

# Product Data Sheet



KPPA-900DPY17

## 824 MHz to 960 MHz, Yagi Antenna, 17.5dBi, 2-Port

- Aircraft Quality 6061-T6 Aluminum with 5/16" Elements Compression Crimped Welded to a 1" Boom
- Powder-Coated Black for Corrosion, Fade, and Ice-Build Up Resistance
- Adjustable Polarization between Horizontal/Vertical and +/-45 Slant

### Electrical Specification

Frequency Band	MHz	824-960
Gain	dBi	17.5
Polarization		Horizontal/Vertical or $\pm 45^\circ$ Slant
Horizontal HPBW	Degree	25
Horizontal Squint	Degree	$\pm 2$
Vertical HPBW	Degree	25
Front-to-Back Ratio @ $180^\circ \pm 30^\circ$	dB	23
Cross-polarization Ratio over HPBW	dB	26
Port Isolation	dB	25
VSWR		1.3:1 typ   1.5:1 max
Return Loss	dB	18 typ   14 max
Max. Input Power per Port	W	50
Impedance	Ohms	50

### Mechanical Specifications

RF Connector Type	RP-SMA on pigtail
RF Connector Quantity	2
RF Connector Position	Antenna boom
Electrical Grounding	RF connector grounded to boom and mounting bracket
Yagi Material	6061-T6 Aluminium
Surface Finish	Ice and UV Resistant Black Powder Coating
Max. Wind Speed	250km/h   155mph
Temperature Range	$-40^\circ$ to $+60^\circ$ C   $-40^\circ$ to $+140^\circ$ F
Ingress Protection	IP55 rain and dust resistant

### Bracket Specifications

Material Type	Powder Coated 6061-T6 Aluminium
Mechanical Tilt (Degree)	-5 to +15
Mounting Type	Pipe Mount
Mounting pole diameter	19 mm – 76 mm   0.75 in – 3 in

### Antenna Dimensions

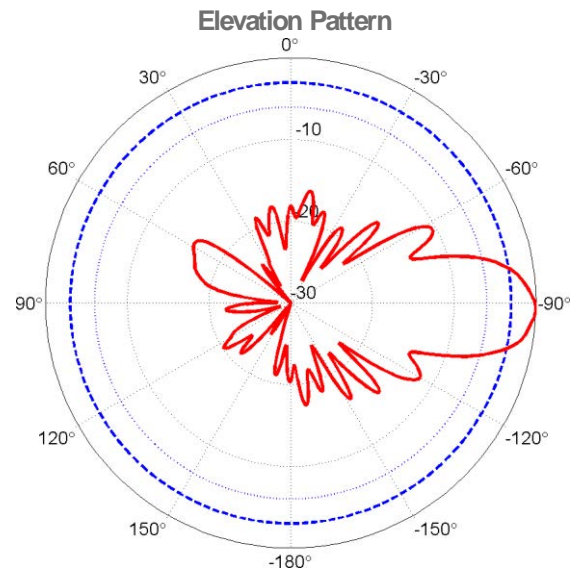
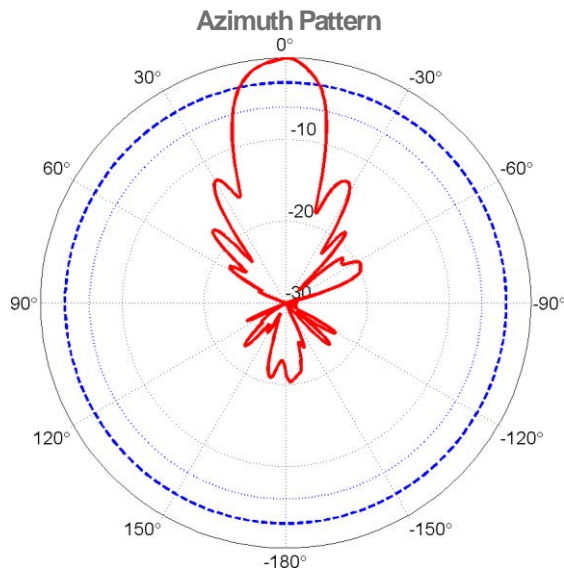
Length	1905 mm   75 in
Width	127 mm   5 in

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Height
Net Weight, with brackets

127 mm | 5 in  
1.8 kg | 4 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.

**Gain:** Antenna's average gain in each frequency band.

**Front to Back Ratio @  $180^\circ \pm 30^\circ$ :** Difference between the antenna's maximum gain and the maximum gain in the antenna's back lobe over  $\pm 30^\circ$  angles.

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