

# Product Data Sheet

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## Dual-sector antenna KPPA-3S5HV-90SS

3 GHz band  $\pm 45^\circ$   $\pm 45^\circ$  slant polarization, 5 GHz band V/H polarization



The new generation of dual-antennas from KP combine two complete radiating systems within a single rugged radome. This arrangement allows complete coverage while reducing tower rental and installation costs.

### Features:

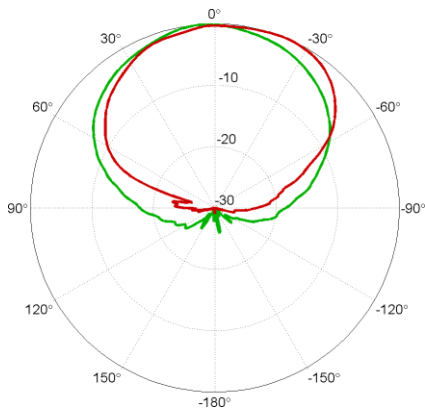
- Two forward-facing  $90^\circ$  sector antennas in a single radome, one for each band
- High gains of 15.9 and 15.9 dBi
- Clean patterns for frequency re-use on the same tower
- Supplied with KP's over-designed universal adjustable bracket, in hot-dip galvanised steel, with wide U-bolts for mounting on poles or tower legs up to 4".
- Mounting space for two ePMP radios on back

### Advantages:

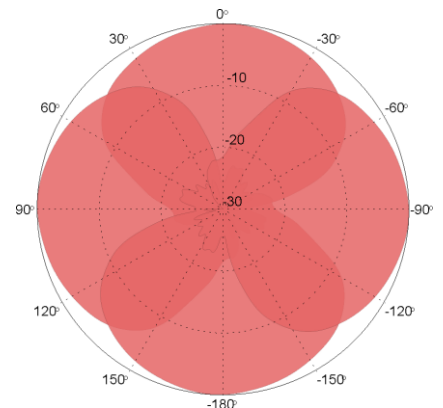
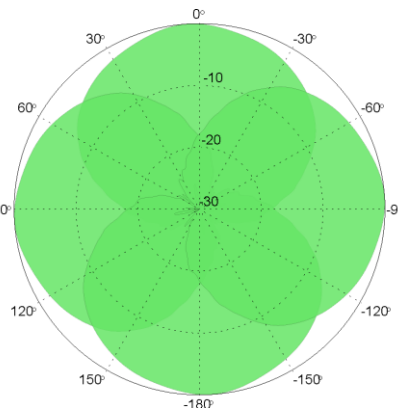
- Reduced inches on tower, only 27.5" tall
- Single mounting point means half the tower rental
- Lower wind resistance than two equivalent sectors
- Allows upgrade path to add a frequency band without using more space on tower.
- Faster installation than two single-band sectors

### Overview pattern diagrams:

A single KPPA-3S5HV-90SS has two dual-pol ports, facing in the same direction, one for each band.



Four KPPA-3S5HV-90SS mounted around a tower give complete  $360^\circ$  coverage in both bands, without taking up any more tower space.



### Also available:

- 2, 3 and 5 GHz single-band dual sectors in a single radome
- 2/3 and 3/5 GHz dual-band sectors in a single radome
- 2, 3 and 5 GHz single-band quad-pol sector antennas

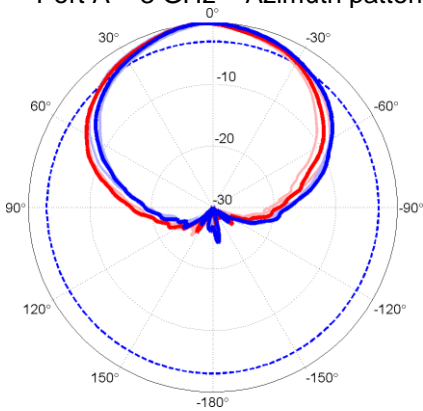
ANTENNAS ENGINEERED & MANUFACTURED TO EXCEED INDUSTRY STANDARDS

## KPPA-3S5HV-90SS Detailed specifications

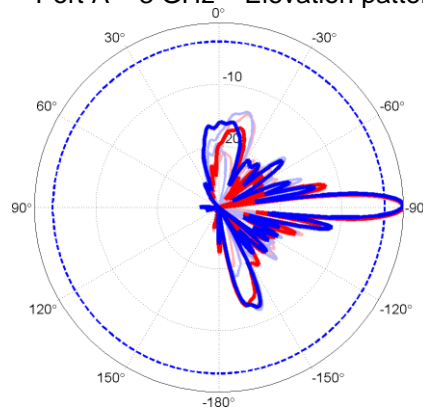
Electrical	Port A	Port B
Frequency range	3500-3700	5400-5900
Polarization	$\pm 45^\circ$	V/H
Gain	15.9 dBi	15.9 dBi
Azimuth 3dB beamwidth	$90^\circ$	$90^\circ$
Elevation 3dB beamwidth	$6.9^\circ$	$4.9^\circ$
Electrical Downtilt	$< 1^\circ$	
VSWR, Return loss	$< 2:1$ , $< 10$ dB	
F/B ratio	$> 28$ dB	$> 28$ dB
Cross-pol ratio	$> 17$ dB	$> 30$ dB
Port to port isolation, in-band	$> 19$ dB	$> 24$ dB
between bands	$> -27$ dB	
ABAB frequency re-use	-26 dB	-30 dB
ABABAB frequency re-use	-18 dB	-24 dB
ABCABC frequency re-use	-26 dB	-30 dB

Input power	50 W max per port
Connector Type	Type N Female x 4
<b>Mechanical</b>	
Dimensions	27.5 x 8.75 x 4.5"
Weight	9.0 lb
Mounting method	Carriage bolts
Mounting pole dia	1 1/4" – 3 1/2"
Surface Finish	Matt powder coat
<b>Environmental</b>	
Temperature range	-40° to +60° C / +140° F
Wind speed	160 km/h / 100 mph
UV protection	UV resistant UPVC
Ingress protection	IP55 rain resistant

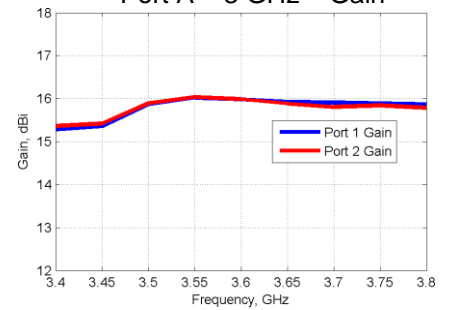
Port A – 3 GHz – Azimuth patterns



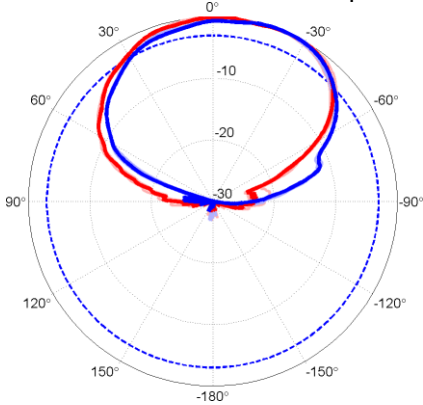
Port A – 3 GHz – Elevation patterns



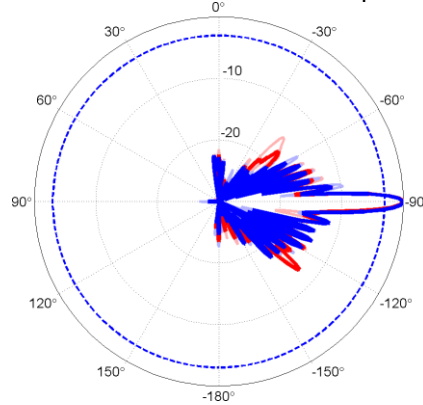
Port A – 3 GHz – Gain



Port B – 5 GHz – Azimuth patterns



Port B – 5 GHz – Elevation patterns



Port B – 5 GHz – Gain

