

3.3 GHz to 3.8 GHz, 90 Degree, 17 dBi, +/-45 Slant Polarization, 4-Port Sector Antenna

KP-3SX4-90



Features

- 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
- Uniform 360 degree coverage

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 90 degree of horizontal coverage
- Ideal for 4-sector frequency-reuse two (ABAB) channel planning
- use two with LTE equipment

Description

Superior Performance: The KP Brand KP-3SX4-90 Sector Panel Antenna combines four ports with dual ± 45 slant polarization, high 17 dBi gain with a 90 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 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 90 degree horizontal coverage over one or more sectors and with 4-sector frequency-reuse two (ABAB) 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 plastic radome for all-weather operation. The heavy-duty, powder-coated mounting brackets allows installation with pipe diameter from 1.25” to 3.5” and various 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	Multi
Radiation Pattern	Directional
Polarization	45 Deg. Slant
Connector Type	N Female
Interface 2	N Female
Interface 3	N Female
Interface 4	N Female
Number of Ports	4

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	3,300		3,800	MHz
Input VSWR		1.5:1	1.7:1	
Impedance		50		Ohms
Gain	8.5			dBi
Front to Back Ratio	30			dB

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications:
[3.3 GHz to 3.8 GHz, 90 Degree, 17 dBi, +/-45 Slant Polarization, 4-Port Sector Antenna KP-3SX4-90](#)

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Electrical Downtilt		1	Degrees
Cross Polarization Ratio	10		dB
Port to Port Isolation	25		dB
Horizontal (Azimuth) HPBW		90	Degrees
Vertical (Elevation) HPBW		11	Degrees
Input Power		50	Watts

Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	3.3 to 3.55	3.5 to 3.8				GHz
Gain	16.5	17				dBi
Horizontal HPBW	90	90				Degrees
Vertical HPBW	6.5	6				Degrees
Electrical Downtilt	0					Degrees
Cross Polar Ratio	15					
VSWR Max	2:1	1.7:1				

Mechanical Specifications

Radome Material	UV protected PVC
Size	
Radome Diameter	6.3 in [160.02 mm]
Length	31.7 in [805.18 mm]
Width	11 in [279.4 mm]
Height	3.57 in [90.68 mm]
Mounting Mast Diameter	1.25 to 3.5 in [31.75 to 88.90 mm]
Weight	18 lbs [8.16 kg]
Mechanical Specification Notes:	
Radome material is UV-resistant PVC.	

Environmental Specifications

Temperature	
Operating Range	-40 to +140 deg C
Wind Survivability	100 MPH [160.93 KPH]
Wind Loading	54 lbs at 130 mph

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

IP Rating 55

Plotted and Other Data

Notes:

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-to-3-8ghz-90-degree-17-dbi-slant-polarization-4-port-sector-antenna- kp-3sx4-90-p.aspx>

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KP-3SX4-90 CAD Drawing

