

# **JAG-925-2X4-OMD**





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













|                                                                   | • 1                                                                                                                                                                        | Land mobile networks  Public security and safety  Transportation / Oil & Gas networks   Environmental  Model JAG-925-2X4-OMD  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) 1.73 (0.16)  Lateral thrust (100mph) 0 Radial Ice Buildup ft-lbs (Nm) 11 (14.9)  Bending moment (100mph) 0 Radial Ice Buildup ft-lbs (Nm) 132 (178.2) |
|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electrical Specifications                                         | Mechanical Specifications                                                                                                                                                  | Environmental                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Model JAG-925-2X4-OMD                                             | Model JAG-925-2X4-OMD                                                                                                                                                      | Model JAG-925-2X4-OMD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Frequency Range (MHz) 890 – 960                                   | Height inches (mm) 102 (2,591)                                                                                                                                             | Survival Wind Velocity  With no Ice mph (km/h) 175 (282)                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Bandwidth @ 1.5:1<br>VSWR or Better (MHz) 70                      | Width inches (mm) 9 (228.6)                                                                                                                                                | - Survival Wind Velocity                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Polarization Vertical                                             | Depth inches (mm) 9 (228.6)                                                                                                                                                | With Ice mph (km/h) 110 (177)                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Radiation Pattern Omnidirectional                                 | Weight lb (kg) 23 (10.4)                                                                                                                                                   | Maximum Allowable - Radial Ice Buildup inches (mm) 0.5 (12.7)                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Nominal Gain (dBd)  5.5 – 6                                       | Support Mast Outside Diameter Inches (mm) 2.375 (60.3)                                                                                                                     | Equivalent Flat Plate Area ft^2 (m^2) 1.73 (0.16)                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Nominal Horizontal 3dB Beamwidth (Deg) N/A                        |                                                                                                                                                                            | Leteral thrust (100mph)                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Nominal Vertical 3dB Beamwidth (Deg) 14 – 16                      | Support Mast  Allowable Clamping Space  Inches (mm)  Support Mast  See JAG Delta1 Series application notes for details  Allowable Clamping Space  Inches (mm)  55 (1,397)* | Lateral thrust (100mph) 0 Radial Ice Buildup lbs (N) 70 (311.4)                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Port-to-Port Isolation (dB) N/A                                   | Mounting Information No clamps supplied*                                                                                                                                   | Torsional moment (100mph) 0 Radial Ice Buildup ft-lbs (Nm) 11 (14.9)                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Maximum Average Power (Watts) 300  Lightning Protection DC Ground | *(See JAG clamps page for suitable clamps)  Pigtail (ft) & RF Connector 2 – 2.5 & 'N' Male                                                                                 | Bending moment (100mph)<br>0 Radial Ice Buildup ft-lbs (Nm) 132 (178.2)                                                                                                                                                                                                                                                                                                                                                                                                                               |

Dated: January-14-2013

JAG-925-2X4-OMD Product Specification Sheet.

Electromagnetics

RF EMI Engineering Technology 26-1750 Creek Way Burlington, Ontario L7L 7E2 Canada

Email: info@jagelectromagnetics.com Web: <u>www.jagelectromagnetics.com</u> Tel (905)-635-7437 Fax (905)-332-8093

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# EXPOSED FOLDED 800 MHz 900 MHz

890-960 MHz

## **JAG-925-2X4-OMD**

## **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-925-2X4-OMD was initially designed for the oil and gas industry that required a robust omnidirectional 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-925-2X4-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-925-2X4-OMD features 6061-T6 aluminum and stainless steel construction. Features such as the internal phasing harness and fixed omni-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-925-2X4-0MD at a glance



Expert TIG welding



Fully sealed internal phasing harness



Optional lightning rod



Pigtail for easy weather proofing

JAG to determine suitable clamps for your application



JAG-925-2X4-OMD Product Specification Sheet.

Site-specific mounting hardware is necessary with theses antennas. Please consult

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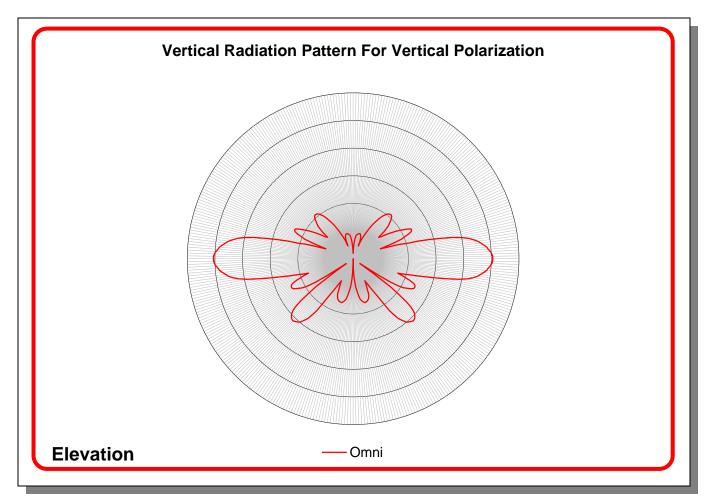
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**JAG-925-2X4-OMD** 



<sup>\*</sup> This is a general representation of the Delta1 Series JAG-925-2X4-OMD 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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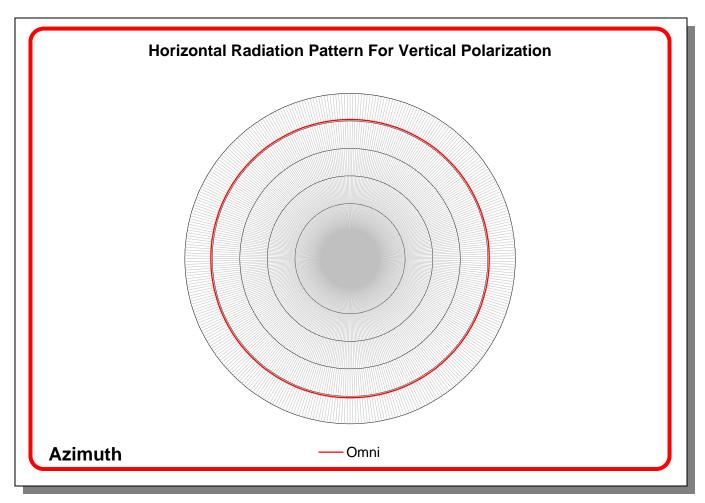
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<sup>\*</sup> This is a general representation of the Delta1 Series JAG-925-2X4-OMD antenna radiation pattern. For the latest detailed pattern contact JAG Applications Engineering.

#### Toronto:

JAG Electromagnetics 26-1750 Creek Way Burlington, ON, L7L 7E2 Canada Tel (905)-635-7437 Fax (905)-332-8093

#### Saskatoon:

JAG Electromagnetics 30065-1624 33<sup>rd</sup> St. W Saskatoon, SK, S7L 7M6 Canada Tel (905)-635-7437 Fax (905)-332-8093

Email: info@jagelectromagnetics.com

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