



**Delta1 Series**  
**EXPOSED FOLDED VHF UHF**  
**DIPOLE 8-Bay Array**  
**406-512 MHz**



**Electromagnetics**  
*"Quality is everything."*

**JAG-450-8-1/4**



- Civil aviation applications
- Land mobile networks
- Public security and safety
- Transportation networks



Electrical Specifications		Mechanical Specifications		Environmental	
Model	JAG-450-8-1/4	Model	JAG-450-8-1/4	Model	JAG-450-8-1/4
Frequency Range (MHz)	406 – 512	Height	inches (mm) 204 (5,182)	Survival Wind Velocity With no Ice	mph (km/h) 110 (177)
Bandwidth @ 1.5:1 VSWR or Better (MHz)	106	Width	inches (mm) 8 (203.2)	Survival Wind Velocity With Ice	mph (km/h) 80 (128)
Polarization	Vertical	Depth	inches (mm) 4.25 (108)	Maximum Allowable Radial Ice Buildup	inches (mm) 0.5 (12.7)
Radiation Pattern	Offset	Weight	lb (kg) 49 (22.05)	Equivalent Flat Plate Area	ft^2 (m^2) 3.54 (0.33)
Nominal Gain (dBd)	9.2 – 9.5	Support Mast Outside Diameter Inches (mm)	2.375 (60.3)	Lateral thrust (100mph) 0 Radial Ice Buildup	lbs (N) 144 (640.5)
Nominal Horizontal 3dB Beamwidth (Deg)	205 – 215	Support Mast Allowable Clamping Space Inches (mm)	56 (1,422.4)	Torsional moment (100mph) 0 Radial Ice Buildup	ft-lbs (Nm) 43 (58.1)
Nominal Vertical 3dB Beamwidth (Deg)	7 – 9	Mounting Information	No clamps supplied* *(See JAG clamps page for suitable clamps)	Bending moment (100mph) 0 Radial Ice Buildup	ft-lbs (Nm) 632 (853.2)
Maximum Average Power (Watts)	300	Pigtail (ft) & RF Connector	10 – 10.5 & 'N' Male		
Lightning Protection	DC Ground				

JAG-450-8-1/4 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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 Research & Development will result  
 in product improvements as they  
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Features

- 2-year factory warranty (See page 3)
- Broadband (106 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 monitoring stations

Description

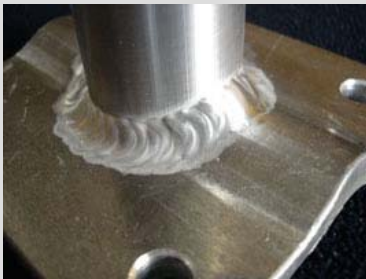
The JAG-450-8-1/4 is an 8-bay version of the JAG-450-1-1/4, incorporating all the features of the basic model into an extremely high gain antenna needed in certain system applications. The JAG-450-8-1/4 is supplied with either half-wave (JAG-450-8-1/2) or quarter-wave (JAG-450-8-1/4) dipole-to-mast spacing. Site-specific mounting hardware is required with these antennas. Please consult JAG for suitable clamps.

The JAG-450-8-1/4 features 6061-T6 aluminum and stainless steel construction. Features such as natural rubber plugs make sure the internal phasing harness remains well protected from the elements ensuring trouble free operation.

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.

The JAG-450-8-1/4, with its rugged construction and ease of installation, is ideal for leased or rented system use. Its bandwidth also makes it perfect to stock for re-use or re-sale.

JAG-450-8-1/4 at a glance



Expert TIG welding



Natural rubber plugs



Heavy-duty dipole fixture



Optional lightning rod

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

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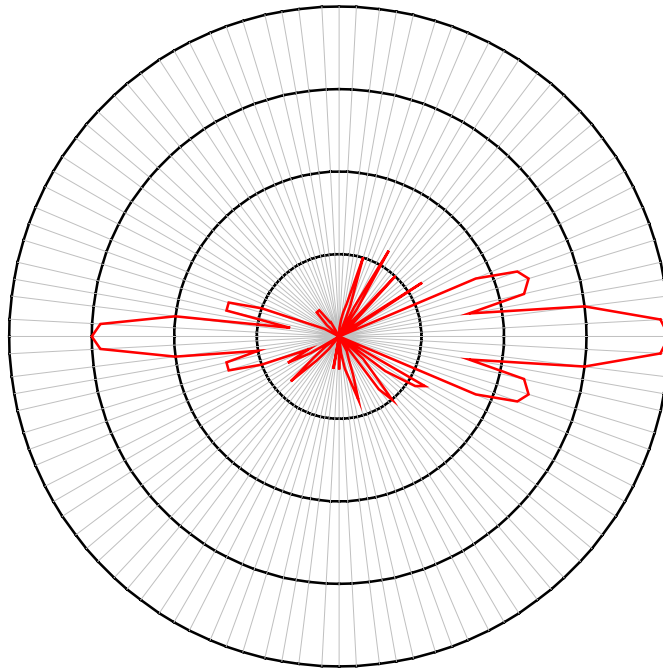
406-512 MHz

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JAG-450-8-1/4

Vertical Radiation Pattern For Vertical Polarization



Elevation

— Quarter Wavelength Spacing

\* This is a general representation of the Delta0 Series JAG-450-8-1/4 antenna radiation pattern. For the latest detailed pattern contact JAG Applications Engineering.

WARRANTY

JAG Electromagnetics 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 not be liable for any incidental or consequential damages due to failure of a JAG product under this warranty or any implied warranty.

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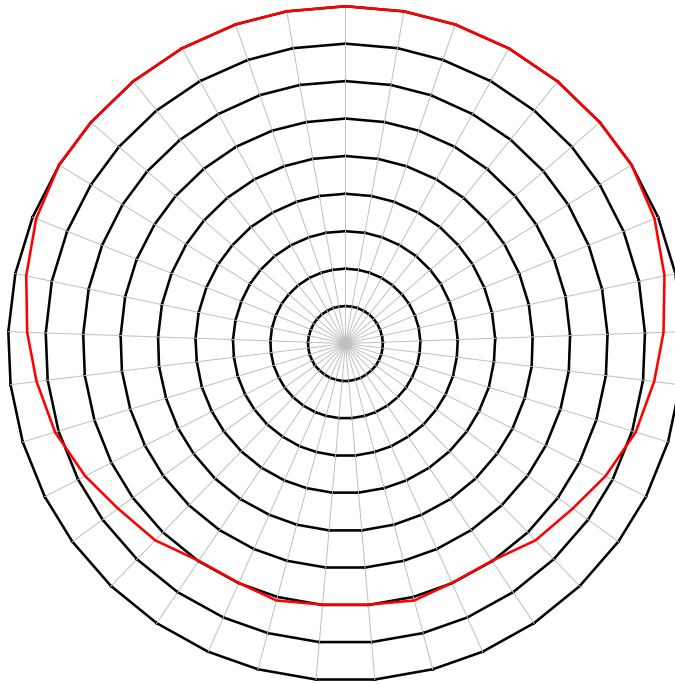
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JAG-450-8-1/4

Horizontal Pattern For Vertical Polarization



Azimuth

— Quarter Wave Spacing

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