Product Data Sheet

KPP-3S65-5S90-X8-0DT

3.5 GHz to 4.2 GHz, 65 Degree + 4.9 GHz to 6.4 GHz, 90 Degree Dual Band Sector Antenna, 8-Port, ±45 Slant (Two Sectors in One Shell)

- Supports 2x2 and 4x4 MIMO in each 3 GHz and 5 GHz bands and carrier aggregation
- Optimized Upper Elevation Side Lobes and Front to Back

Electrical Specification

Frequency Band	MHz	3500-3800	3800-4200	4900-5400	5400-5900	5900-6400
Gain	dBi	17.4±0.4	17.8±0.2	15.5±0.5	16.5±0.5	17.0±0.5
Polarization		±45 Slant	±45 Slant	±45 Slant	±45 Slant	±45 Slant
Horizontal HPBW	Degree	65±3	62±2	100±5	90±5	80±5
Horizontal Squint	Degree	±3	±3	±5	±4	±3
Vertical HPBW	Degree	6.5±0.3	6.0±0.3	6.5±0.3	6.0±0.3	5.5±0.3
Electrical Downtilt	Degree	0	0	0	0	0
Upper Side Lobe Suppression (Peak to 20°)	dB	15	15	15	16	16
Front-to-Back Ratio @ 180°±30°	dB	33	35	30	35	35
Cross-polarization Ratio over HPBW	dB	14	16	14	13	15
VSWR		1.3 typ | 1.5 max	1.3 typ | 1.5 max	1.5 typ | 1.5 max	1.5 typ | 1.7 max	1.5 typ | 2 max
Return Loss	dB	18 typ | 14 max	18 typ | 14 max	18 typ | 14 max	14 typ | 12 max	14 typ | 10 max
Port-to-Port Isolation Same Band	dB	30	27	25	25	23
Port-to-Port Isolation Inter Band	dB	40	40	40	40	40
Max. Input Power per Port	W			50		
Impedance	Ohms			50		

Mechanical Specifications

RF Connector Type	N-Type Female
RF Connector Quantity	8
RF Connector Position	Back 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
Wind Load, frontal	357N @ 160km/h | 80lbf @ 100mph
Max. Wind Speed	160km/h | 100mph
Temperature Range	-40° to +60° C | -40° to +140° F

Bracket Specifications

Material Type	Powder Coated High Strength Aluminium
Mechanical Downtilt (Degree)	-1 to +10 (Slot 1) | -4 to +6 (Slot 2)
Mounting Type	Pipe Mount
Mounting pole diameter	19 mm – 114 mm | 0.75 in – 4.5 in
Antenna-to-Pipe Distance	121 mm | 4.8 in
Bracket-to-Bracket Distance	1155 mm | 45.5in

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Sector Dimensions

Length	1230 mm	|	48.4 in
Width	246 mm	|	9.7 in
Height	67 mm	|	2.6 in
Net Weight, with brackets	11.4 kg	|	25.0 lb

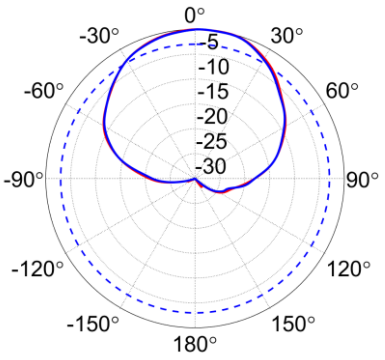
Shipping Dimensions

Length	1360 mm	|	53.5 in
Width	315 mm	|	12.4 in
Height	215 mm	|	8.5 in
Net Weight	11.6 kg	|	25.5 lb

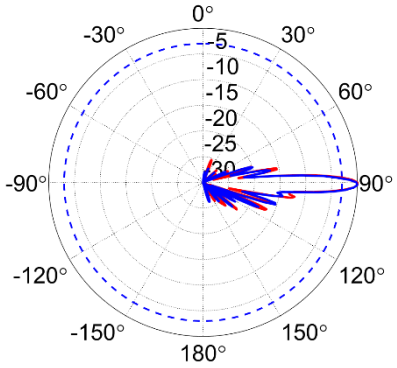
Graphical Data

- 45 Slant + 45 Slant

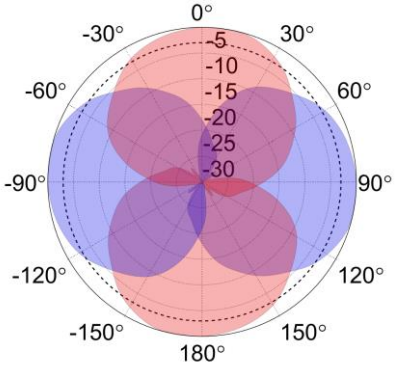
3 GHz Azimuth



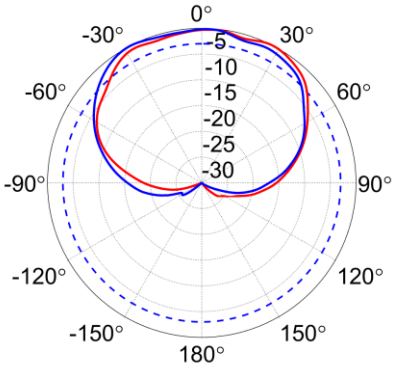
3 GHz Elevation



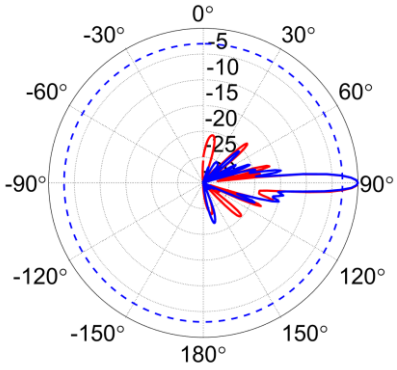
3 GHz ABAB Channel Reuse



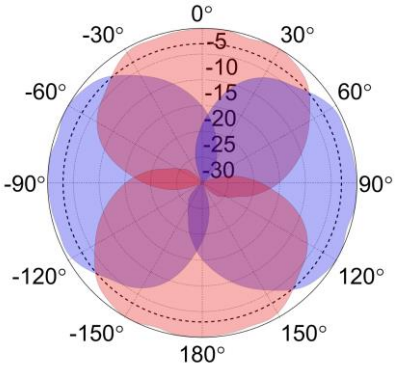
5 GHz Azimuth



5 GHz Elevation



5 GHz ABAB Channel Reuse



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 average forward gain and the gain in the antenna's back lobe over ±30° angles.
Upper Side Lobe Suppression: The average 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.
Port-to-Port Isolation Same Band (dB): Isolation between different ports in the same frequency band.
Port-to-Port Isolation Inter Band (dB): Isolation between different ports between different frequency bands (i.e., 3GHz and 5GHz)

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