

Product Data Sheet

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KP-3DP33S-45

3.5 GHz to 4.2 GHz, 33 Degree Sector Antenna, 18.8 dBi, 2-Port, ±45 Slant

- 4° fixed electrical downtilt
- ProLine sector with stable and high gain
- Interference mitigation with azimuth and elevation side-lobe suppression
- Ideal for 6-sector and 8-sector frequency-reuse one and two, respectively, with LTE equipment

Electrical Specification

Frequency Band	MHz	3500—3800	3800—4200
Gain	dBi	18.5±0.2	18.8±0.3
Polarization		Slant (±45°)	Slant (±45°)
Horizontal HPBW	Degree	35±1	33±1
Horizontal Squint	Degree	±0.5	±0.5
Vertical HPBW	Degree	8.5±0.5	7.8±0.4
Electrical Downtilt	Degree	4	4
Front-to-Back Ratio @ 180° ±30°	dB	35	33
Upper Side Lobe Suppression (+20°)	dB	15	15
Cross-polarization Ratio over HPBW	dB	15	13
VSWR		1.3 typ 1.5 max	1.3 typ 1.5 max
Return Loss	dB	17 typ 14 max	17 typ 14 max
Port-to-Port Isolation	dB	30	25
Max. Input Power per Port	W	50	50
Impedance	Ohms	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	Fully-Enclosed Aluminium
Ingress Protection	IP55 rain and dust resistant
Wind Load, frontal	135N @ 160km/h 30lbf @ 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 +18 (Slot 1) -7 to +11 (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	470 mm 18.5 in

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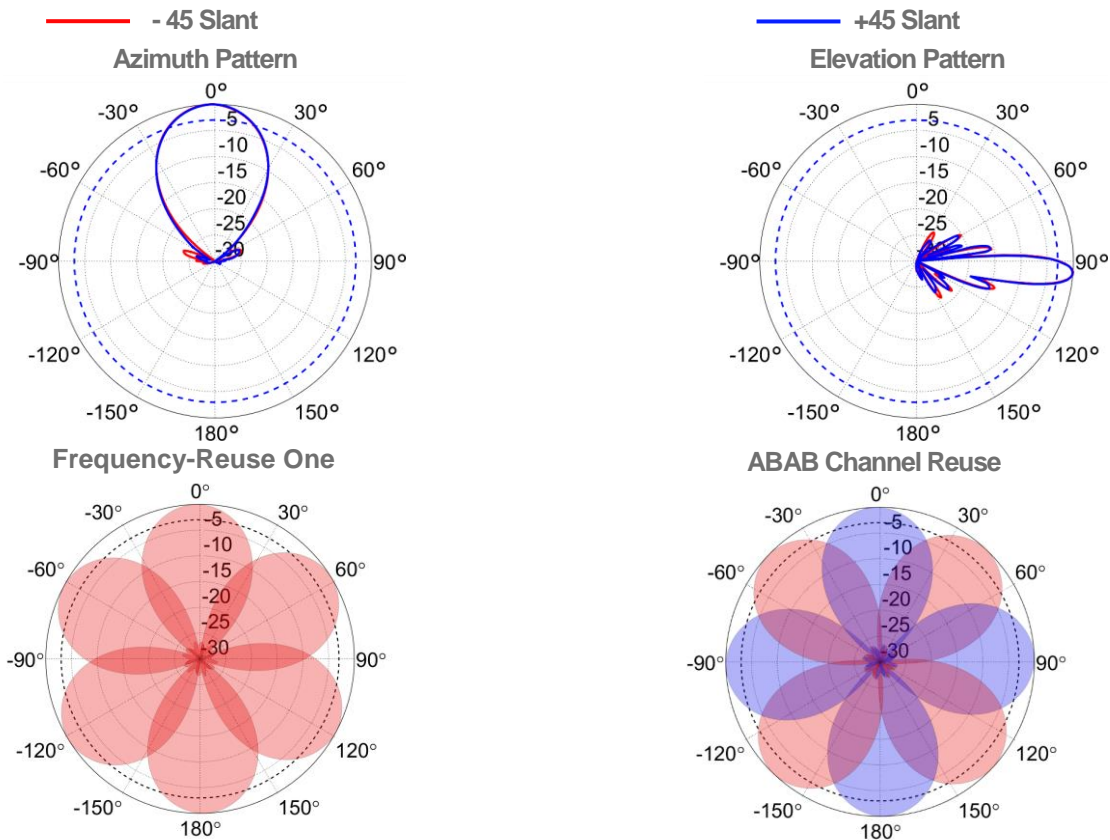
Sector Dimensions

Length	585 mm		23.0 in
Width	174 mm		6.9 in
Height	79 mm		3.1 in
Net Weight, with brackets	5.7 kg		12.5 lb

Shipping Dimensions

Length	800 mm		31.5 in
Width	240 mm		9.4 in
Height	210 mm		8.3 in
Net Weight	5.8 kg		12.8 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.