

# Product Data Sheet

## YA14KPPD

### 850 MHz to 928 MHz, Yagi Antenna, 14.5dBi, 1-Port

- Aircraft Quality 6061-T6 aluminium and compression crimped elements for optimum strength
- Powder-coated black for corrosion, fade, and ice-build up resistance

### Electrical Specification

Frequency Band	MHz	850-900	900-928
Gain	dBi	13.0	14.5
Polarization		Adjustable H or V	
Horizontal HPBW	Degree	40	35
Horizontal Squint	Degree	±2	±2
Vertical HPBW	Degree	45	40
Front-to-Back Ratio @ 180°±30°	dB	20	25
VSWR		1.7:1 typ   2.1:1 max	1.3:1 typ   2:1 max
Return Loss	dB	12 typ   9 max	18 typ   10 max
Max. Input Power per Port	W		50
Impedance	Ohms		50

### Mechanical Specifications

RF Connector Type	N-type Female
RF Connector Quantity	1
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	160km/h   100mph
Temperature Range	-40° to +60° C   -40° to +140° F
Ingress Protection	IP55 rain and dust resistant

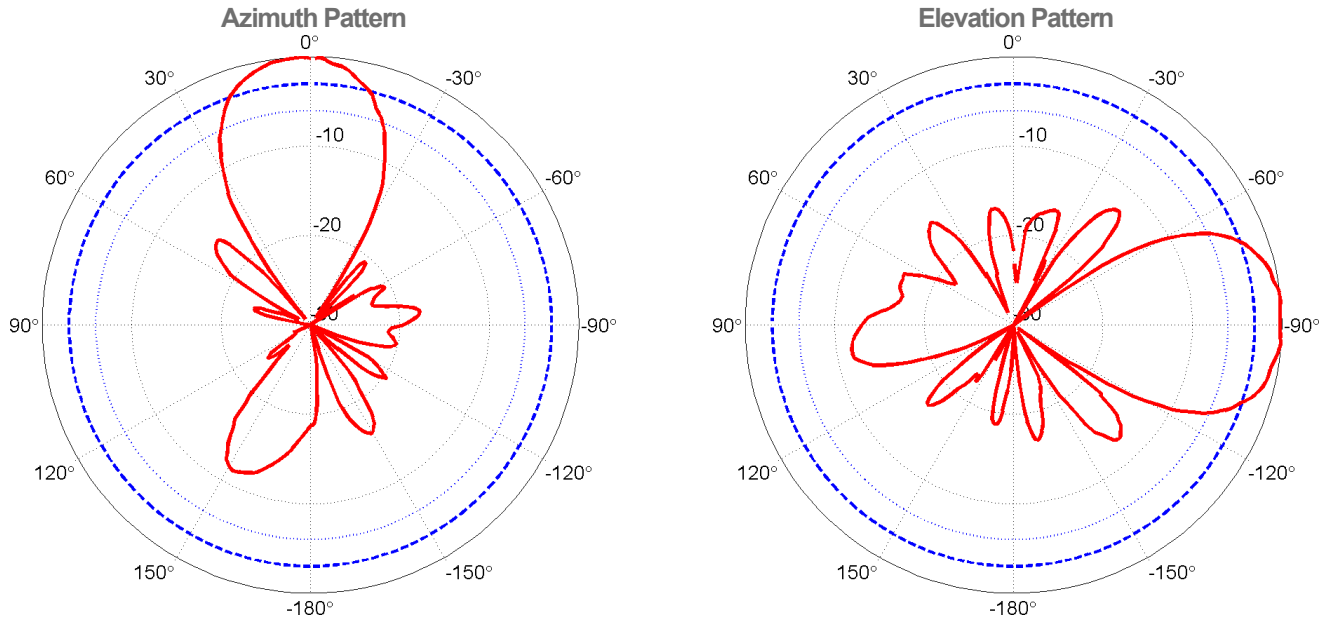
### Bracket Specifications

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	966 mm   38 in
Width	127 mm   5 in
Height	127 mm   5 in
Net Weight, with brackets	1.4 kg   3 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.