



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 between 150-174 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

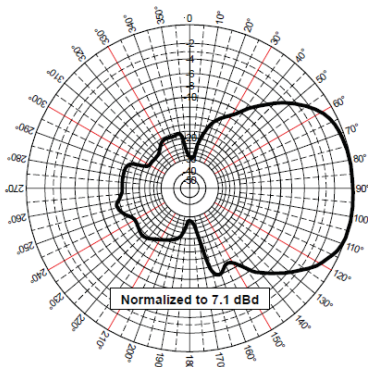
- High performance at low cost
- Tunable gamma matched design
- 100% tested on a network analyzer

APPLICATIONS

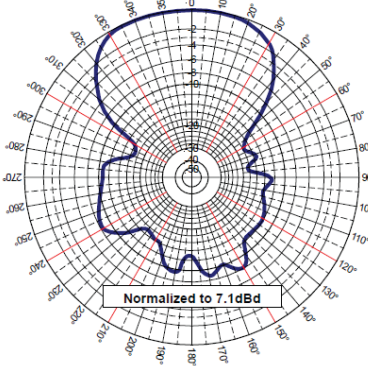
- Designed as a low-cost solution for residential and commercial applications

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 |



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



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

MECHANICAL SPECIFICATIONS

| | |
|---|---|
| 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 SPECIFICATIONS

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

✓RoHS

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