



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





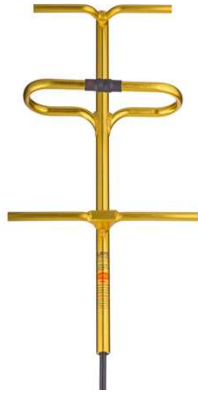
Smart Technology. Delivered.

# DIRECTIONAL YAGI ANTENNAS

## YF45018

### GOLD SERIES DIRECTIONAL 8 dBi YAGI ANTENNAS PROVIDE INDUSTRY-LEADING DESIGN FEATURES WITH LONG TERM OPTIMAL PERFORMANCE

Laird's patent pending premium series directional Yagi antennas are either fully gold, or fully black, 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. The mechanical construction has been further enhanced to have an ingress protection rating of IP67.



Patent Pending



#### 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.
- The antenna has an ingress protection rating of IP67.

#### APPLICATIONS

- Point-to-point and multi-point / directional 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.

PARAMETER	SPECIFICATIONS
Model Number	YF45018
Frequency Bands, MHz	450 – 490 MHz
Peak Gain, dBi (Typ)	8.6
Peak Gain, dBi (Max)	9.1
VSWR, Nominal	<1.5:1
VSWR, Max	<1.7:1
Nominal Impedance	50Ω
Polarization	Vertical
Azimuth 3 dB Beamwidth	90°
Elevation 3 dB Beamwidth	62°
Front-to-Back Ratio	15 dB
Max Power (Ambient 25°C)	250 Watts
Antenna Dimension (L x W x T )	457 x 305 x 98 mm (18.0" x 12.0" x 3.86")
Exposed Cable Length	610 mm RG213 (24")
Connector	Type N female
Weight	0.68 kg ( 1.50 lbs); w/brackets 1.37 kg (3.03 lbs)
Wind Operational	160 km/h (100 mph)
Wind Survival	220 km/h (136 mph)
Operating Temperature	-30°C to +70°C
Storage Temperature	-40°C to +85°C
Ingression Protection	IP67

PART NUMBER	CABLE LENGTH	CONNECTOR
YF45018-61NF	61 cm (24")	Type N- female

Americas: +1.847.839.6925  
IAS-AmericasEastSales@lairdtech.com

Europe: +44.1628.858941  
IAS-EUSales@lairdtech.com

Asia: IAS-AsiaSales@lairdtech.com

Middle East and Africa: +44.1628.858941  
IAS-MEASales@lairdtech.com

[www.lairdtech.com](http://www.lairdtech.com)



### RADIATION PATTERNS

**Azimuth**

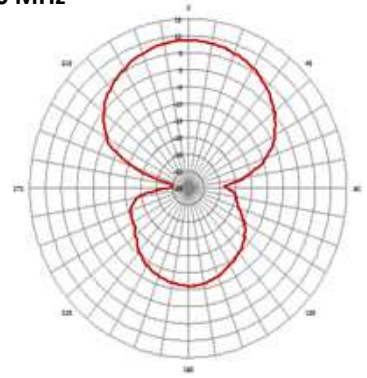
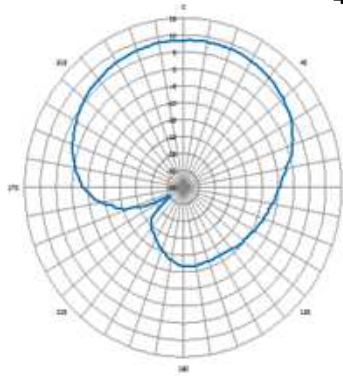
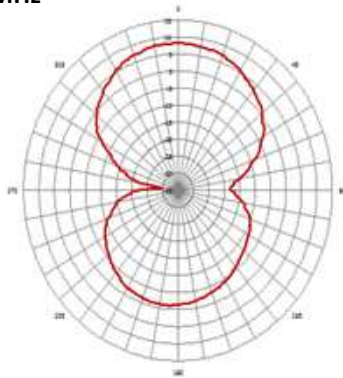
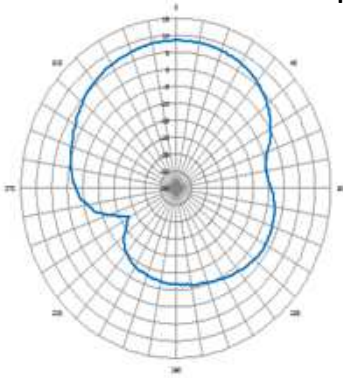
**450 MHz**

**Elevation**

**Azimuth**

**470 MHz**

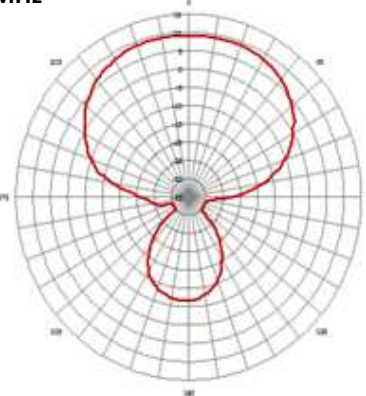
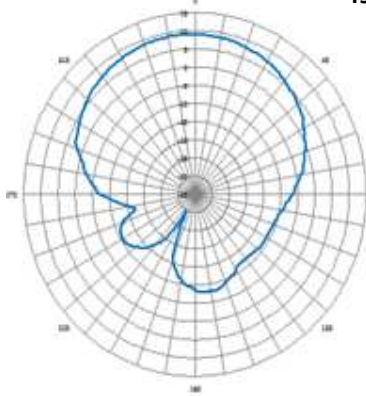
**Elevation**



**Azimuth**

**490 MHz**

**Elevation**



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