





### **FEATURES AND BENEFITS**

- High-gain directional antenna
- Available in 9, 11, and 13 dBi gain models
- Stainless steel construction, low wind loading
- Simple installation Vertical or horizontal polarization
- 18-inch pigtail with Type N-female connector (standard)
- DC ground for lightning protection

# **YA9-9/YA9-11/YA9-13** Yagi NLOS Antennas 860-960 MHz

The NLOS series antenna system offered by Laird Connectivity is constructed of stainless steel for outstanding service life. Individual elements are welded to the main beam for permanent attachment. Welded elements give more consistent signal performance because they ensure high conductivity across the antenna surface. These antennas have high gain and good front- to-back performance to minimize external interference. They can be mounted in vertical or horizontal polarization. They come standard with an 18-inch pigtail cable terminated with an N- female connector. Other connector types are available upon request.

### **APPLICATIONS**

- 900 MHz ISM band applications
- Non-line-of-sight applications
- WISP CPE equipment
- Cellular applications
- Utility transmission and distribution communications

ELECTRICAL SPECIFICATIONS			
Model Name	YA9-9	YA9-11	YA9-13
Operating Frequency (MHz)	860-960		
VSWR	1.5:1		
Nominal Impedance (Ohms)	50		
Max Power - Ambient 25°C (W)	100		
Gain (dB)	9	11	13
Number of Elements	5	8	15
3 dB Beamwidth	53°	50°	30°
Front-to-Back Ratio (dB)	>14	>15	>18
Gamma Match Type	Internally matched		

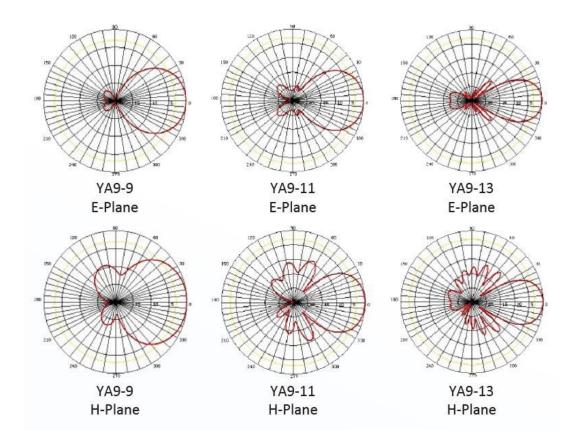
MECHANICAL SPECIFICATION			
Model Name	YA9-9	YA9-11	YA9-13
Length Dimensions m(in); [ Note element width ~ 152 mm (6 in.) ]	0.5 (19.7)	0.9 (35.4)	1.45 (57.0)
Weight – kg (lbs.)	0.7 (1.9)	0.9 (2.4)	1.25 (3.3)
Pole Size - mm (in.)	25 to 51 (1 to 2)		
Element Construction	Welded		
Bracket Included	Included		
Mounting	Up to 2.5-inch diameter mast		

ENVIRONMENTAL SPECIFICATION			
Operating Temperature – °C (°F)	-45 to +70°C (-49 to +158°F)		
Rated Wind Velocity - m/sec (mph)	56 (125)		
Wind Loading - Ibs.	YA9-9	YA9-11	YA9-13
Square Inch	19	29	45
100 MPH	4.75	7.25	11.3
125 MPH	7.42	11.3	17.6
100 MPH with $\frac{1}{2}$ -inch radial ice	8.0	12.0	21.0
Material Substance Compliance	RoHS		

## CONFIGURATION

PART NUMBER	DESCRIPTION
YA9-9	9 dB NLOS series 900 MHz Yagi antenna with N-female connector
YA9-11	11 dB NLOS series 900 MHz Yagi antenna with N-female connector
YA9-11-RTNC-48	11 dB NLOS series 900 MHz Yagi antenna with RPTNC connector
YA9-13	13 dB NLOS series 900 MHz Yagi antenna with N-female connector

#### **RADIATION PATTERNS**



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