JAG™ Electromagnetics

"Quality is everything."

Delta1 Series EXPOSED FOLDED DIPOLE Doubled 8-Bay Array

800 MHz
900 MHz

890-960 MHz

JAG-925-2X8-BID

- Multi-Channel / Trunked Systems
- Spread Spectrum
- Land mobile networks
- Public security and safety
- Transportation / Oil & Gas networks

Electrical Specifications	
Model	JAG-925-2X8-BID
Frequency Range (MHz)	890 – 960
Bandwidth @ 1.5:1 VSWR or Better (MHz)	70
Polarization	Vertical
Radiation Pattern	Bidirectional
Nominal Gain (dBd)	8.5 – 9
Nominal Horizontal 3dB Beamwidth (Deg)	N/A
Nominal Vertical 3dB Beamwidth (Deg)	7 – 8
Port-to-Port Isolation (dB)	N/A
Maximum Average Power (Watts)	300
Lightning Protection	DC Ground

Mechanical Specifications		
Model	JAG-925-2X8-BID	
Height	inches (mm)	144 (3,658)
Width	inches (mm)	9 (228.6)
Depth	inches (mm)	4.5 (114.3)
Weight	lb (kg)	30 (13.6)
Support Mast Outside Diameter	Inches (mm)	2.375 (60.3)
Support Mast Allowable Clamping Space *See JAG Delta1 Series application notes for details	Inches (mm)	55 (1,397)*
Mounting Information	No clamps supplied* *(See JAG clamps page for suitable clamps)	
Pigtail (ft) & RF Connector	2 – 2.5 & 'N' Male	

Environmental		
Model	JAG-925-2X8-BID	
Survival Wind Velocity With no Ice	mph (km/h)	175 (282)
Survival Wind Velocity With Ice	mph (km/h)	110 (177)
Maximum Allowable Radial Ice Buildup	inches (mm)	0.5 (12.7)
Equivalent Flat Plate Area	ft^2 (m^2)	1.91 (0.18)
Lateral thrust (100mph) 0 Radial Ice Buildup	lbs (N)	77 (342.5)
Torsional moment (100mph) 0 Radial Ice Buildup	ft-lbs (Nm)	22 (29.7)
Bending moment (100mph) 0 Radial Ice Buildup	ft-lbs (Nm)	153 (206.6)

JAG-925-2X8-BID Product Specification Sheet.

Specifications are subject to change without notice. As a result, all information contained in the present datasheet is subject to confirmation at time of ordering.

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Features

- 5-year factory warranty (See page 3)
- Broadband (70 MHz)
- Suitable for multi-frequency systems
- High gain applications
- Soldered internal joints
- DC Grounded
- Stainless steel hardware
- Expert TIG welding
- Natural rubber plugs
- Stock for re-use or re-sale
- Low PIM
- Operation in harsh environments
- Optional lightning rod spike
- Optional downtilt versions
- Optional inverted mountable model
- Side or tower top mountable
- Optional coatings
- Ideal for spread-spectrum applications

Description

The JAG-925-2X8-OMD was initially designed for the oil and gas industry that required a robust bi-directional base station SCADA antenna with improved lightning strike survivability over traditional fiberglass antennas offered by most other manufacturers. Although JAG Electromagnetics cannot guarantee antenna survivability from a direct lightning strike, the JAG-925-2X8-OMD does provided a higher probability of high energy current being directed into the earth in the event of a direct lightning strike. This is especially appreciated when there are highly volatile and sensitive elements and equipment in the vicinity such as in an oil or gas field.

The JAG-925-2X8-OMD features 6061-T6 aluminum and stainless steel construction. Features such as the internal phasing harness and fixed bi-directional configuration protect the antenna from the elements ensuring trouble free operation. Its bandwidth also makes it perfect to stock for re-use or re-sale.

This series also offers customers with an optional heavy-duty solid stainless steel lightning rod spike for locations prone to lightning strikes. JAG's standard option consists of a stainless steel bolt fed through the machined end cap. The stainless steel bolt allows for a corrosion free low resistance area for any potential lightning strikes as the surrounding aluminum oxidizes over time.

JAG-925-2X8-BID at a glance

Expert TIG welding

Fully sealed internal phasing harness

Optional lightning rod

Pigtail for easy weather proofing

*Site-specific mounting hardware is necessary with theses antennas. Please consult JAG to determine suitable clamps for your application.

JAG-925-2X8-BID Product Specification Sheet.

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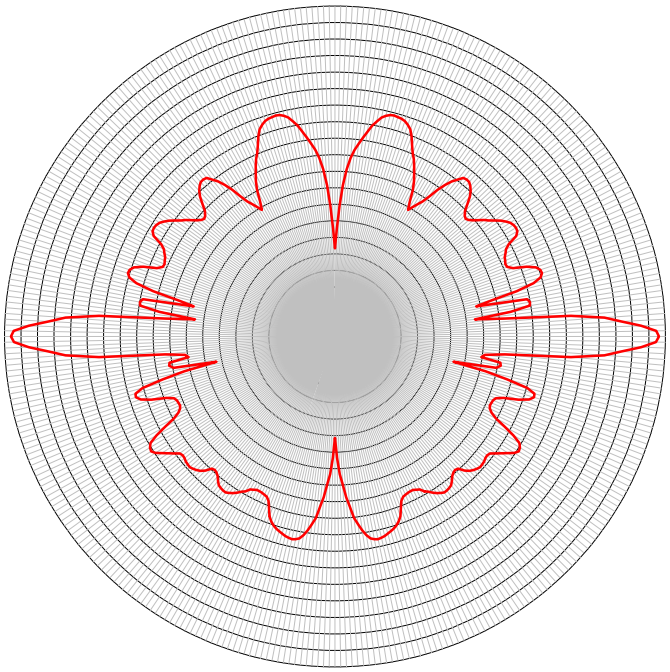
Vertical Radiation Pattern For Vertical Polarization



Concentric Circles = 5dB/div
Radial Lines = 1deg/div

*Outer Circle = 10dB
*Horizontal Line = 0 & 180 deg respectively
*Vertical Line = 90 & 270 deg respectively

Elevation

—— Bidirectional

* This is a general representation of the Delta1 Series JAG-925-2X8-BID 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 five 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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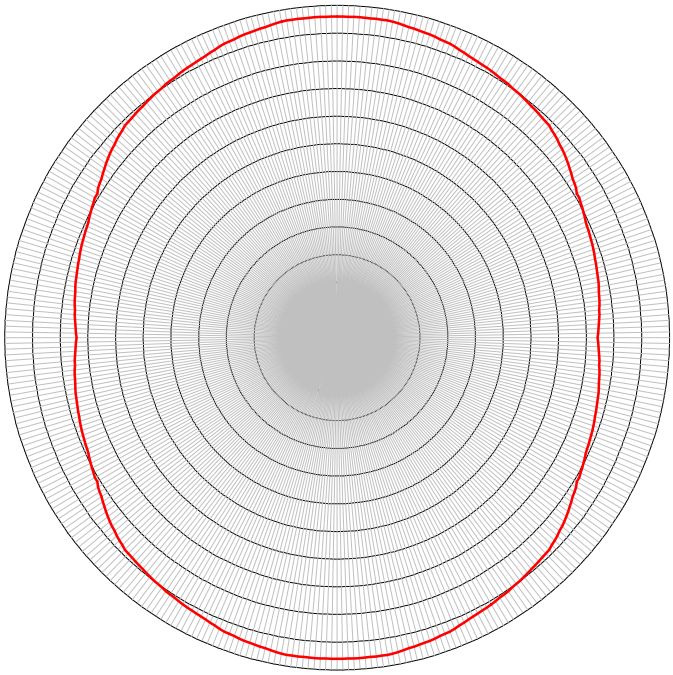
Horizontal Radiation Pattern For Vertical Polarization



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Azimuth

—— Bidirectional

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