### Product Data Sheet

1-855-276-5772 or 780-702-7577
 info@kpperformance.com
 9850 W 190th St. Suite F. Mokena. IL 60448



KPP-2S3SX4-65

## 2.3 GHz to 2.7 GHz, 65 Degree + 3.5 GHz to 4.2 GHz, 65 Degree Dual Band Sector Antenna, 4-Port, ±45 Slant (Two Sectors in One Shell)

- Supports 2x2 and 4x4 MIMO in each 2 GHz and 3 GHz bands and carrier aggregation
- Optimized Upper Elevation Side Lobes and Front to Back

### **Electrical Specification**

Frequency Band	MHz	2300-2500	2500-2700	3500-3800	3800-4200
Gain	dBi	16.5±0.5	$17.0 \pm 0.5$	$16.3 \pm 0.5$	16.8±0.5
Polarization		±45 Slant	±45 Slant	±45 Slant	±45 Slant
Horizontal HPBW	Degree	65±3	$60 \pm 3$	65±3	$60 \pm 3$
Horizontal Squint	Degree	±2	±2	±2	±2
Vertical HPBW	Degree	$8.4 \pm 0.4$	$8.0 \pm 0.4$	$8.8 \pm 0.3$	$8.2 \pm 0.3$
Electrical Downtilt	Degree	4	4	4	4
Upper Side Lobe Suppression (Peak to 20°)	dB	15	15	17	16
Front-to-Back Ratio @ 180° ±30°	dB	33	32	35	35
Cross-polarization Ratio over HPBW	dB	15	20	20	22
VSWR		1.3 typ   1.5 max			
Return Loss	dB	18 typ   14 max			
Port-to-Port Isolation	dB	30	30	30	30
Max. Input Power per Port	W	50	50	50	50
Impedance	Ohms	50	50	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
Reflector Material	Anodized Aluminium
Ingress Protection	IP55 rain and dust resistant
Max. Wind Speed	160km/h   100mph
Wind Load, frontal	242N @ 160km/h   54lbf @ 100mph
Temperature Range	-40° to +60° C   -40° to +140° F

### **Bracket Specifications**

Material Type	Powder Coated Galvanized Steel		
Mechanical Downtilt (Degree)	-1 to +12 (Slot 1)   -5 to +8 (Slot 2)		
Mounting Type	Pipe Mount		
Mounting pole diameter	19 mm – 114 mm   ¾ in – 4 ½ in		
Antenna-to-Pipe Distance	121 mm   4.8 in		
Bracket-to-Bracket Distance	743 mm   29.3 in		

# Product Data Sheet

1-855-276-5772 or 780-702-7577info@kpperformance.com

9850 W 190th St, Suite F, Mokena, IL 60448



#### **Sector Dimensions**

Length	836 mm   32.9 in
Width	246 mm   9.7 in
Height	67 mm   2.6 in
Net Weight, with brackets	8.4 kg   18.5 lb

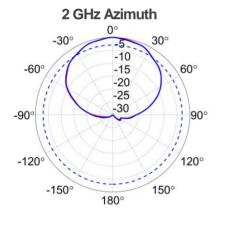
### **Shipping Dimensions**

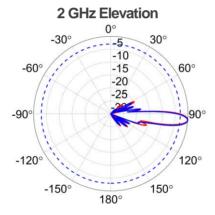
Length	905 mm	35.7 in
Width	315 mm	12.4 in
Height	200 mm	7.9 in
Net Weight	8.5 kg	18.7 lb

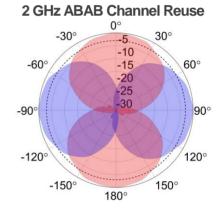
### **Graphical Data**

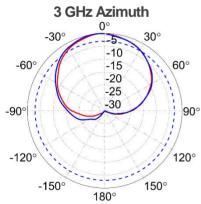


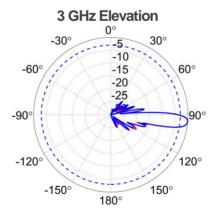


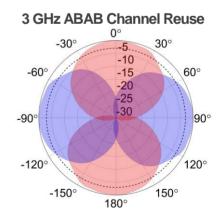












### **Appendix**

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°±30°: Difference between the antenna's maximum gain and the maximum gain in the antenna's back lobe over ±30° angles. Upper Side Lobe Suppression: The maximum value for the antenna's elevation upper side lobes from the main beam to +20°.

Cross-polarization Ratio over HPBW (dB): Maximum difference between the co-polarization and cross-polarization gain across the sector's HPBW.