

# Product Data Sheet

## KP-3S3S-65SA

4-port sector antenna, 3300-3800 MHz, 65° HPBW, 3.5° fixed electrical downtilt

- Two 65° sectors in a single radome cover 180°
- Two antennas provide 360° coverage and reduce tower space
- High gain and slant dual polarization
- Simultaneously maximize coverage and minimize interference

### Electrical Specification

		Port 1 and 2		Ports 3 and 4	
Frequency Band	MHz	3300—3550	3550-3800	3300—3800	3550-3800
Gain	dBi	17±0.5	17.5±0.5	17±0.5	17.5±0.5
Polarization		Slant (±45°)	Slant (±45°)	Slant (±45°)	Slant (±45°)
Angle of Maximum Gain	Degree	-45±3	-45±2	45±3	45±1
Horizontal HPBW	Degree	65±2	65±2	65±2	65±2
Vertical HPBW	Degree	7±1	6.5±1	7±1	6.5±1
Electrical Downtilt	Degree	3.5	3	3.5	3
Front-to-Back Ratio @ 180°	dB	35	40	35	38
Front-to-Back Ratio @ 180°±30°	dB	30	30	30	32
Cross-polarization Ratio at Boresight	dB	26	23	24	22
Cross-polarization Ratio over HPBW	dB	14	15	15	14
VSWR		1.5 typ   1.7 max	1.5 typ   1.6 max	1.5 typ   1.7 max	1.5 typ   1.6 max
Return Loss	dB	14 typ   12 max	14 typ   12 max	14 typ   12 max	14 typ   12 max
Port-to-Port Isolation	dB	25	25	25	25
Max. Input Power per Port	W	50	50	50	50
Impedance	Ohms	50	50	50	50

### Mechanical Specifications

RF Connector Type	7/16 DIN 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 Galvanized 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	490mm   19 in

# Product Data Sheet

## Sector Dimensions

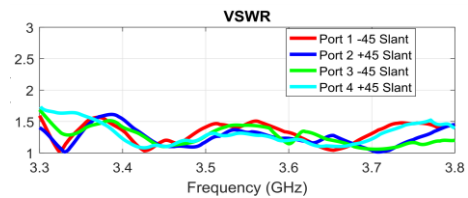
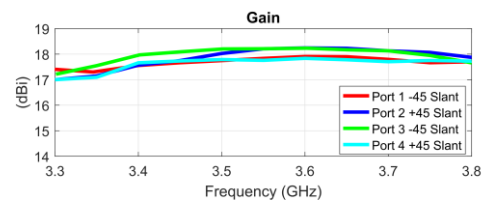
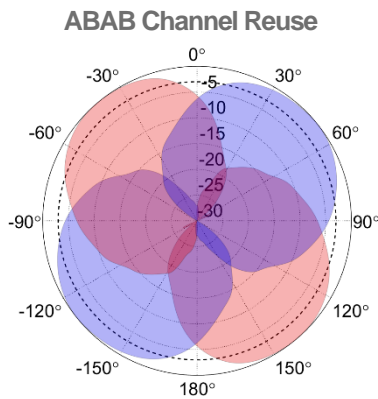
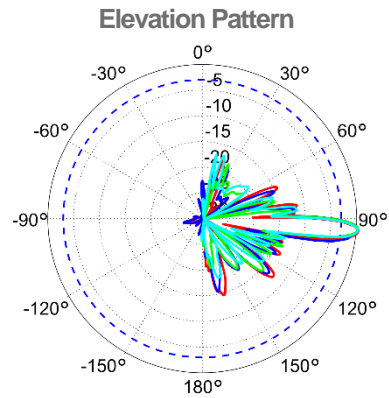
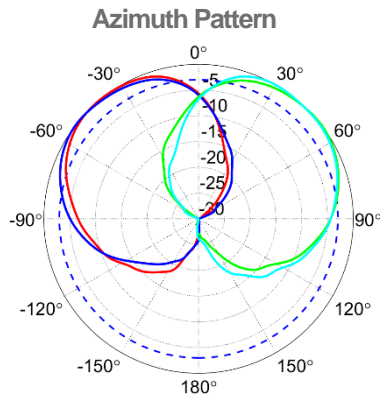
Length	736 mm		29 in
Width	280 mm		11 in
Height	130 mm		5 in
Net Weight, with brackets	4.3 kg		9.5 lb

## Package Dimensions

Length	810 mm		32 in
Width	350 mm		14 in
Height	255 mm		10 in
Net Weight	13 kg		29 lb

## Graphical Data

— Port 1 - 45 Slant    
 — Port 2 + 45 Slant    
 — Port 3 - 45 Slant    
 — Port 4 + 45 Slant



## Appendix

**HPBW:** Average and variation of the antenna's 3dB beamwidth in its horizontal (Azimuth) or vertical (Elevation) pattern.

**Angle of Maximum Gain:** Angle in the antenna's azimuth pattern in which the maximum gain occurs.

**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°:** Typical difference between the antenna's maximum gain and the gain directly behind the antenna ( $\theta=180^\circ$ ).

**Front to Back Ratio @ 180°±30°:** Typical 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:** Typical difference between the co-polarization and cross-polarization gain at 0° (boresight).

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