

## WPANT10014

### Micro-Hepta Antenna



### Application

An ideal embedded cellular antenna solution for M2M wireless applications. This high efficiency antenna is specifically designed to meet PTCRB requirements even in very high noise and high voltage applications.

We can assist your engineers to optimize mounting positions for these antennas in your specific application and can further assist to trouble shoot system integration issues such as TRP/TIS and FCC requirements. We specialize in developing customized Antenna solutions. Please contact [sales@worldproducts.com](mailto:sales@worldproducts.com) with your specific application requirements.

### Electrical Properties

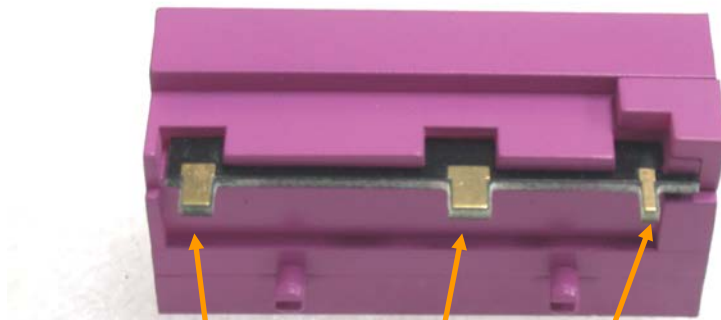
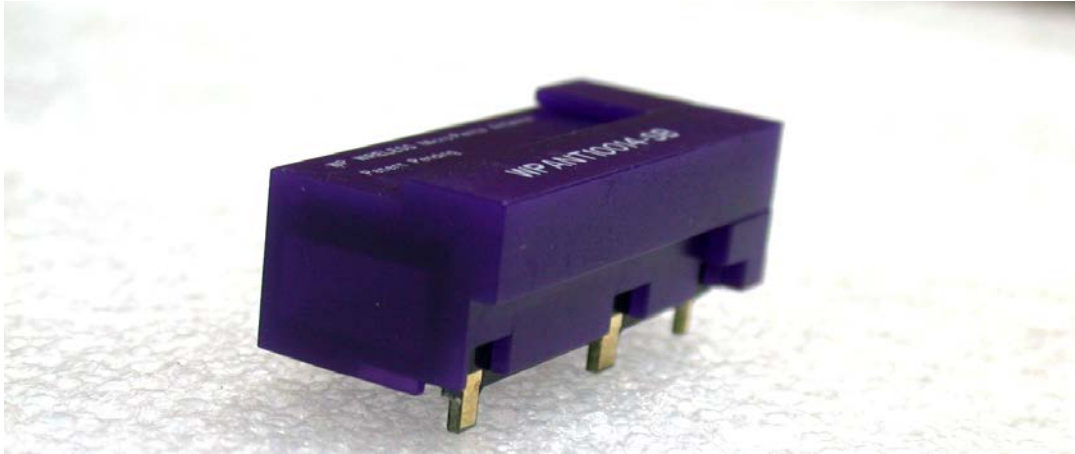
<b>Operating Frequency</b>	824 – 960 MHz	1567 – 1583 MHz	1710 – 2170 MHz	2400 – 2500 MHz
<b>Approximate Antenna Impedance [Ω]</b>	50Ω	50Ω	50Ω	50Ω
<b>VSWR (Typical)</b>	< 2.5:1	< 3:1	< 2.5:1	< 3:1
<b>Peak Gain [dBi] (Typical)</b>	2 dBi	1 dBi	2.5 dBi	4 dBi
<b>Efficiency [%] (Typical)</b>	75 %	60%	70 %	70 %
<b>Polarization</b>	Linear or Elliptical			
<b>Pattern</b>	Near Omni Directional			

<sup>\*</sup>Note: The above mentioned relevant performance metrics are recorded with the Antenna installed on World Products Inc. Test Evaluation boards. These Evaluation boards mimic the customer's circuit board in general. The Antenna has enough bandwidth to accommodate for minor tuning issues when installed on the client's actual circuit boards. In case of discrepancy, WPI engineers will assist the clients in designing proper matching circuit design.

### Mechanical / Environmental Properties

<b>Antenna Dimensions</b>	1.5" x 0.67" x 0.52" (37.3mm x 17mm x 13.25mm)
<b>Antenna Color</b>	Purple / Eggplant
<b>Materials</b>	UL 94-V compliant
<b>Operating / Storage Temperature</b>	-40°C to +125°C
<b>Environmental</b>	Meets standards for UL 94V-0
<b>Hazardous Materials</b>	RoHS Compliant

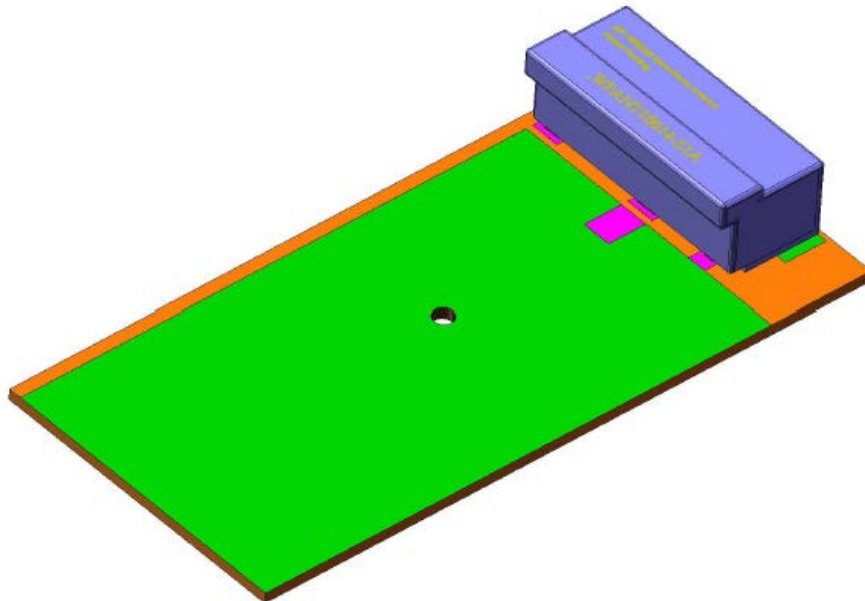
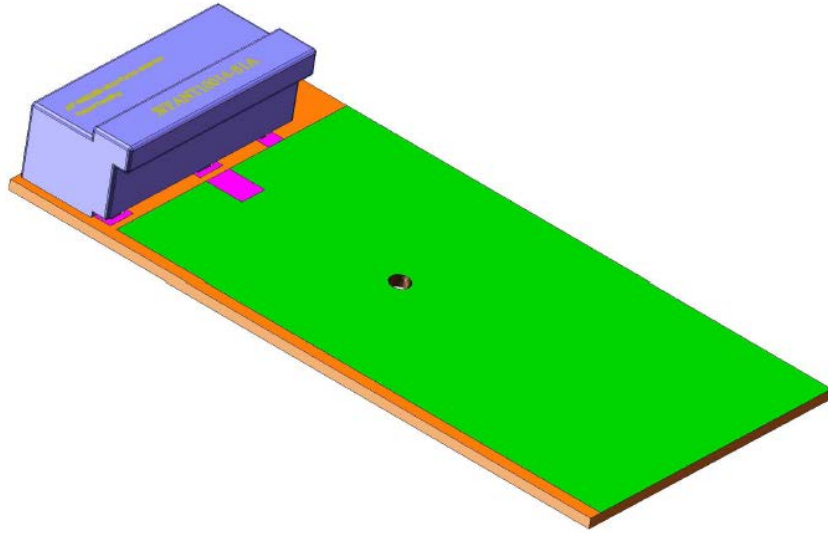
## Pictures



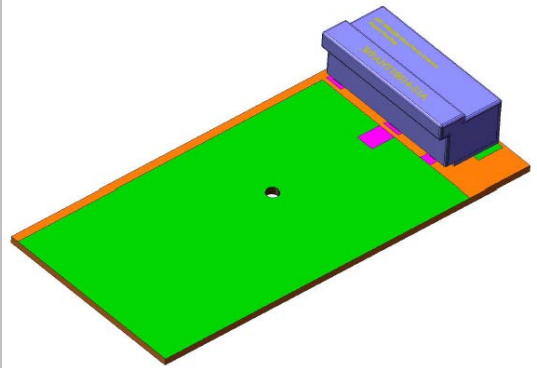
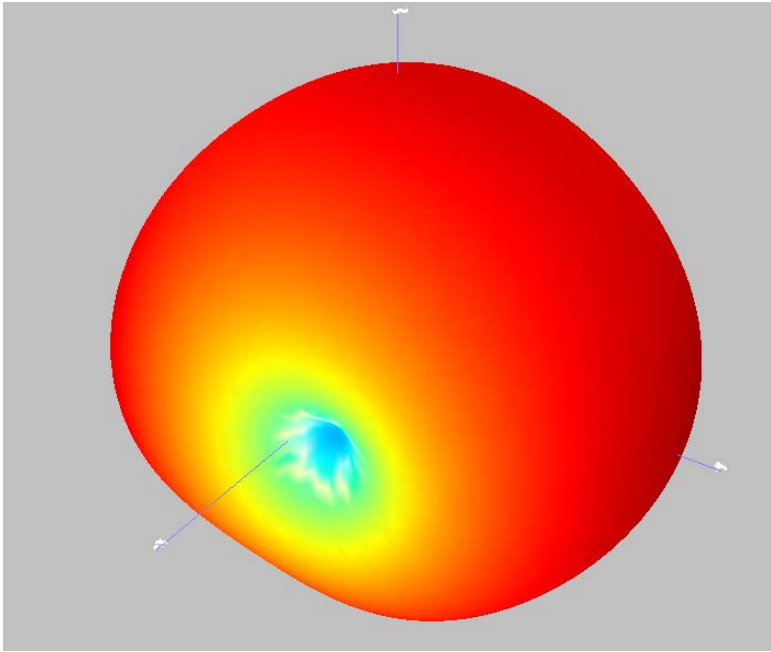
Mounting Legs

**Note:** There is no need for any additional Cables or Connectors. This eliminates the possibility of additional overhead for the Clients. Antenna and all the rest of the Evaluation boards are connected together through Soldering.

Antenna Placement on a Circuit Board (62 mils thick FR4 Standard WPI Evaluation Boards)



Antenna 3D Radiation Pattern in Lower Frequency Band (Antenna Placement shown)



Antenna 3D Radiation Pattern in Higher Frequency Band (Antenna Placement shown)

