

Product Data Sheet

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✉ 15497 117 Ave, Edmonton, AB T5M3X4, Canada
✉ 5000 W. Proviso Dr, Unit #2 Melrose Park, IL 60163, USA



KP-2DP120S-45

2-port sector antenna, 2300-2700 MHz, 120° HPBW

- High gain and slant dual polarization
- Simultaneously maximize coverage and minimize interference
- Ideal for 2-sector frequency-reuse one with LTE equipment

Electrical Specification

Frequency Band	MHz	2300—2500	2500—2700
Gain	dBi	14.5±0.25	14±0.25
Polarization		Slant (±45°)	Slant (±45°)
Horizontal HPBW	Degree	120±5	115±5
Horizontal Squint	Degree	±2	±4
Vertical HPBW	Degree	9±1	8±1
Electrical Downtilt	Degree	1	1
Front-to-Back Ratio @ 180°	dB	32	35
Front-to-Back Ratio @ 180°±30°	dB	26	28
Cross-polarization Ratio at Boresight	dB	20	20
Cross-polarization Ratio over HPBW	dB	15	16
VSWR		1.5 typ 1.7 max	1.7 typ 2 max
Return Loss	dB	14 typ 12 max	12 typ 10 max
Port-to-Port Isolation	dB	25	20
Max. Input Power per Port	W	50	50
Impedance	Ohms	50	50

Mechanical Specifications

RF Connector Type	Type N 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
Ingress Protection	IP55 rain and dust resistant
Wind Load, frontal	205N @ 160km/h 46 lbf @ 100mph
Max. Wind Speed	160km/h 100mph
Temperature Range	-40° to +60° C -40° to +140° F

Bracket Specifications

Material Type	Hot Dipped Galvanized Steel
Mechanical Tilt (Degree)	-3 – 15
Mounting Type	Pipe Mount
Mounting pole diameter	25 mm – 89 mm 1¼ in – 3.5 in
Antenna-to-Pipe Distance	127 mm 5 in
Bracket-to-Bracket Distance	546 mm 21.5 in

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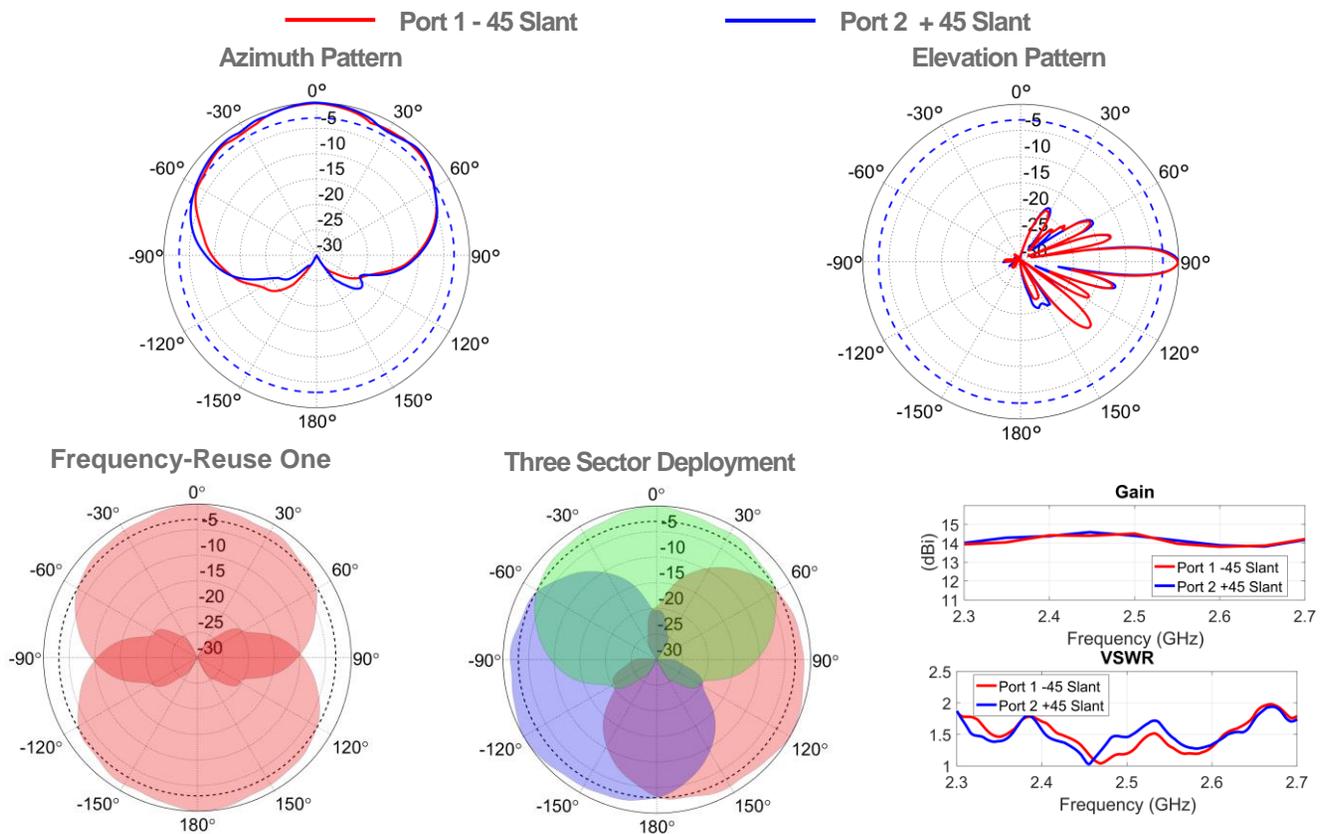
Sector Dimensions

Length	685 mm		27 in
Width	229 mm		9 in
Height	127 mm		5 in
Net Weight, with brackets	4.1 kg		9 lb

Package Dimensions

Length	812 mm		32 in
Width	304 mm		12 in
Height	229 mm		9 in
Net Weight	7.3 kg		16 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°: Difference between the antenna's maximum gain and the gain directly behind the antenna ($\theta=180^\circ$).
Front to Back Ratio @ $180^\circ \pm 30^\circ$: Difference between the antenna's maximum gain and the maximum gain in the antenna's back lobe over $\pm 30^\circ$ angles.
Cross polarization at boresight: Difference between the co-polarization and cross-polarization gain at 0° (boresight).
Cross-polarization Ratio over HPBW (dB): Maximum difference between the co-polarization and cross-polarization gain across the sector's HPBW.

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