

## Y(B)80612

### Directional Yagi Antennas 806-896 MHz

Laird Connectivity's premium series directional Yagi antennas are fully gold anodized for corrosion resistance. All UHF and above frequency antennas feature internal matching to assure broad bandwidth and resistance to severe weather conditions. There is no gamma match to ice up, corrode, or detune. Our engineering staff has optimized the product family for forward gain by computer analysis and then field-tested each for conformance.

#### FEATURES AND BENEFITS

- All UHF and higher frequency antennas feature 360° welds around each element and an end-of-boom N connector feed with an internal transmission line feeding the driven element
- Every Yagi is tuned on a network analyzer for best power match and lowest VSWR
- All Yagi antennas ship complete with a high-quality cast aluminum mounting kit that includes stainless steel hardware and allows vertical or horizontal orientation during installation

#### APPLICATIONS

- Point-to-point and multi-point/ omnidirectional outdoor antennas applications used by private organizations and government agencies around the globe
- Typical applications include transportation such as railroad switching, remote locations reporting examples that include oil fields, weather conditions and, meter data transmissions for utilities

#### ELECTRICAL SPECIFICATION

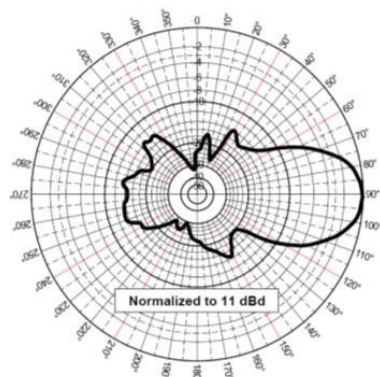
|                              |  |
|------------------------------|--|
| Operating Frequency (MHz)    | 806-896  |
| Gain (dBd)                   | 11   |
| Tune Capability              | Fixed tune   |
| Center Frequency (MHz)       | 851.00   |
| Bandwidth @ VSWR < 1.5:1     | 806-896  |
| Bandwidth @ VSWR < 2.0:1     | 801-911  |
| Nominal Impedance (Ohms)     | 50   |
| Max Power - Ambient 25°C (W) | 300  |
| Polarization                 | Align source and destination to same polarization (horizontal or vertical) |
| Front-to-Back Ratio (dB)     | 20   |

## MECHANICAL SPECIFICATION

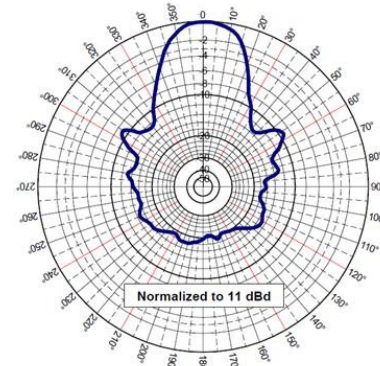
|                                  |  |
|----------------------------------|--|
| Dimensions - L x W x H- cm (in.) | 124.14 x 20.64 x 2.22 (48-7/8 x 8-1/8 x 0.875) |
| Ground Plane                     | None   |
| Number of Elements               | 12   |
| Termination                      | N-female                                       |
| Assembly                         | Fully welded                                   |
| Mounting                         | Up to 2.5-inch mast                            |
| Hardware                         | Stainless steel                                |
| Lightning Protection             | DC grounded                                    |
| Rated Wind Velocity - km/h (mph) | Not tested                                     |

## CONFIGURATION

| PART NUMBER | FREQUENCY RANGE | COLOR |
|-------------|-----------------|-------|
| Y80612      | 806-896 MHz     | Gold  |
| YB80612     | 806-896 MHz     | Black |



Vertical-to-Vertical Polarization  
Azimuthal Pattern (X, Y or E-Plane)



Horizontal-to-Horizontal Polarization  
Elevation Pattern (Y, Z or H-Plane)

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