Product Data Sheet

KP-3SX4N-65

4-port sector antenna, 3300-3800 MHz, 65° HPBW, 3.5° fixed electrical downtilt

- High gain and slant dual polarization
- Simultaneously maximize coverage and minimize interference
- Ideal for 3-sector frequency-reuse one with LTE equipment
- Low PIM N-type female connectors

Electrical Specification

Frequency Band	MHz	3300—3550	3550—3800
Gain	dBi	17.3±0.4	17.7±0.4
Polarization		Slant (±45°)	Slant (±45°)
Horizontal HPBW	Degree	65±2	60±2
Horizontal Squint	Degree	±4	±4
Vertical HPBW	Degree	7±0.5	6.5±0.5
Electrical Downtilt	Degree	3.5	3
Front-to-Back Ratio @ 180°	dB	35	38
Front-to-Back Ratio @ 180°±30°	dB	32	35
Cross-polarization Ratio at Boresight	dB	19	19
Cross-polarization Ratio over HPBW	dB	15	14
VSWR		1.5 typ | 2 max	1.5 typ | 1.7 max
Return Loss	dB	14 typ | 10 max	14 typ | 12 max
Port-to-Port Isolation	dB	25	25
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/ABS
Ingress Protection	IP55 rain and dust resistant
Wind Load, frontal	240N @ 160km/h | 54 lbf @ 100 mph
Max. Wind Speed	160km/h | 100mph
Temperature Range	-40° to +60° C | -40° to +140° F

Bracket Specifications

Material Type	Power Coated Stainless Steel
Mechanical Tilt (Degree)	-2 – 8
Mounting Type	Pipe Mount
Mounting pole diameter	25 mm – 89 mm | 1.25 in – 3.5 in
Antenna-to-Pipe Distance	76 mm | 3 in
Bracket-to-Bracket Distance	490 mm | 19 in

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Sector Dimensions

Length	736 mm	|	29 in
Width	279 mm	|	11 in
Height	89 mm	|	3.5 in
Net Weight, with brackets	4.3 kg	|	9.5 lb

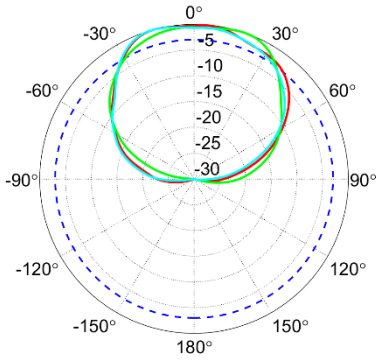
Package Dimensions

Length	810 mm	|	32 in
Width	350 mm	|	14 in
Height	205 mm	|	8 in
Net Weight	13kg	|	28 lb

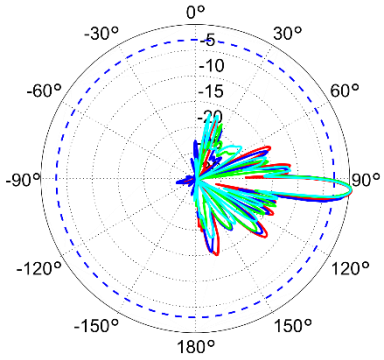
Graphical Data

Port 1 - 45 Slant Port 2 + 45 Slant Port 3 - 45 Slant Port 4 + 45 Slant

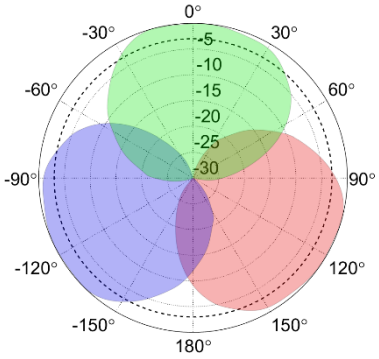
Azimuth Pattern



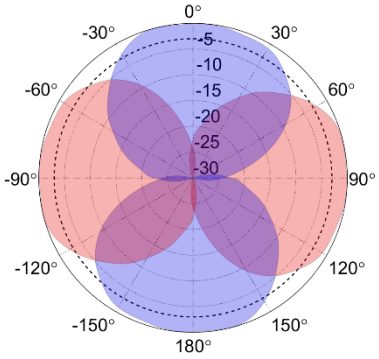
Elevation Pattern

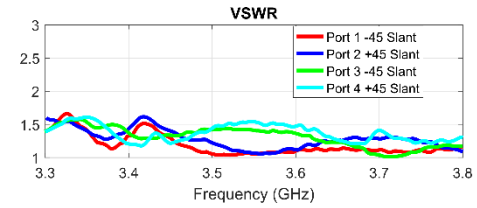


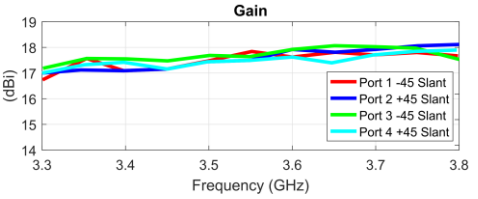
Frequency-Reuse One



ABAB Channel Reuse







Appendix

HPBW: Average and variation of the antenna's 3dB 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 (θ=180°).
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.
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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