148-174 MHz



**JAG-GPX-150-0** 





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











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PX-150-0 Product Specification Sheet.	Radiatio
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JAG-G	

Electrical Specific	ations	Mechanical Spec		Environmental  Model JAG-GPX-150-0  Survival Wind Velocity With no Ice mph (km/h) 130 (209)  Survival Wind Velocity With lee mph (km/h) 85 (137)  Maximum Allowable Radial Ice Buildup inches (mm) 0.5 (12.7)  Equivalent Flat Plate Area ft^2 (m^2) 1.47 (0.14)  Lateral thrust (100mph) 0 Radial Ice Buildup ft-lbs (Nm) N/A  Bending moment (100mph) 0 Radial Ice Buildup ft-lbs (Nm) 47.7 (64.4)	
Model JAG-GPX-150-0		Model JAG-GPX-150-0		Model JAG-GPX-150-0	
Frequency Range (MHz)	144 – 174	Height inches (mm)	55 (1,397)	Survival Wind Velocity With no Ice	mah (km/h) 120 (200)
Bandwidth @ 1.5:1 VSWR or Better (MHz)	2% of $f_c$	Width inches (mm)	48 (1,219.2)	Survival Wind Velocity	mph (km/h) 130 (209)
Polarization	Vertical	Depth inches (mm)	48 (1,219.2)	With Ice	mph (km/h) 85 (137)
Radiation Pattern	Omnidirectional	Weight lb (kg)	13 (5.90)	Maximum Allowable Radial Ice Buildup	inches (mm) 0.5 (12.7)
Nominal Gain (dBd)	Unity	Support Mast Outside Diameter Inches (mm)	1.5 (38.1)	Equivalent Flat Plate Area	ft^2 (m^2) 1.47 (0.14)
Nominal Horizontal 3dB Beamwidth (Deg)	360	Support Mast  Allowable Clamping Space		Lateral thrust (100mph 0 Radial Ice Buildup	) lbs (N) 24.2 (107.6)
Nominal Vertical 3dB Beamwidth (Deg)	73 – 77	Inches (mm) 24 (609.6)		Torsional moment (100	Omph)
Maximum Power (Watts)	150	Mounting Information No clam (See JAG clamps page for suitable)	nps supplied* ble clamps)	0 Radial Ice Buildup	ft-lbs (Nm) N/A
		Pigtail (ft) & RF Connector 5 -	- 5.5 & 'N' Male	Bending moment (100) 0 Radial Ice Buildup	mph) ft-lbs (Nm) 47.7 (64.4)

Dated: October-31-2012



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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### **GP1 Series**

**JAG-GPX-150-0** 

# **Features**

- 2-year factory warranty (See page 3)
- Wideband
- **Omnidirectional**
- Easy transport and installation
- Easily field adjustable
- Fits in standard Otis Elevators
- DC Grounded
- Stainless steel hardware
- Easy storage
- Low PIM
- Operation in harsh environments
- Natural rubber plugs
- Side or tower top mountable
- **Optional coatings**
- Ideal for mobile command vehicles
- Ideal for monitoring stations
- Aluminum construction throughout

### Description

One of JAG's most popular antennas, the JAG-GPX-150-0 is a fundamental level antenna. Its unique high efficiency wideband design allows it to be tuned anywhere in the 144-174 MHz frequency range with a VSWR of 1.5:1 or better by sliding the ground plane up or down. Due to this versatility and very low intermodulation response, the JAG-GPX-150-0 is useful in a wide range of functions ranging from trunking, business, public safety, government and even armature radio plus endless other applications.

The JAG-GPX-150-0 is a unity gain omnidirectional antenna that can be mounted on a variety of structures such as wooden telephone poles, buildings, tower tops, mobile command vehicles, marine vessels to name a few.

The JAG-GPX-150-0 features a heavy-duty design constructed from 6061-T6 aluminum and stainless steel for lightweight resulting in all elements operating at DC ground potential for an almost lightning proof antenna. Features such as natural rubber plugs make sure the internal harness remains well protected from the elements ensuring years of trouble free operation.

The JAG-GPX-150-0, with its rugged construction, lightweight and ease of installation, is ideal for leased or rented system use. Its wideband design also makes it perfect to stock for re-use or re-sale.

## JAG-GPX-150-0 at a glance



Antenna pulled from shipping tube



Spread ground plane radials 90-deg apart



Slide ground plane assembly over feed cable and onto antenna

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

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IAG-GPX-150-0 Product Specification Sheet



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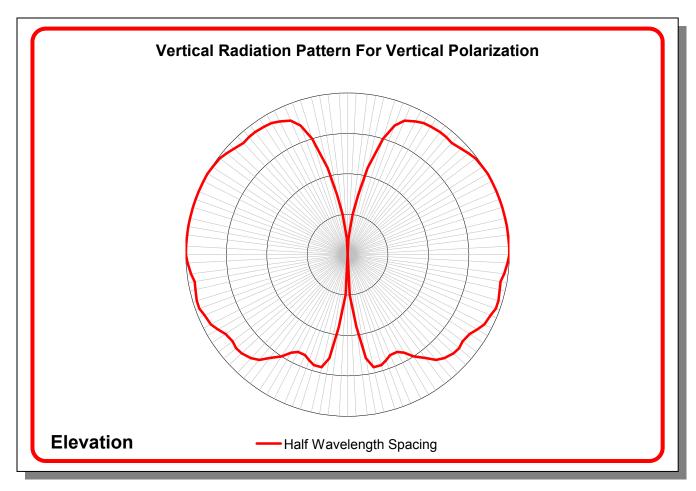
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**JAG-GPX-150-0** 



\* This is a general representation of the Jagy1 Series JAG-GPX-150-0 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 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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RF EMI Engineering Technology 26-1750 Creek Way Burlington, Ontario L7L 7E2 Canada

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

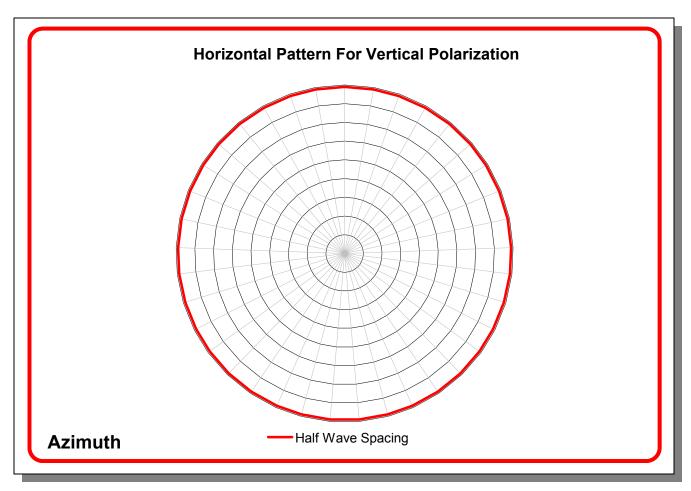
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**JAG-GPX-150-0** 



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#### Toronto:

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

Email: info@jagelectromagnetics.com

#### 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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JAG-GPX-150-0 Product Specification Sheel



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