

3.3 GHz to 3.8 GHz, 65 Degree Small Cell Sector Antenna, 15 dBi, 4-Port, 45 Slant

KP-3SCX4-65



Features

- Small cell design with aesthetically pleasing form factor
- 4 x 4 MIMO – Multiple-Input and Multiple-Output
- Four ±45 slant polarization ports with integral N-female connectors in a single enclosure
- UV-resistant radome and rugged mounting hardware for all-weather operation
- 0° fixed electrical downtilt

Applications

- 3.5 GHz Citizens Broadband Radio Service (CBRS) applications
- Wireless LAN systems & IEEE 802.16e applications
- Mobile WiMAX Wireless Internet Provider “cell” sites
- SOFDMA
- Point-to-multipoint (PtMP) requiring 65 degree of horizontal coverage
- Ideal for 6-sector frequency-reuse two with LTE equipment
- Small cell and urban deployments

Description

Superior Performance The KP Brand KP-3SCX4-65 Small Cell Sector Panel Antenna has an aesthetically small footprint and consists of four ports with dual ±45 slant polarization, high 15 dBi gain with a 65 degree beamwidth in a single enclosure with one mounting point. It is a professional quality antenna designed primarily for 4x4 or 2x2 MIMO point-to-point or point-to-multipoint applications in the 3.5 GHz Citizens Broadband Radio Service (CBRS) frequency band. This small-cell sector’s wider elevation beamwidth provide excellent coverage near the tower and can be mechanically tilted to provide optimal coverage over the target coverage zone. This antenna incorporates advanced low PIM, dual polarization technology that allows for the interoperability of one 4x4 radio or two 2x2 radios with multiple transmit and receive path. The sector antenna is ideal for applications requiring 60 degree horizontal coverage over one or more sectors and with 6-sector frequency-reuse two (ABCABC) channel planning. This antenna supports LTE deployments in the 3.3 - 3.8 GHz spectrum.

Rugged and Weatherproof The 4-port sector antenna features a heavy-duty UV-resistant ABS radome for all-weather operation. The heavy-duty mounting brackets allows installation with pipe diameter from 0.75” to 3.3” and up to 30 degrees of incline for easy alignment. This sector antenna is built to withstand speeds of up to 100 mph and survive in a wide-range of challenging environments.

Configuration

Design	Sector
Application Band	CBRS
Band Type	Single
Radiation Pattern	Directional
Polarization	±45 Deg. Slant
Connector Type	N Female
Number of Ports	4
Lightning Protection	RF connector grounded to reflector and mounting bracket
Housing Material and Plating	Anodized Aluminum

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	3.3		3.8	GHz
Input VSWR		1.5:1		
Impedance		50		Ohms
Electrical Downtilt		0		Degrees

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications:
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Input Power 50 Watts

Electrical Specification Notes:
Max input power is 50W per port.

Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	3,300-3,500	3,500-3,800				MHz
Gain	14.5	15				dBi
Horizontal HPBW	60	63				Degrees
Horizontal Squint (±)	1	1				Degrees
Vertical HPBW	14	12				Degrees
Electrical Downtilt	0	0				Degrees
Cross Polar Ratio HPBW	19	20				dB
Port Isolation	30	30				dB
Front to Back Ratio	30	30				dB
VSWR Max	2:1	1.7:1				
Maximum Input Power	50	50				Watts

Mechanical Specifications

Radome Material	UV Resistant ABS
Housing Material	Anodized Aluminum
Size	
Length	20.5 in [520.7 mm]
Width	11.8 in [299.72 mm]
Height	2 in [50.8 mm]
Mounting Mast Diameter	0.75 to 3.3 in [19.05 to 83.82 mm]
Weight	40 lbs [18.14 kg]

Environmental Specifications

Temperature	
Operating Range	-40 to +60 deg C
Wind Survivability	100 MPH [160.93 KPH]

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

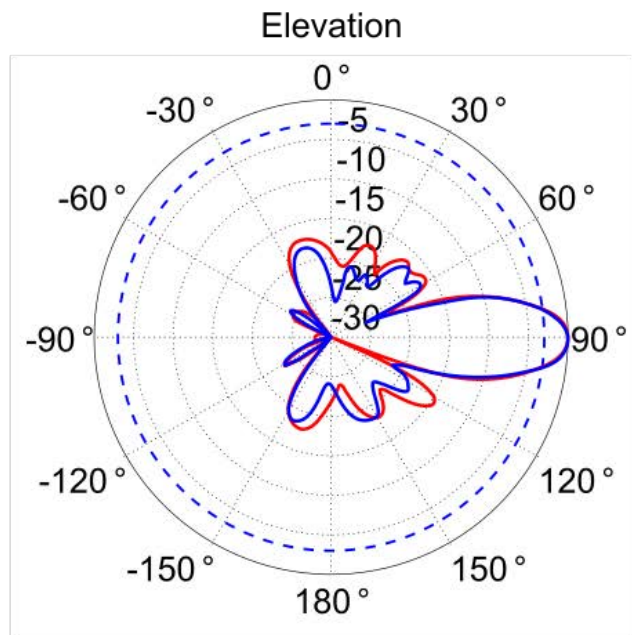
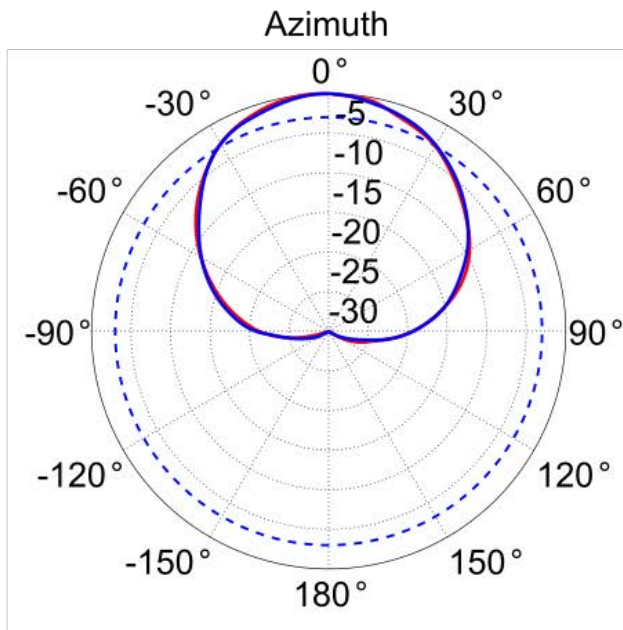
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Typical Radiation Pattern



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Appendix

Electrical Downtilt: Angle in the antenna's elevation pattern in which the maximum gain occurs.

Gain: Antenna's average gain.

Front to Back Ratio @ 180°±30°: Average difference between the antenna's maximum gain and the maximum gain in the antenna's back lobe over ±30° angles.

Cross-polarization Ratio (dB): Typical difference between the co-polarization and cross-polarization gain across the sector's 3 dB Beam Width.

Dedicated to serving the needs of the Wireless Internet Service Provider (WISP) market, KP Performance Antennas offers purpose built products that reliably perform in the field. KP Performance Antennas product line consists of Yagi, Grid, Omni, Dish and other style antennas that operate in the 900 MHz, 2.4 GHz, 3 GHz, and 5 GHz frequencies.

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URL: <https://www.kpperformance.com/3.3ghz-3.8ghz-65degree-sector-antenna-15dbi-4-port-45-slant-kp-3scx4-65-p.aspx>

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KP-3SCX4-65 CAD Drawing

