



**JagyR Series**

**FOLDED DIPOLE**

**YAGI (HD Radome Enclosed)**

**403-430 MHz**



**Electromagnetics**

*"Quality is everything."*

**JAGY-415-7-RAD-HD**



- SCADA / Telemetry
- Government & Defense
- Arctic & Mountain Top Sites
- Land mobile networks
- Public security and safety
- Transportation networks
- Oil & Gas



JAGY-415-7-RAD-HD Product Specification Sheet.

Electrical Specifications		Mechanical Specifications		Environmental	
<b>Model</b>	<b>JAGY-415-7-RAD-HD</b>	<b>Model</b>	<b>JAGY-415-7-RAD-HD</b>	<b>Model</b>	<b>JAGY-415-7-RAD-HD</b>
Typical Frequency Range (MHz)	403 – 430	Length	inches (mm) 50 (1,270)	Survival Wind Velocity With no Ice	mph (km/h) 110 (177)
Bandwidth @ 1.5:1 VSWR or Better (MHz)	27	Width	inches (mm) 24 (609.6)	Survival Wind Velocity With Ice	mph (km/h) 80 (128)
Bandwidth @ 1.7:1 VSWR or Better (MHz)	36	Depth	inches (mm) 24 (609.6)		
Polarization	Vertical or Horizontal	Weight	lb (kg) 30 (13.6)* <small>*Value based on supplied antenna without clamps</small>	Maximum Allowable Radial Ice Buildup	inches (mm) 0.5 (12.7)
Radiation Pattern	Directional	Support Mast	No mast supplied* ** (See JAG pipes page for suitable masts) <small>*See JagyR Series application notes for details</small>	Equivalent Flat Plate Area	ft^2 (m^2) 5.36 (0.48)* <small>*Values based on no ice</small>
Nominal Gain (dBd)	9.5 – 10	Mounting Information	clamps supplied	Lateral thrust (100mph) 0 Radial Ice Buildup	lbs (N) 212 (942.8)
Nominal Horizontal 3dB Beamwidth (Deg)	50 – 60	Colour (Color)	FAA Orange & White	Torsional moment (100mph) 0 Radial Ice Buildup	ft-lbs (Nm) 224 (302.4)
Nominal Vertical 3dB Beamwidth (Deg)	38 – 48				
Front to Back Ratio (dB)	18 – 20	Pigtail (ft) & RF Connector	2 – 2.5 & 'N' Male	Bending moment (100mph) 0 Radial Ice Buildup	ft-lbs (Nm) 74 (99.9)
Maximum Average Power (Watts)	250	<small>Note: See JAG antenna options page for other connectors and pigtail lengths.</small>			
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.

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Issue: 1

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

Email: [info@jagelectromagnetics.com](mailto:info@jagelectromagnetics.com)  
Web: [www.jagelectromagnetics.com](http://www.jagelectromagnetics.com)  
Tel (905)-635-7437  
Fax (905)-332-8093



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



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403-430 MHz

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JAGY-415-7-RAD-HD

Features

- 5-year factory warranty (See page 3)
- Broadband (27 MHz)
- Suitable for SCADA radio systems
- Soldered internal joints
- Fiberglass and aluminum construction
- Optimal for arctic regions
- DC Grounded
- Stainless steel hardware
- Easy storage
- Ideal for mountain top sites
- Operation in harsh environments
- Fully weather sealed
- Side or tower top mountable
- JAG signature FAA orange & white
- Optional radome colors available
- Welded elements
- Horizontal or vertical polarization

Description

The JAGY-415-7-RAD-HD antenna has been developed to meet the need for a heavy-duty radome enclosed broadband premium quality directional antenna; providing 9.5 – 10 dBd gain with a low VSWR across the entire 403-430 MHz frequency band.

The JAGY-415-7-RAD-HD antenna consists of a 7-element yagi of exceptional durability and performance enclosed in a HD RF matched fiberglass radome. The reflector and director elements are welded to the boom, which maintain excellent electrical continuity and make the antenna less intermod prone.

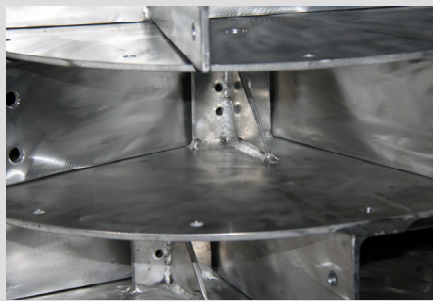
The JAGY-415-7-RAD-HD antenna is suitable for tower top or side mounting. A heavy duty clamp kit is also supplied with this antenna.

Enclosing the yagi inside a rugged fiberglass radome makes this antenna virtually immune to the detrimental effects of severe snow and ice build up where a traditional yagi may become detuned. This makes the JAGY-415-7-RAD-HD a desirable choice for sites that experience extreme snow and ice conditions and where maintaining a clear signal path is crucial.

JAGY-415-7-RAD-HD at a glance



JAG signature FAA orange & white heavy-duty tapered fiberglass radome with smooth finish



Extra heavy-duty fully welded aluminum back plate offers exceptional structural support for radome



Radome sized for 7-element UHF yagi

JAGY-415-7-RAD-HD Product Specification Sheet.

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

Email: [info@jagelectromagnetics.com](mailto:info@jagelectromagnetics.com)  
Web: [www.jagelectromagnetics.com](http://www.jagelectromagnetics.com)  
Tel (905)-635-7437  
Fax (905)-332-8093



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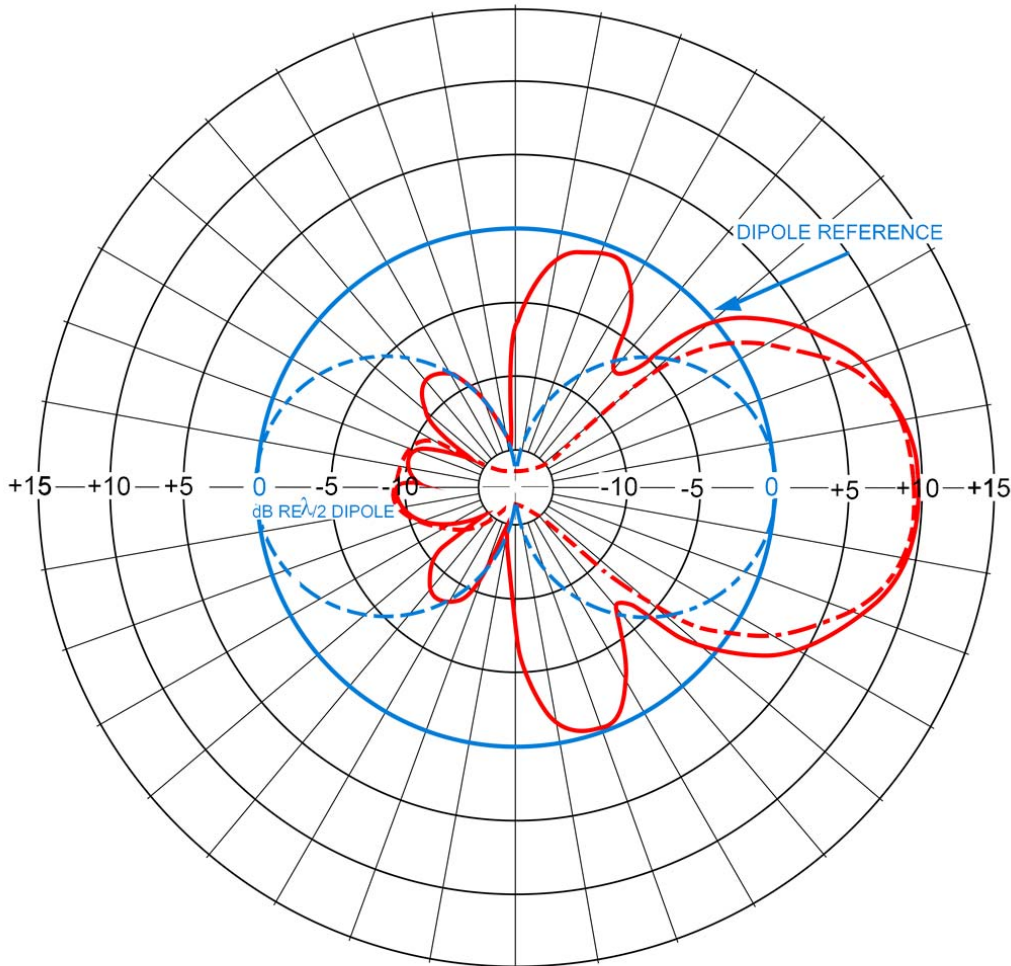
403-430 MHz



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JAGY-415-7-RAD-HD



\* This is a general representation of the JagyR Series JAGY-415-7-RAD-HD antenna radiation pattern.

JAGY-415-7-RAD-HD Product Specification Sheet.

### 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.

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

Email: [info@jagelectromagnetics.com](mailto:info@jagelectromagnetics.com)  
 Web: [www.jagelectromagnetics.com](http://www.jagelectromagnetics.com)  
 Tel (905)-635-7437  
 Fax (905)-332-8093



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