



JAG-450-2-1/2-SM



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



Electrical Specifications		Mechanical Specifications		Environmental	
Model	JAG-450-2-1/2-SM	Model	JAG-450-2-1/2-SM	Model	JAG-450-2-1/2-SM
Frequency Range (MHz)	406 – 512	Height	inches (mm) 60 (1,524)	Survival Wind Velocity With no Ice	mph (km/h) 175 (282)
Bandwidth @ 1.5:1 VSWR or Better (MHz)	106	Width	inches (mm) 16 (406)	Survival Wind Velocity With Ice	mph (km/h) 110 (177)
Polarization	Vertical	Depth	inches (mm) 4.25 (108)	Maximum Allowable Radial Ice Buildup	inches (mm) 0.5 (12.7)
Radiation Pattern	Bi-directional (Elliptical)	Weight	lb (kg) 10 (4.5)	Equivalent Flat Plate Area	ft ² (m ²) 0.96 (0.09)
Nominal Gain (dBd)	3 – 3.7	Support Mast Outside Diameter Inches (mm)	2.375 (60.3)	Lateral thrust (100mph) 0 Radial Ice Buildup	lbs (N) 38.5 (171.3)
Nominal Horizontal 3dB Beamwidth (Deg)	205 – 215	Support Mast Allowable Clamping Space* Inches (mm)	24 (609.6)	Torsional moment (100mph) 0 Radial Ice Buildup	ft-lbs (Nm) 11 (14.9)
Nominal Vertical 3dB Beamwidth (Deg)	33 – 35	Mounting Information	No clamps supplied* (See JAG clamps page for suitable clamps)	Bending moment (100mph) 0 Radial Ice Buildup	ft-lbs (Nm) 76.5 (103.3)
Maximum Power (Watts)*	200	Pigtail (ft) & RF Connector	2 – 2.5 & 'N' Male		
Lightning Protection	DC Ground				

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.





JAG-450-2-1/2-SM

Features

- 2-year factory warranty (See page 3)
- Broadband (106 MHz)
- Suitable for multi-frequency systems
- Soldered internal joints
- Small for easy transport and installation
- Fits in standard Otis Elevators
- DC Grounded
- Stainless steel hardware
- Easy storage
- Low PIM
- Operation in harsh environments
- Optional lightning rod spike
- Optional downtilt versions
- Optional inverted mountable model
- Side or tower top mountable
- Optional coatings such as black paint
- Courier shippable
- Ideal for monitoring stations

Description

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

The JAG-450-2-1/2-SM offers a short mast design (only five feet in length) to facilitate easy transport, rooftop access, and installation resulting in a cost effective antenna for urban sites.

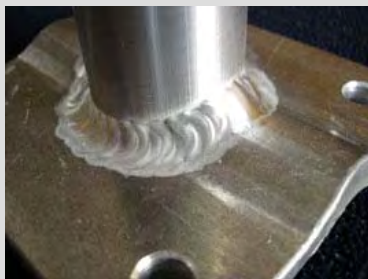
As a result of the antennas 5-foot compact design, it is shippable by most courier companies such as FedEx or UPS. This is much more convenient than traditional freight shipping required for comparable antennas.

The JAG-450-2-1/2-SM, with its rugged construction, lightweight 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.

FedEx Shippable



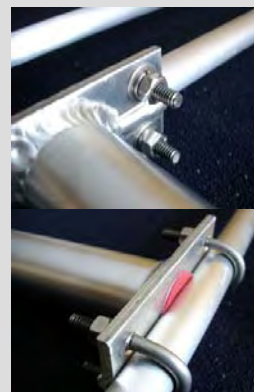
JAG-450-2-1/2-SM at a glance



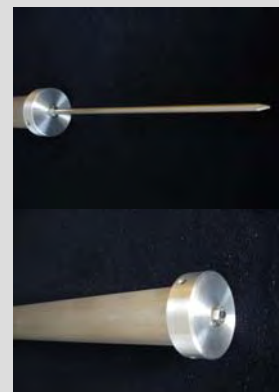
Expert TIG welding



Natural rubber plugs



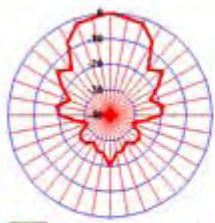
Heavy-duty dipole fixture



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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"Quality is everything."

Delta1 Series

EXPOSED FOLDED ^{VHF} ^{UHF}

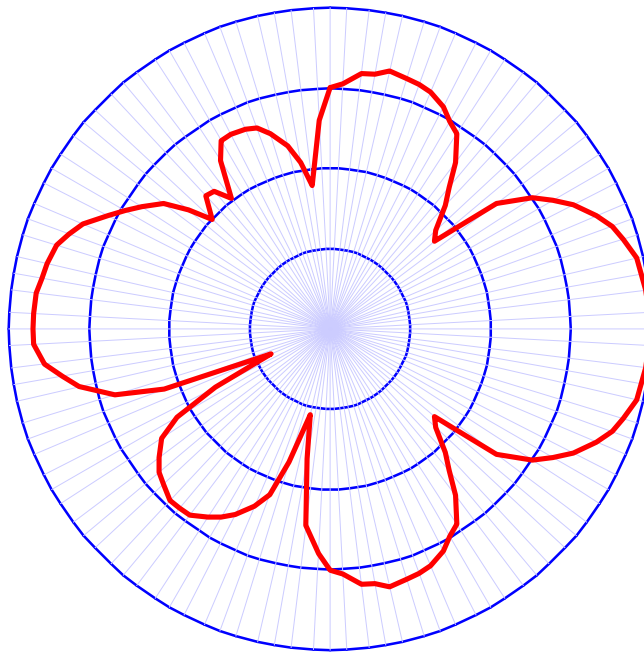
DIPOLE 2-Bay Array

406-512 MHz



JAG-450-2-1/2-SM

Vertical Radiation Pattern For Vertical Polarization



Elevation

— Half Wavelength Spacing

* This is a general representation of the Delta1 Series JAG-450-2-1/2-SM 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 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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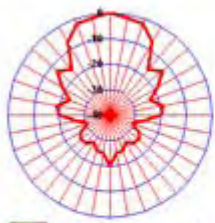
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Page 3/4



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



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Delta1 Series

EXPOSED FOLDED VHF UHF

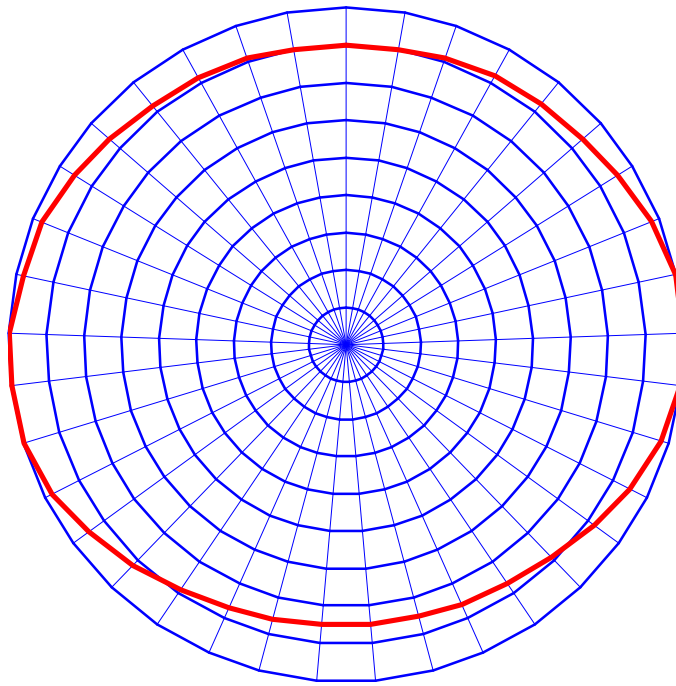
DIPOLE 2-Bay Array

406-512 MHz



JAG-450-2-1/2-SM

Horizontal Pattern For Vertical Polarization



Azimuth

— Half Wave Spacing

* This is a general representation of the Delta1 Series JAG-450-2-1/2-SM antenna radiation pattern. For the latest detailed pattern contact JAG Applications Engineering.

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Page 4/4



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