
Reflector Material	Anodized Aluminium
Ingress Protection	IP55 rain and dust resistant
Wind Load, frontal	90N @ 160km/h 20lbf @ 100mph
Max. Wind Speed	160km/h 100mph
Temperature Range	-40° to +60° C -40° to +140° F

Bracket Specifications

Material Type	Powder Coated High-Strength Aluminium
Mechanical Tilt (Degree)	-1 to +19 (Slot 1) -7 to +12 (Slot 2)
Mounting Type	Pipe Mount
Mounting pole diameter	19 mm – 114 mm 0.75 in – 4.5 in
Antenna-to-Pipe Distance	121 mm 4.8 in
Bracket-to-Bracket Distance	452 mm 17.8 in

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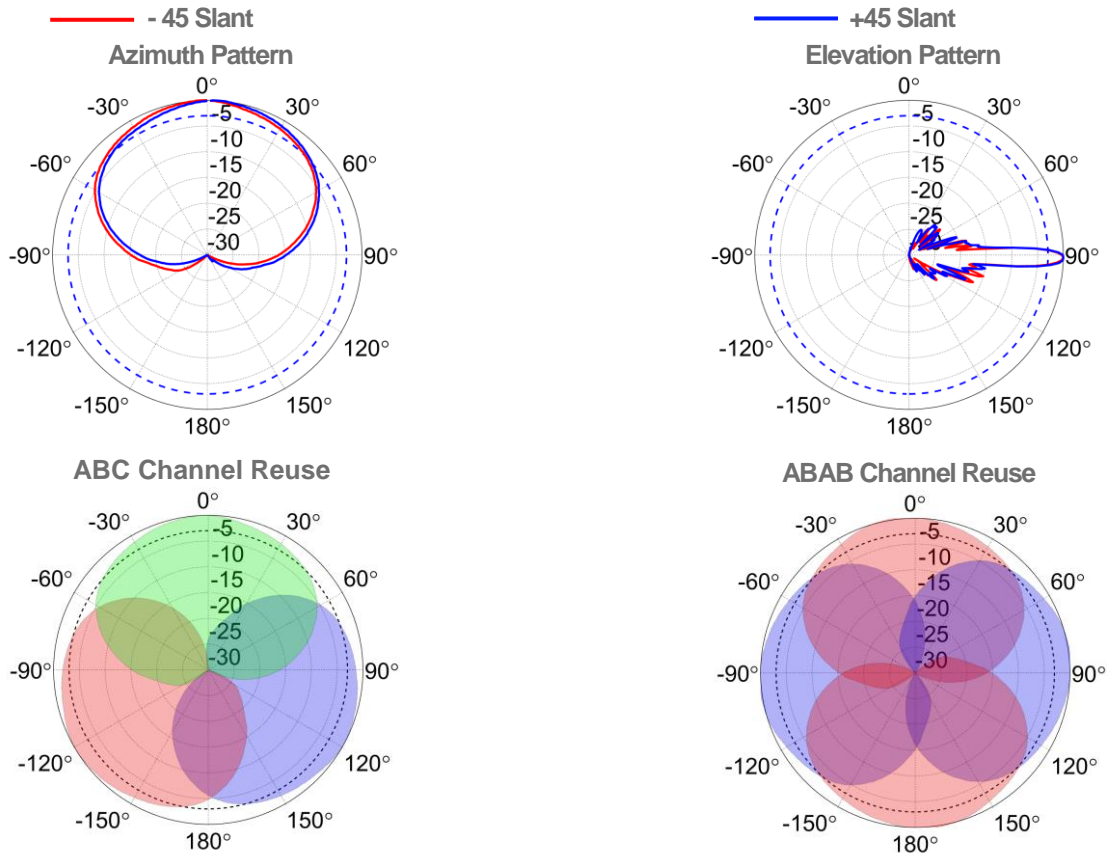
Sector Dimensions

Length	563 mm		22.2 in
Width	126 mm		5.0 in
Height	67 mm		2.6 in
Net Weight, with brackets	5.6 kg		12.3 lb

Shipping Dimensions

Length	775 mm		30.5 in
Width	244 mm		9.4 in
Height	200 mm		7.87 in
Net Weight	5.7 kg		12.5 lb

Graphical Data



Appendix

HPBW: Average and variation of the antenna's 3dB beamwidth (half power beamwidth) in its horizontal (Azimuth) or vertical (Elevation) pattern.
 Horizontal Squint: Angle in the antenna's azimuth pattern in which the maximum gain occurs. Reported is the maximum variation in the frequency band.
 Electrical Downtilt: Angle in the antenna's elevation pattern in which the maximum gain occurs.
 Gain: Antenna's average gain and variation in each frequency band.
 Front to Back Ratio @ 180°±30°: Difference between the antenna's maximum gain and the maximum gain in the antenna's back lobe over ±30° angles.
 Upper Side Lobe Suppression: The maximum value for the antenna's elevation upper side lobes from the main beam to +20°.
 Cross-polarization Ratio over HPBW (dB): Maximum difference between the co-polarization and cross-polarization gain across the sector's HPBW.