Product Data Sheet

☎ 1-855-276-5772 or 780-702-7577
info@kpperformance.com
9850 W 190th St, Suite F, Mokena, IL 60448

PERFORMANCE ANTENNAS
Alive Telecom

KP-5SX4-45

4.9 GHz to 5.9 GHz, 45 Degree Sector Antenna, 20.5 dBi, 4-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 6-or 8-sector frequency-reuse two

Electrical Specification

Frequency Band	MHz	4900-5400	5400-5900
Gain	dBi	20.0±0.2	20.5±0.3
Polarization		Slant (±45°)	Slant (±45°)
Horizontal HPBW	Degree	45±1	43±1
Horizontal Squint	Degree	±2	±2
Vertical HPBW	Degree	6.5±0.3	6.2±0.3
Electrical Downtilt	Degree	0	0
Front-to-Back Ratio @ 180°±30°	dB	40	38
Upper Side Lobe Suppression (+20°)	dB	16	16
Cross-polarization Ratio over HPBW	dB	20	19
VSWR		1.5 typ | 1.7 max	1.5 typ | 1.7 max
Return Loss	dB	14 typ | 12 max	14 typ | 12 max
Port-to-Port Isolation	dB	31	35
Max. Input Power per Port	W	50	50
Impedance	Ohms	50	50

Mechanical Specifications

RF Connector Type	N-type Female
RF Connector Quantity	4
RF Connector Position	Bottom of radome
Electrical Grounding	RF connector grounded to reflector and mounting bracket
Radome Material	UV resistant PVC
Reflector Material	Fully Enclosed Aluminium
Ingress Protection	IP55 rain and dust resistant
Wind Load, frontal	229N @ 160km/h | 51lbf @ 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 +10 (Slot A) | -2 to +6 (Slot B)
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	846 mm | 33.3 in

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Sector Dimensions

Length	1083 mm	|	42.6 in
Width	162 mm	|	6.4 in
Height	64 mm	|	2.5 in
Net Weight, with brackets	7.9 kg	|	17.4 lb

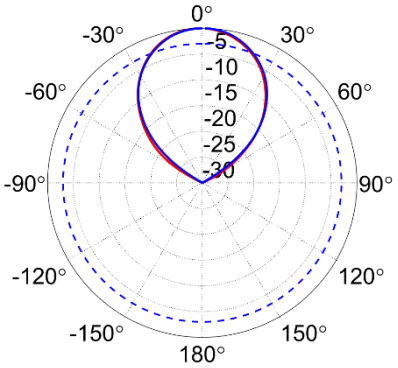
Shipping Dimensions

Length	1415 mm	|	55.7 in
Width	200 mm	|	7.9 in
Height	120 mm	|	4.7 in
Net Weight	8.0 kg	|	17.6 lb

Graphical Data

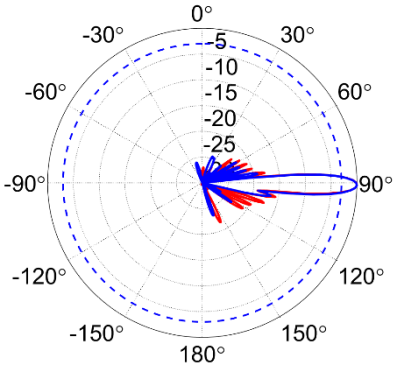
- 45 Slant

Azimuth Pattern

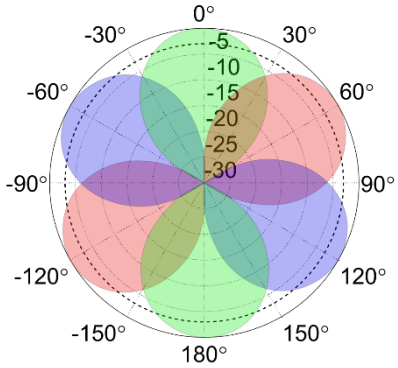


+ 45 Slant

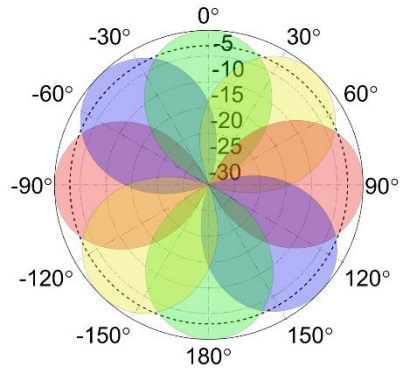
Elevation Pattern



ABCABC Channel Reuse



ABCDABCD Channel Reuse



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.