# EXPOSED FOLDED VHF **DIPOLE 2-Bay Array** 138-174 MHz



**JAG-150-2-1/2-SM** 





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











		Machanicals		Land mobile network Public security and Transportation netv	rks I safety works
Electrical Specifications  Model JAG-150-2-1/2-SM		Mechanical Specifications  Model JAG-150-2-1/2-SM		Environmental  Model JAG-150-2-1/2-SM	
Frequency Range (MHz)	138 – 174	Height inches (mm)	90 (2,286)	Survival Wind Velocity	
	130 - 174	, , , , , , , , , , , , , , , , , , ,		- With no Ice	mph (km/h) 135 (217)
Bandwidth @ 1.5:1 VSWR or Better (MHz)	36	Width inches (mm)	42 (1,066.8)	Survival Wind Velocity	
Polarization	Vertical	Depth inches (mm)	4.25 (108)	With Ice	mph (km/h) 100 (161)
	ctional (Elliptical)	Weight lb (kg)	22 (9.97)	Maximum Allowable Radial Ice Buildup	inches (mm) 0.5 (12.7)
Nominal Gain (dBd)	3 – 3.7	Support Mast Outside Diameter Inches (mm)	2.375 (60.3)	Equivalent Flat Plate Area	ft^2 (m^2) 2.1 (0.2)
Nominal Horizontal 3dB Beamwidth (Deg)	205 – 215	Support Mast	210.13 (23.15)	Lateral thrust (100mph) 0 Radial Ice Buildup	. , , , ,
Nominal Vertical		Allowable Clamping Space Inches (mm)	15 (381)		
3dB Beamwidth (Deg)	33 – 35	Mounting Information No clamps supplied*		Torsional moment (100mph) 0 Radial Ice Buildup ft-Ibs (Nm) 83 (112.1)	
Maximum Power (Watts)	200	(See JAG clamps page for suitable clamps)		Bending moment (100mph)	
Lightning Protection	DC Ground	Pigtail (ft) & RF Connector 0.5 -	- 1.0 & 'N' Male	0 Radial Ice Buildup	ft-lbs (Nm) 247 (333.5)

Email: info@jagelectromagnetics.com

Electromagnetics

Made in Canada

Rev030809.0

Page 1/4

### **Delta1 Series**

# EXPOSED FOLDED WHF DIPOLE 2-Bay Array

JAG-150-2-1/2-SM

## **Features**

- 2-year factory warranty (See page 3)
- Broadband (36 MHz)
- Suitable for multi-frequency systems
- Medium gain applications
- Soldered internal joints
- DC Grounded
- Stainless steel hardware
- Small for easy transport and installation
- Fits in standard Otis Elevators
- 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-150-2-1/2-SM is a 2-bay version of the JAG-150-1-1/2, incorporating all the features of the basic model into a medium gain antenna needed in certain system applications. The JAG-150-2-1/2-SM is supplied with either quarter-wave (JAG-150-2-1/4-SM) or half-wave (JAG-150-2-1/2-SM) dipole-to-mast spacing. Site-specific mounting hardware is required with these antennas. Please consult JAG for suitable clamps.

The JAG-150-2-1/2-SM offers a short mast design (only 7.5-feet in length) to facilitate easy transport, rooftop access, and installation resulting in a cost effective antenna for urban sites.

Being an antenna from the Delta1 Series means the phasing harness is contained within the mast. This provides the added benefit of a protected harness compared to a situation where only an external harness antenna could traditionally be used (determined by antenna size and site accessibility).

Therefore, the JAG-150-2-1/2-SM gives you both maximum protection for the precision phasing harness and the small size needed to negotiate some sites.

The JAG-150-2-1/2-SM, 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-150-2-1/2-SM at a glance**



**Expert TIG welding** 



Natural rubber plugs

Email: info@jagelectromagnetics.com

Web: <u>www.jagelectromagnetics.com</u> Tel (647)-746-5937

Fax (905)-332-8093



Heavy-duty dipole fixture



Optional lightning rod

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

Made in Canada



Rev082209.2

Page 2/4

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



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

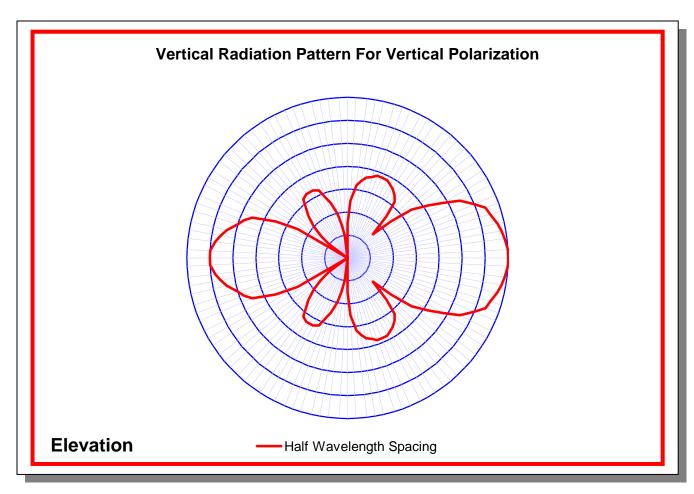
Copyright © JAG Electromagnetics

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

## EXPOSED FOLDED WHF **DIPOLE 2-Bay Array** 138-174 MHz



JAG-150-2-1/2-SM



<sup>\*</sup> This is a general representation of the Delta1 Series JAG-150-2-1/2-SM 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 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.

Electromagnetics

Made in Canada

Rev081209.2

Page 3/4

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

Email: info@jagelectromagnetics.com Web: <u>www.jagelectromagnetics.com</u> Tel (647)-746-5937 Fax (905)-332-8093

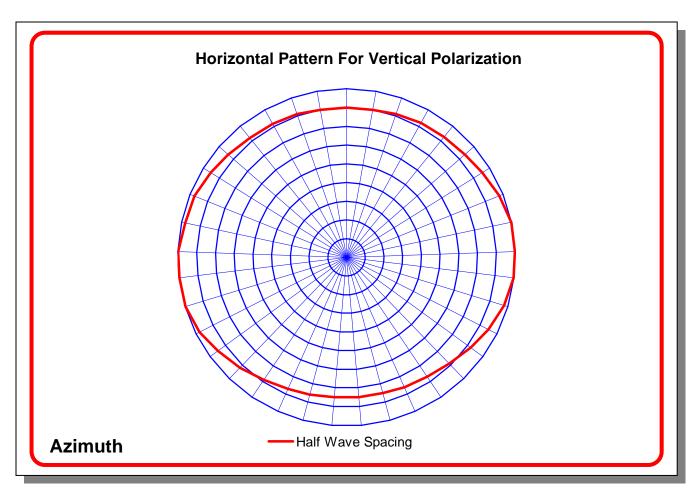


Copyright © JAG Electromagnetics

## EXPOSED FOLDED WHF **DIPOLE 2-Bay Array** 138-174 MHz



JAG-150-2-1/2-SM



<sup>\*</sup> This is a general representation of the Delta1 Series JAG-150-2-1/2-SM antenna radiation pattern. For the latest detailed pattern contact JAG Applications Engineering.

#### Toronto:

JAG Electromagnetics 1750 Creek Way, Unit 26 Burlington, Ontario, Canada L7L 7E2 Tel (647)-746-5937 Fax (905)-332-8093

Email: info@jagelectromagnetics.com

### Saskatoon:

JAG Electromagnetics P.O. Box 20030 Saskatoon, Saskatchewan, Canada S7L 7K9 Tel (647)-746-5937 Fax (905)-332-8093

Email: info@jagelectromagnetics.com

Published by JAG and printed in Canada. This document cannot be printed or duplicated other than for its intended purpose as a JAG product selection guide without the written consent of JAG Electromagnetics.



Email: info@jagelectromagnetics.com Web: <u>www.jagelectromagnetics.com</u> Tel (647)-746-5937

Copyright © JAG Electromagnetics

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

Made in Canada

Page 4/4

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

Rev081209.0