PRODUCT: Embedded ISM 868 MHz

Part No. 1001826

Prestta[™] Standard ISM Antenna 868-870 MHz

ethertronics[•]



Ethertronics' Prestta series of Isolated Magnetic Dipole™ (IMD) embedded antennas address the challenges facing today's product designers. IMD's high performance and isolation characteristics offer better connectivity and minimal interference. Prestta antennas can be used in a variety of applications including:

- M2M
- Automotive
- Automatic Meter Reading
- Healthcare
- Point of Sale
- Tracking

TECHNOLOGY ADVANTAGES



Stays in Tune

IMD antenna technology provides superior RF field containment, resulting in less interaction with surrounding components. Ethertronics IMD antennas **resist de-tuning**; providing a robust radio link regardless of the usage position.

Prestta antennas use patented IMD technology in a stamped metal configuration to provide high performance. IMD antennas requires a smaller design keep-out area, carry lower program development risk which yields a quicker time-to-market, without sacrificing RF performance.



KEY BENEFITS

DESIGN ADVANTAGES

Reduced Costs and Time-to-Market

 Standard antenna eliminates design fees and cycle time associated with a custom solution; getting products to market faster.

Greater Flexibility with Unique Form Factors

- Ethertronics' IMD technology helps you deliver more advanced ergonomic designs without adverse impact on product performance.
- SMD mountable design enables faster and lower cost manufacturing.

RoHS Compliant

• Ethertronics' antennas are fully compliant with the European RoHS Directive 2002/95/EC.

END USER ADVANTAGES

Unique Form Factors Support Advanced Industrial Designs

• Smaller, more efficient IMD embedded antennas break through restrictive design rules and provide new freedom in component placement.

Superior Range

• Better antenna function means longer range and greater sensitivity to critically precise signals—delivering greater customer satisfaction while building brand loyalty.

SERVICE AND SUPPORT

Extensive RF Experience

• Our Prestta antennas are supported by documentation, and when needed, by the expertise of RF engineers who have integrated hundreds of antenna designs into wireless devices.

Global Operations & Design Support

• Ethertronics' global operations supports an integrated network of design centers that can take projects from concept to production.

⁵⁵⁰¹ Oberlin Drive, Suite 100, San Diego, CA. 92121, USA www.ethertronics.com Tel +(1) 858.550.3820 | fax +(1) 858.550.3821 | contact: info@ethertronics.com

PRODUCT: Embedded ISM 868 MHz – P/N 1001826 Example: Ethertronics' ISM868/915 Internal (Embedded) Antenna Specifications.

Below are the typical specs for a ISM application (subject to change).

Electrical Specifications Typical Characteristics		868 MHz
Measurements taken with a match- ing circuit on a 50 x 110 mm ground plane.	Peak Gain	0 dBi
	Average Efficiency	45%
	Return Loss	< -15 dB
	Feed Point Impedance	50 ohms unbalanced (other if required)
	Power Handling	2 Watt CW
	Polarization	Linear
		24.0.70.00
Mechanical Specifications	Maximum Dimensions	34.0 x 7.0 x 0.8 mm
	Connector type	U.fl compatible connector
	Cable	100mm cable length, diameter 1.13mm
Typical Efficiency in %	70%	
	60%	
	0070	
	50%	

40%

30%

20%

10%

0%

860

Efficiency



865

870

Freq in MHz

ETHERTRONICS

5501 Oberlin Drive, Suite 100, San Diego, CA. 92121, USA www.ethertronics.com Tel +(1) 858.550.3820 | fax +(1) 858.550.3821 | contact: info@ethertronics.com

875

880

PRODUCT: Embedded ISM 868 MHz - P/N 1001826

Antenna Radiation Patterns @ 868 MHz

Typical Performances on 100x65mm Ground Plane





© 2013 Ethertronics. All rights reserved. Ethertronics, the Ethertronics logo, shaping antenna technology, Prestta, Isolated Magnetic Dipole and the iMD logo are trademarks of Ethertronics. All other trademarks are the property of their respective owners. Specifications subject to change and are dependent upon actual implementation. 1001826 1May2013