

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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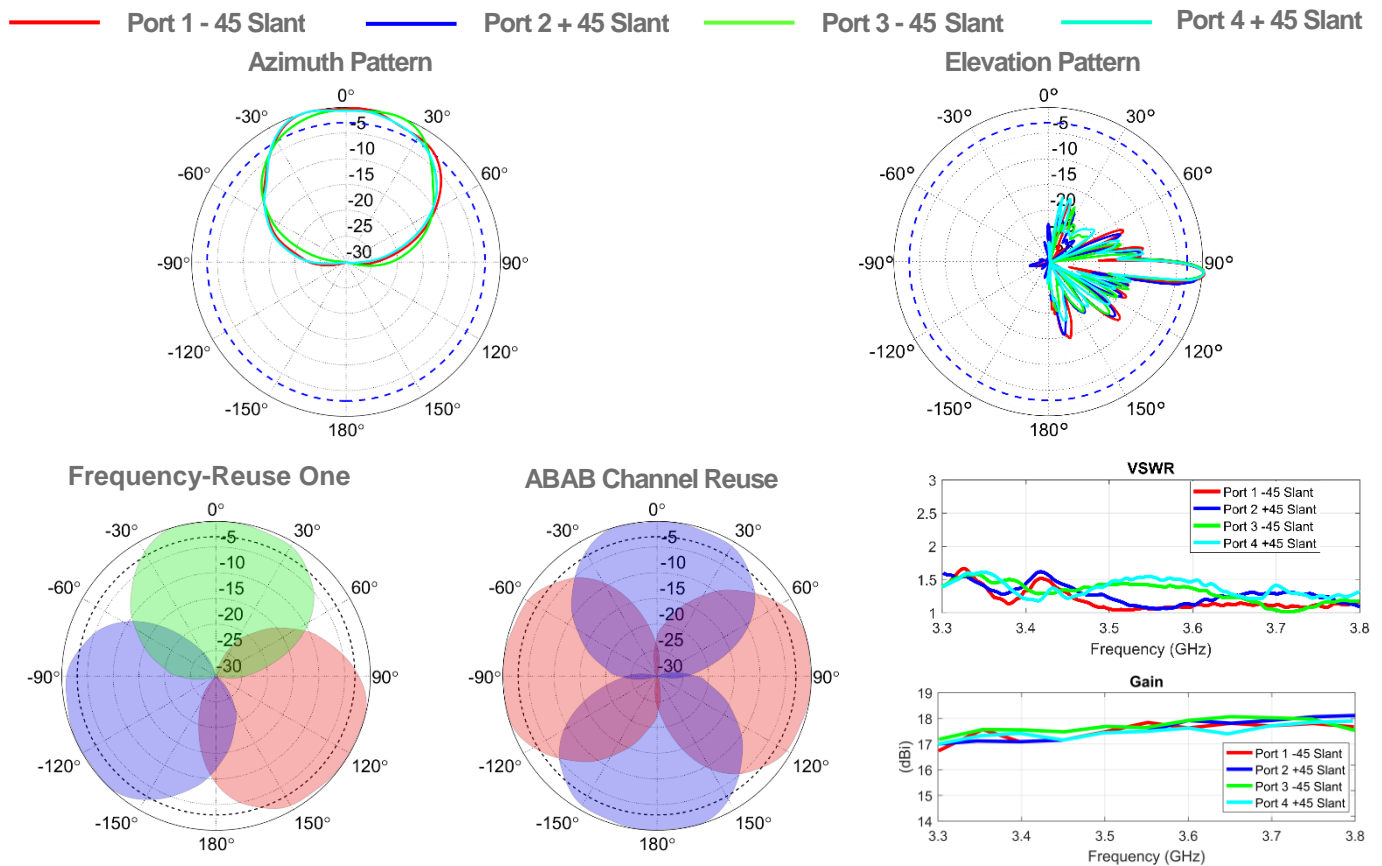
Sector Dimensions

| | | | |
|---------------------------|--------|--|--------|
| 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



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 ($\theta=180^\circ$).

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.