

YS1503

Directional Yagi Antenna 150-174 MHz

This Laird Connectivity directional gamma-matched, three element, VHF series of yagi antennas is designed with a focus on economical yet high performance. This series is a 7.1 dBi gain antenna that operates between150-174 MHz frequency range. It is manufactured using high strength 6061-T6 aluminum to withstand heavy ice, high wind, and other harsh conditions.

FEATURES AND BENEFITS

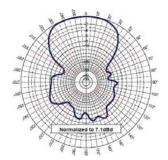
- High performance at low cost
- Tunable gamma matched design
- 100% tested on a network analyzer

Normalized to 1.1 dBd

Azimuth Pattern (X, Y, or E-plane) Representation Pattern

APPLICATIONS

• Designed as a low-cost solution for residential and commercial applications



Elevation Pattern (Y, Z, or H-plane) Representation Pattern

ELECTRICAL SPECIFICATIONS	
Model Name	YS1503
Operating Frequency (MHz)	150-174
VSWR	<2.0:1
Return Loss - Max (dB)	-10
Gain (dBd)	7.1
Nominal Impedance (Ohms)	50
Max Power - Ambient 25°C (W)	500
Polarization	Vertical
Pattern	Directional
Vertical Plane 3 dB Beamwidth	74°
Horizontal Plane 3 dB Beamwidth	80°
Transmitting/Receiving	Both
Front-to-Back Ratio (dB)	17

MECHANICAL SPECIFICATION	
Dimensions – L x H – cm (inches)	105.41 x 248.6 (41.5 x 39.25)
Boom Diameter - cm (inches)	2.22 (7/8)
Weight - kg (lbs.)	0.95 (2.1)
Cable Type	None
Connector Type	N-female
Radome Material	Aluminum
Color	Silver
Equivalent Flat Area - sq. meter (sq. feet)	0.051 (0.550)
Mounting Kit	YM78 (included) Maximum mountable mast 1.5"
Lightning Protection (sold separately)	Lightning arrestor LABH350NN



ENVIRONMENTAL SPECIFICATION	
Rated Wind Velocity – km/hr (mph)	241 (150)
Rated Wind Velocity (with 0.5" radial ice) – km/hr (mph)	130 (80)

TE TECHNICAL SUPPORT CENTER

USA: +1 (800) 522-6752 +1 (905) 475-6222 Canada: Mexico: +52 (0) 55-1106-0800 +54 (0) 11-4733-2200 Latin/S. America: Germany: +49 (0) 6251-133-1999 +44 (0) 800-267666 UK: +33 (0) 1-3420-8686 France: Netherlands: +31 (0) 73-6246-999 China: +86 (0) 400-820-6015

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