

## **JAGY-850-7**





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

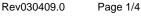


Electrical Specifications		Mechanical Specifications			Environmental	
Model JAGY-850-7		Model JAGY-850-7			Model JAGY-850-7	
Frequency Range (MHz)	824 – 894	Height	inches (mm)	6.8 (172.7)	Survival Wind Velocity With no Ice	mph (km/h) 187 (300)
Bandwidth @ 1.5:1	70	Width	inches (mm)	24 (609.6)		
VSWR or Better (MHz)	70	Depth	inches (mm)	3 (76.2)	Survival Wind Velocity With Ice	mph (km/h) 113 (182)
	Horizontal	Weight	lb (kg)	2.5 (1.15)	Maximum Allowable	
Radiation Pattern Directional		Yagi Support Boom		Radial Ice Buildup inches (mm) 0.5 (12.7)		
Nominal Gain (dBd)	9.5 – 10	Outside Diameter		0.84 (21.3)	Equivalent Flat Plate Area	ft^2 (m^2) 0.25 (0.022)
Nominal Horizontal 3dB Beamwidth (Deg) 50 – 60		, , , , , , , , , , , , , , , , , , ,		0.01 (21.0)		
Nominal Vertical 3dB Beamwidth (Deg)	38 - 48	Yagi Support Boom Allowable Clamping Space Inches (mm) 4.75 (120.7)		Lateral thrust (100mph) 0 Radial Ice Buildup Ibs (N) 15.6 (69.4)		
Front to Back Ratio (dB)	18 – 20			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) 90 (122)	
Lightning Protection	DC Ground	Piqtail (ft) & RF Connector 2 – 2.5 & 'N' Female		Bending moment (100mph) 0 Radial Ice Buildup ft-Ibs (Nm) 24 (32.4)		
		i iyiali (ii)				11-103 (1111) 24 (32.4)



RF EMI Engineering Technology 26-1750 Creek Way Burlington, Ontario L7L 7E2 Canada Email: info@jagelectromagnetics.com Web: www.jagelectromagnetics.com Tel (647)-746-5937 Fax (905)-332-8093 Made in Canada

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



# JAGY-850-7

## **Features**

- 2-year factory warranty (See page 3)
- Broadband (70 MHz)
- Suitable for cellular systems
- Soldered internal joints
- Aluminum construction
- Light weight
- 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

### Description

The JAGY-850-7 yagi antenna has been developed to meet the need for a high gain, broadband, premium quality directional antenna providing 10 dBd gain with a low VSWR across the entire 824-894 MHz frequency band.

The JAGY-850-7 antenna consists of a sevenelement 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-850-7 antenna is suitable for mounting on the top or side of a conductive or nonconductive 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-850-7 has a number of system applications, such as use in systems requiring an antenna with excellent icing characteristics. The JAGY-850-7 can also be used in point-to-point systems where high gain is required over a relatively narrow circular sector. 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.

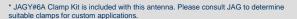
### JAGY-850-7 at a glance



Unique dipole (DE) block mount and fully sealed feeder



Welded elements





Sealed feed point



Clamp included with S.S. hardware





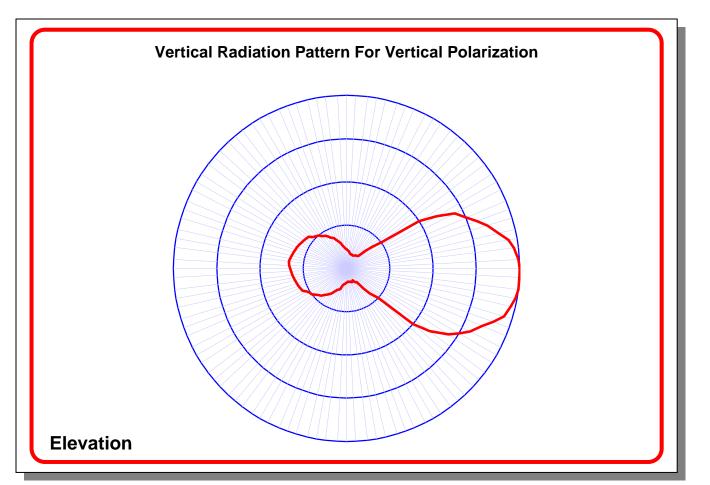
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## **JAGY-850-7**



\* This is a general representation of the Jagy1 Series JAGY-850-7 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 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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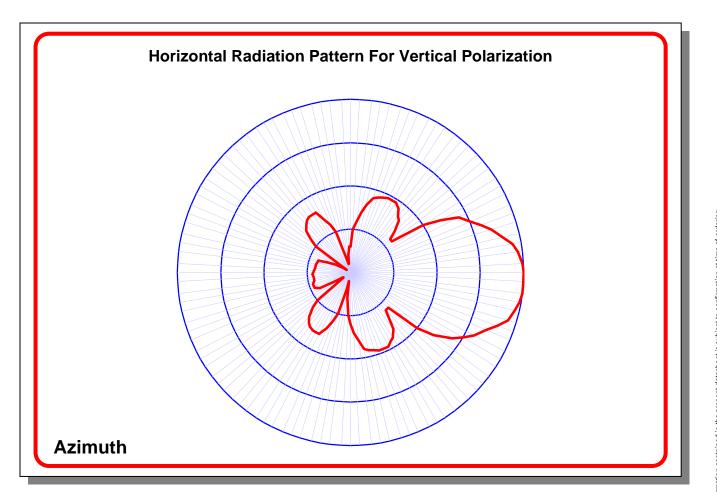
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