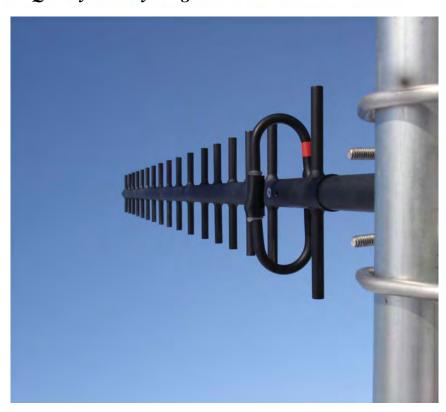
**Jagy1 Series** 

### 800 MHz 900 MHz **FOLDED DIPOLE YAGI 18-Element**

824-894 MHz

**JAGY-850-18** 





- Telemetry
- Land mobile networks
- Public security and safety
- Transportation networks













Electrical Specifications	Mechanical Specifications	Environmental
Model JAGY-850-18	Model JAGY-850-18	Model JAGY-850-18
Frequency Range (MHz) 824 – 894	Height inches (mm) 7.5 (190.5)	Survival Wind Velocity With no Ice mph (km/h) 113 (182)
Bandwidth @ 1.5:1	Width inches (mm) 65 (1,651)	
VSWR or Better (MHz) 70	Depth inches (mm) 3 (76.2)	Survival Wind Velocity With Ice mph (km/h) 85 (137)
Polarization Vertical or Horizontal	Weight Ib (kg) 5 (2.3)	Maximum Allowable
Radiation Pattern Directional	Yaqi Support Boom	Radial Ice Buildup inches (mm) 0.5 (12.7)
Nominal Gain (dBd) 13 – 13.5	Outside Diameter Inches (mm) 1 (25.4)	Equivalent Flat Plate Area ft^2 (m^2) 0.75 (0.066)
Nominal Horizontal 3dB Beamwidth (Deg) 30 - 40	Yagi Support Boom	Lateral thrust (100mph)
Nominal Vertical 3dB Beamwidth (Deg) 25 – 35	Allowable Clamping Space Inches (mm)  4.75 (120.7)	0 Radial Ice Buildup lbs (N) 18.7 (83.2)
Front to Back Ratio (dB) 24 – 26	, , , , , , , , , , , , , , , , , , , ,	Torsional moment (100mph)
Maximum Power (Watts) 200	Mounting Information JAGY#6A clamp kit supplied (See JAG clamps page for other suitable clamps)	0 Radial Ice Buildup ft-lbs (Nm) 130 (176)
Lightning Protection DC Ground	Pigtail (ft) & RF Connector 2 – 2.5 & 'N' Female	Bending moment (100mph) 0 Radial Ice Buildup ft-lbs (Nm) 27 (36.5)

Email: info@jagelectromagnetics.com

Fax (905)-332-8093



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Jagy1 Series

# FOLDED DIPOLE YAGI 18-Element

824-894 MHz

**JAGY-850-18** 

### **Features**

- 2-year factory warranty (See page 3)
- Broadband (70 MHz)
- Suitable for cellular systems
- Soldered internal joints
- Aluminum construction
- DC Grounded
- Stainless steel hardware
- Easy storage
- Low PIM
- Operation in harsh environments
- Fully sealed joints
- Side or tower top mountable
- Available in bare AL or painted black
- Optional Anodized finish
- Welded elements
- Horizontal or vertical polarization
- Courier shippable

### **Description**

The JAGY-850-18 yagi antenna has been developed to meet the need for a very high gain, broadband, premium quality directional antenna providing 13 dBd gain with a low VSWR across the entire 824-894 MHz frequency band.

The JAGY-850-18 antenna consists of an eighteen-element yagi of exceptional durability and performance. All elements including the driven folded dipole element are maintained at DC Ground potential for lightning protection. The reflector and director elements are welded to the boom reducing the risk of damage or misalignment and maintain excellent electrical continuity.

The JAGY-850-18 antenna is suitable for mounting on the top or side of a conductive or non-conductive tower or pole and is supplied complete with a mounting clamp kit. To assure optimum performance, each JAG antenna is checked for proper VSWR over a wide range of frequencies before leaving our factory.

The JAGY-850-18 has a number of system applications, such as use in systems requiring an antenna with excellent icing characteristics. The JAGY-850-18 can also be used in point-to-point systems where very high gain is required over a relatively long distance. Reduction in transmitter noise, receiver desensitization, and intermodulation interference is also a result when a JAGY is co-located or 180 degrees from other antennas.

## JAGY-850-18 at a glance



Unique dipole (DE) block mount and fully sealed feeder



Welded elements



Sealed feed point



Clamp included with S.S. hardware

\* JAGY#6A Clamp Kit is included with this antenna. Please consult JAG to determine suitable clamps for custom applications.

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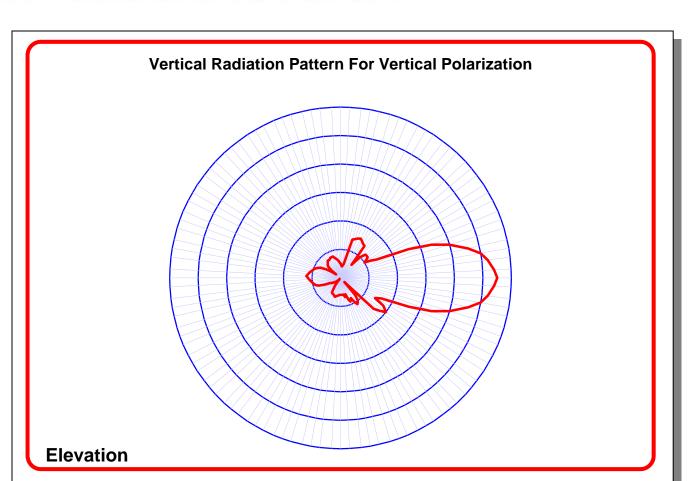


JAG's dedication to continuous Research & Development will result in product improvements as they

# **FOLDED DIPOLE YAGI 18-Element**

824-894 MHz

**JAGY-850-18** 



<sup>\*</sup> This is a general representation of the Jagy1 Series JAGY-850-18 antenna radiation pattern. For the latest detailed pattern contact JAG Applications Engineering.

#### WARRANTY

JAG Electronmagnetics warrants all its products against defects in material or workmanship and is only applicable if failure results from these factors within two years from the purchase date by the user. Jag Electromagnetics will be responsible for the supply, at no charge, of new or rebuilt replacements in exchange for defective parts for the duration of the warranty. This warranty does not extend to any JAG products that have been subject to misuse, neglect, accident, improper installation or application. In addition, this warranty does not extend to products that have been repaired or substantially altered outside our manufacturing plant.

JAG Electromagnetics will not be liable for any incidental or consequential damages due to failure of a JAG product under this warranty or any implied warranty. JAG is in no event liable for consequential damages or other costs of any kind as a result of the use of the products manufactured by JAG. No envoy is sanctioned to presume for JAG any other legal responsibility in connection with JAG products. JAG Electromagnetics is not accountable for replacement of any product damaged by lightning.

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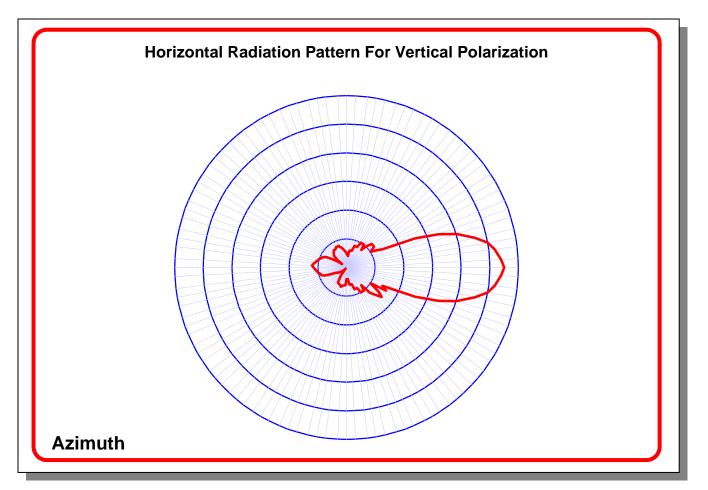


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# **FOLDED DIPOLE YAGI 18-Element**

824-894 MHz

**JAGY-850-18** 



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