



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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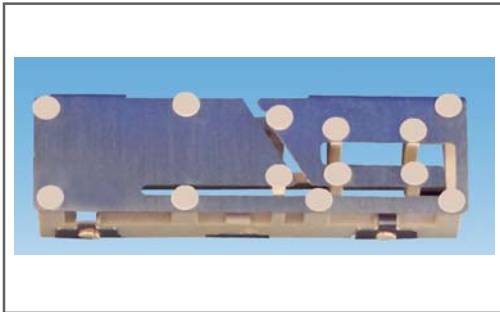
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## Presta™ Standard Penta-Band Cellular Embedded Antenna

850/ 900/ 1800/ 1900/ 2100 MHz



Ethertronics' Presta 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. Presta 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.

Presta 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.

##### 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.

##### Faster Data Rates

- Improved performance also means faster data rates for receiving critical data.

#### SERVICE AND SUPPORT

##### Extensive RF Experience

- Our Presta 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.

## PRODUCT: Cellular

### Example: Ethertronics' Penta-Band Internal (Embedded) Antenna Specifications.

Below are the typical specs for a Penta-Band application.

#### Electrical Specifications

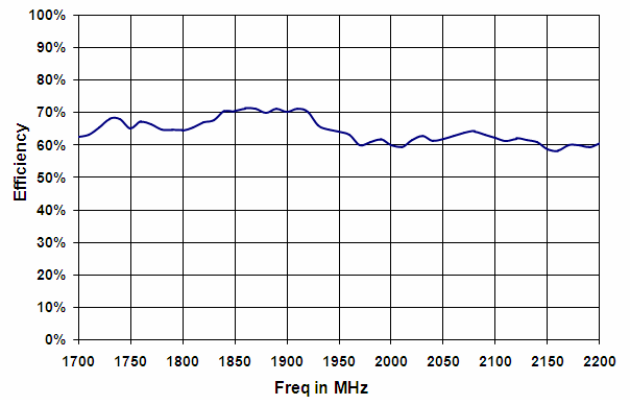
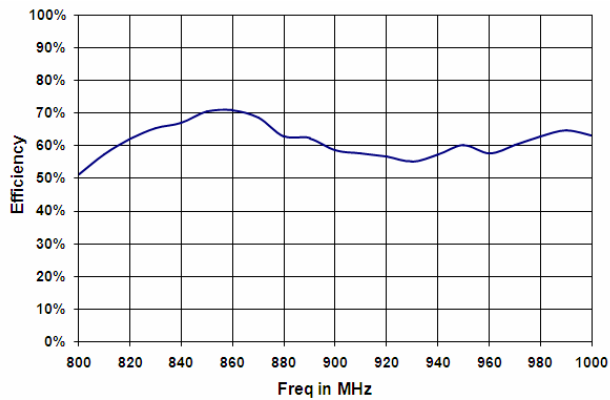
Typical Characteristics  
(PCB: 50 x 110 mm)

Cellular Antenna	824-849, 869-894	880-915, 925-960	1710-1785, 1805-1880	1850-1910, 1930-1990	1920-1980, 2110-2170
Peak Gain	1.4 dBi	1.2 dBi	2.7 dBi	2.6 dBi	2.8 dBi
Average Efficiency	62%		66%		
VSWR Match	2.5:1 max				
Feed Point Impedance	50 ohms unbalanced (other if required)				
Power Handling	2 Watt cw				
Polarization	Linear				

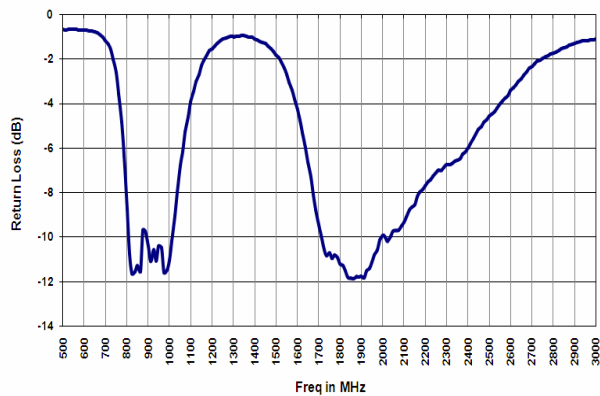
#### Mechanical Specifications

Maximum Dimensions	42.5 x 12.7 x 8.1 mm
Mechanical Mounting	Metal on plastic carrier. Antenna Assembly is SMD attached to main PCB.
RF Mounting	RF and Ground feed pads are SMD attached to main PCB.

#### Typical Efficiency



#### Typical Return Loss



Antenna Radiation Patterns

Typical Performance

Ethertronics' Test Board  
PCB: 50x110mm

