

Part No. P822601

Prestta™ Standard Octa-Band Cellular Embedded Antenna 700/750/850/900/1800/1900/2100/2700 MHz



Prestta™ IMD Antennas M2M / Automotive / IoT

Cellular LTE

KEY BENEFITS

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.

APPLICATIONS

- M2M
- Automotive
- Healthcare
- Point of Sale
- Tracking

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.

Stays in Tune

IMD antenna technology provides superior RF field containment, resulting in less interaction with surrounding components. Ethertronics IMD antennas resist detuning; 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.

Electrical Specifications

Measurements taken with a matching circuit on a 140x50mm ground plane.

LTE Cellular Bands (MHz)	700 ~ 746	746 ~ 787	824 ~ 896	880 ~ 896	1710 - 1880	1850 ~ 1990	1920 ~ 2170	2500 ~ 2700
Peak Gain	1.1 dBi	1.7 dBi	1.8 dBi	2.2 dBi	3.9 dBi	3.8 dBi	3.4 dBi	3.6 dBi
Average Efficiency	56 %	67%	68%	68%	75%	68%	72%	54%
VSWR Match	VSRW < 2.5:1 over the whole frequency range							
Power Consumption	2 Watt CW							
Feed Point Impedance	50 Ohms unbalanced							

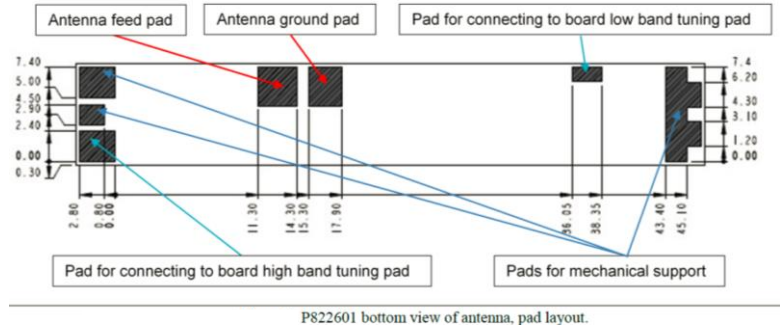
Mechanical Specifications

Dimensions	50.0 x 8.0 x 3.2 mm (L x W x T)
Variant	P822602 : Mirrored version of P822601
Mechanical Mounting	RF and Ground feed pads are SMT attached to main PCB
Weight	2.63 grams
RF Mounting	RF and Ground feed pads are SMD attached to main PCB
Packaging	Tape & Reel



Cellular LTE Ethertronics' Octa-Band Internal (Embedded) Antenna Specifications.

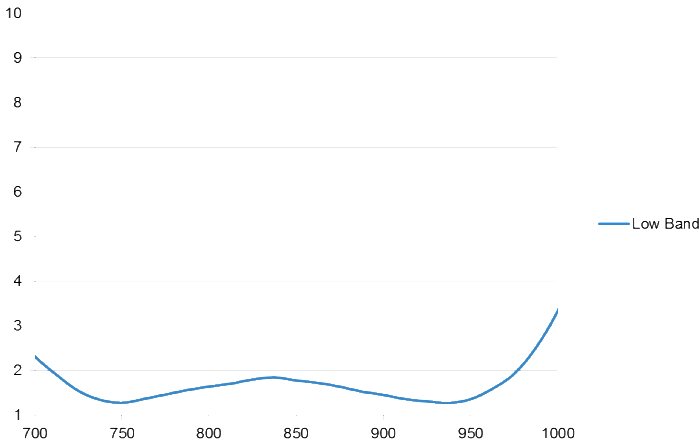
Mechanical dimensions and pads layout



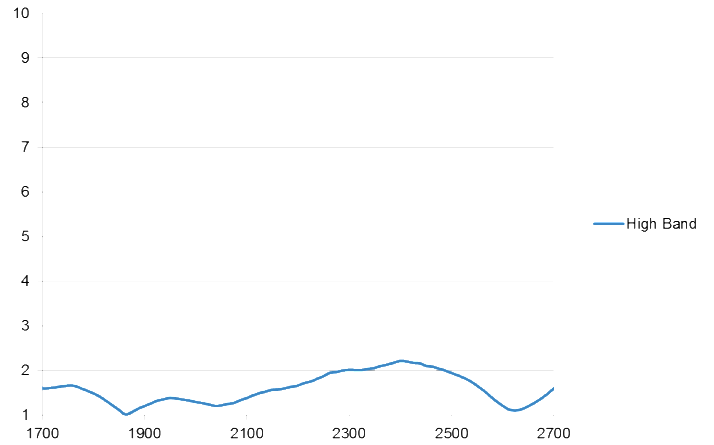
P822601 bottom view of antenna, pad layout.

Typical VSWR

Low Band

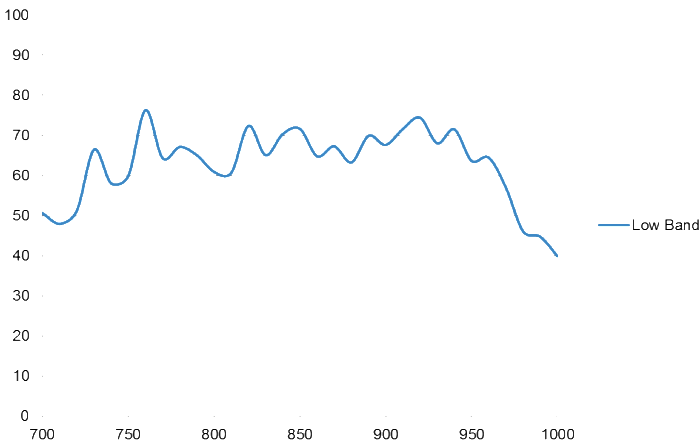


High Band

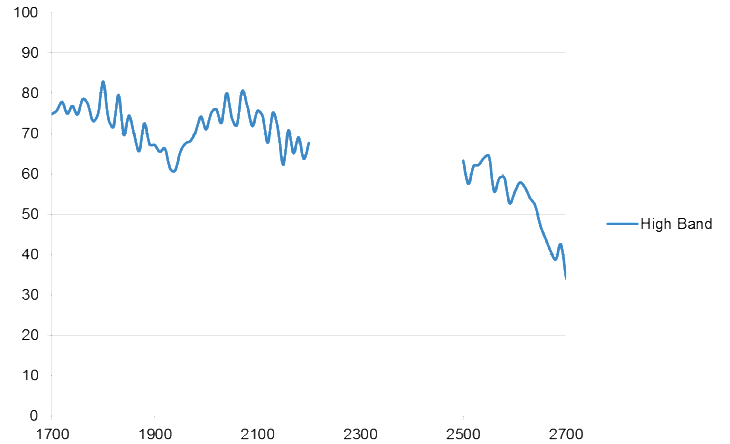


Typical Efficiency

Low Band



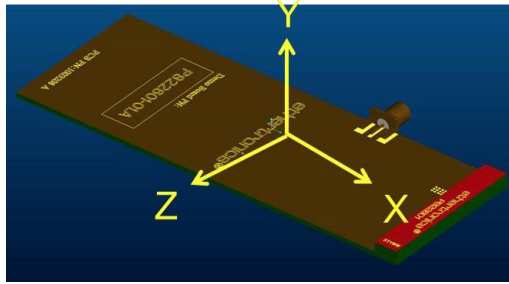
High Band



*All dimensions provided in this document are for informational purposes only.

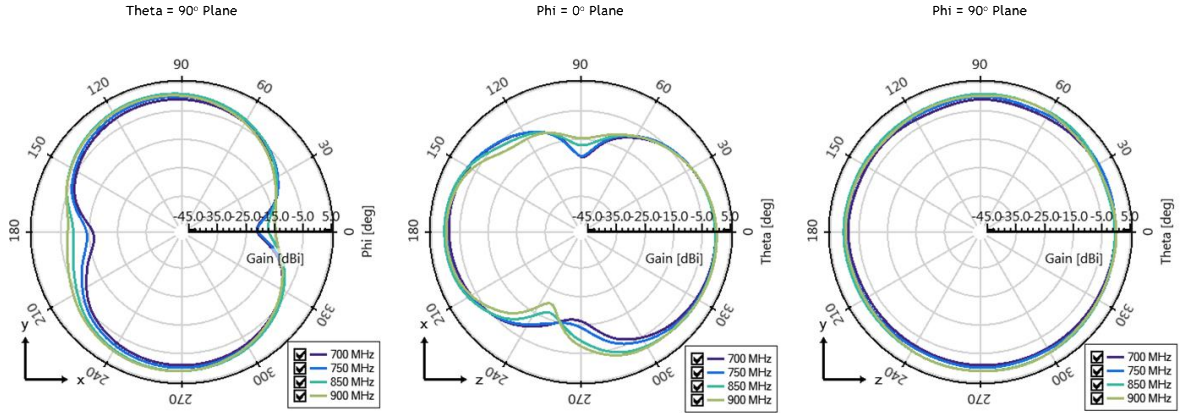
Antenna Radiation Patterns

Typical Performance
Ethertronics' Test Board
PCB: 50x140 mm



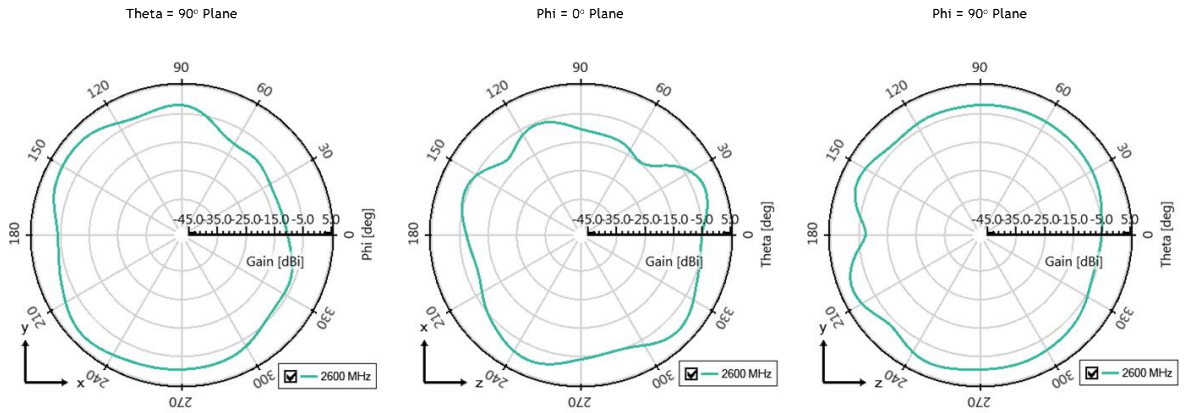
Low Band

700 MHz
750 MHz
850 MHz
900 MHz



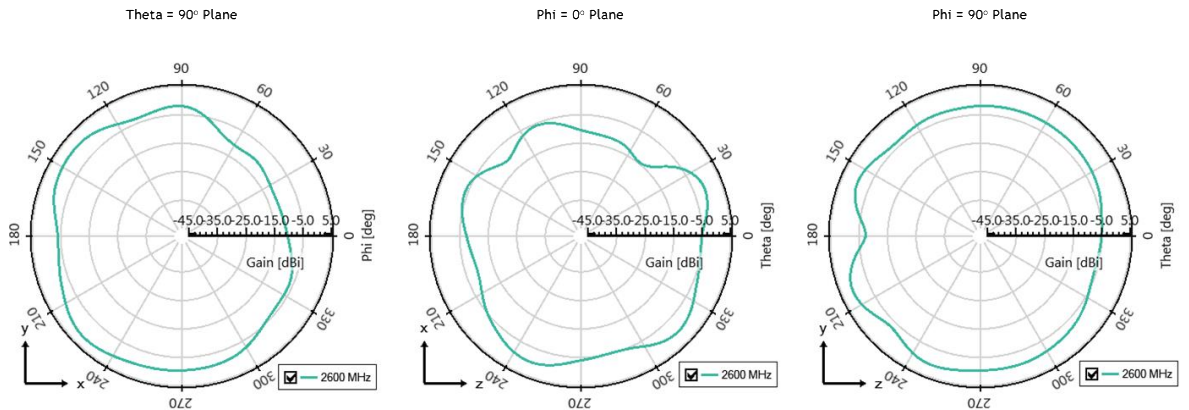
High Band

1800 MHz
1900 MHz
2100 MHz



High Band

2600 MHz



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