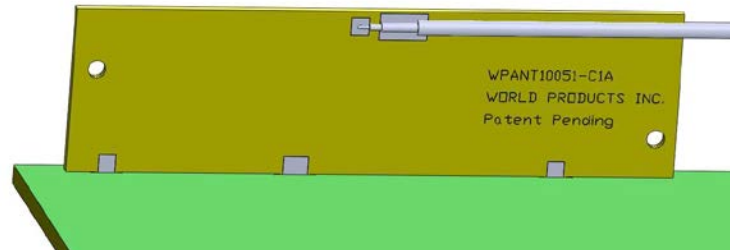


## WPANT10051-C1A

### 2.4 GHz Wi-Fi Horizontally Polarized Embedded Antenna



Note: 3D Drawing shown.

### Description / Application

This antenna has a very thin & sleek profile, and can easily be installed inside any wireless device. It has a **Horizontally Polarized** near-Omnidirectional radiation pattern. Good efficiency and ease of integration make this an ideal choice for applications where space is a constraint.

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

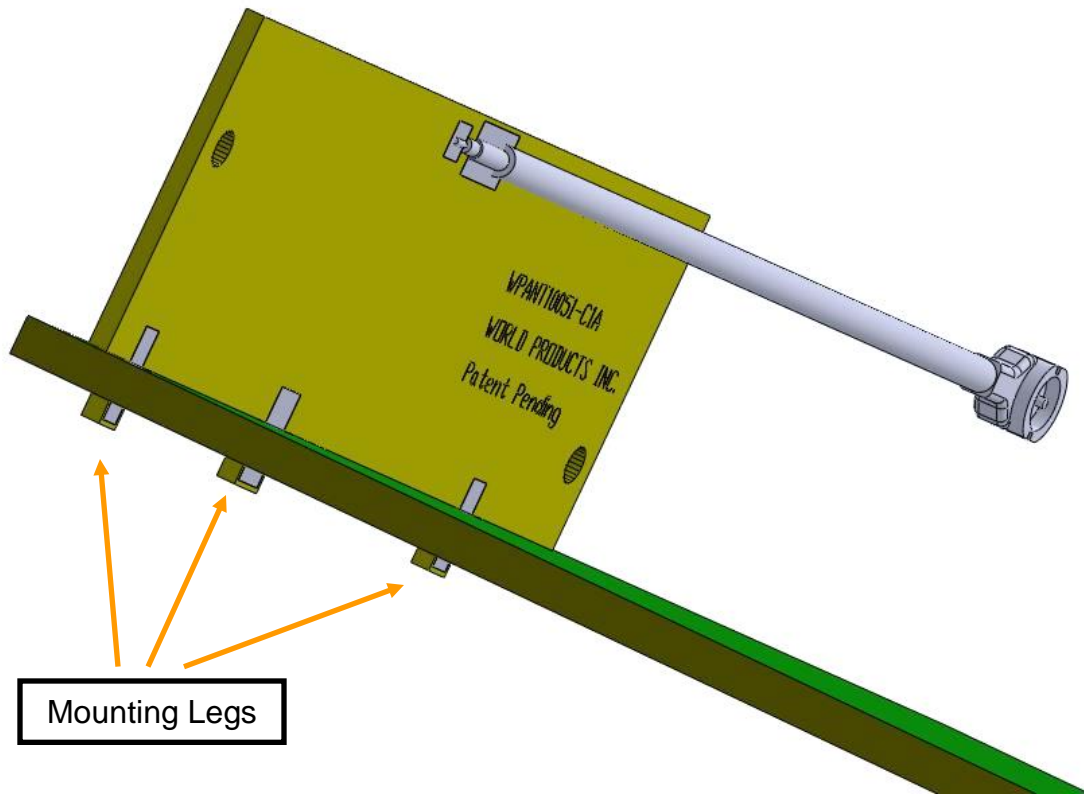
<b>Operating Frequency*</b>	2.4 – 2.5 GHz
<b>Approximate Antenna Impedance [Ω]</b>	50Ω
<b>VSWR – Typical*</b>	< 2:1
<b>Peak Gain [dBi] (Typical)*</b>	2.5 dBi
<b>Efficiency [%] (Typical)*</b>	65 – 80 %
<b>Polarization</b>	Linear (Horizontal)
<b>Pattern</b>	Near Omni-directional

**\*Note:** These performance metrics were recorded with the Antenna installed on WPI test Evaluation Board. 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.

### Mechanical / Environmental Properties

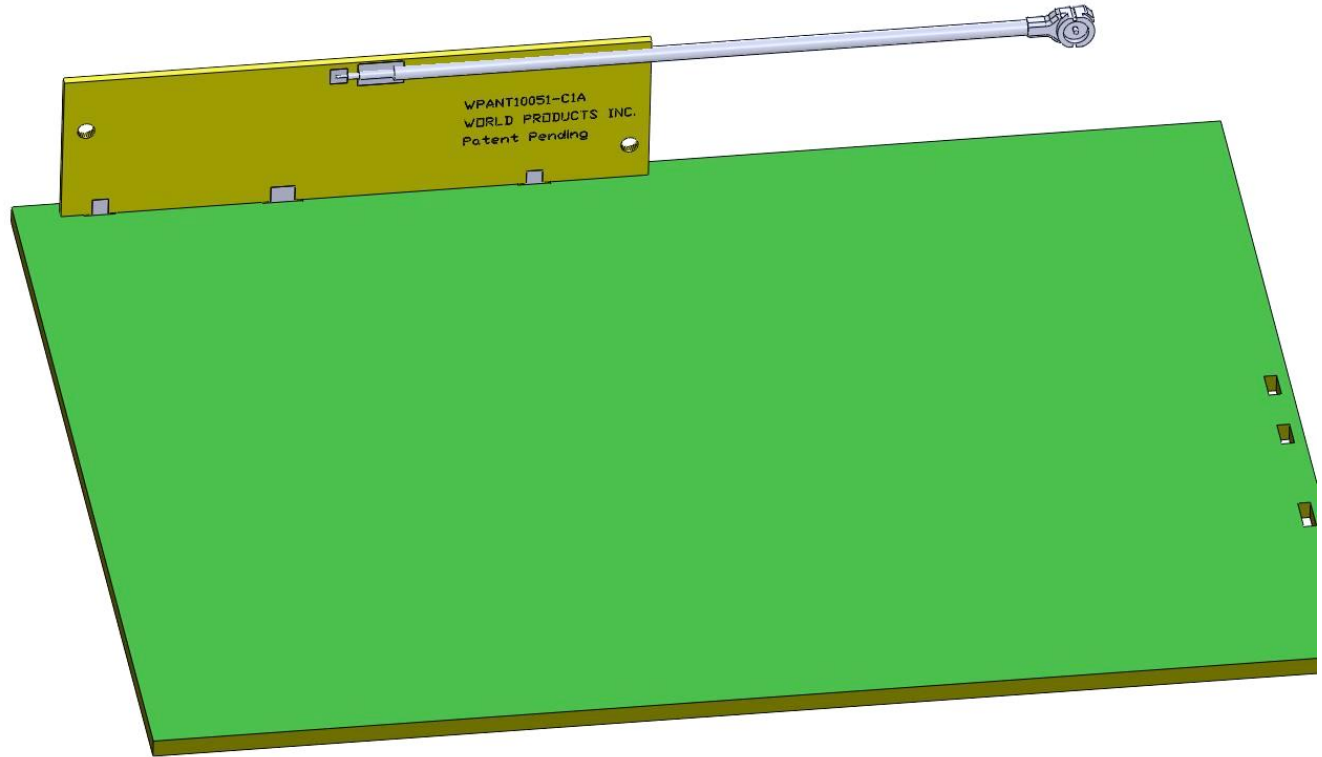
<b>Antenna Dimensions</b>	2" X 0.55" X 0.031" (51mm X 14mm X 0.79mm)
<b>Antenna Color</b>	Black
<b>Cable</b>	60mm long 1.32mm dia micro-coax U.FL
<b>Connector</b>	IPX / Hirose equivalent
<b>Operating / Storage Temperature</b>	-40°C to +90°C
<b>Environmental</b>	Meets standards for UL 94V-0
<b>Hazardous Materials</b>	RoHS Compliant

### Pictures of the Antenna (3D Drawings)

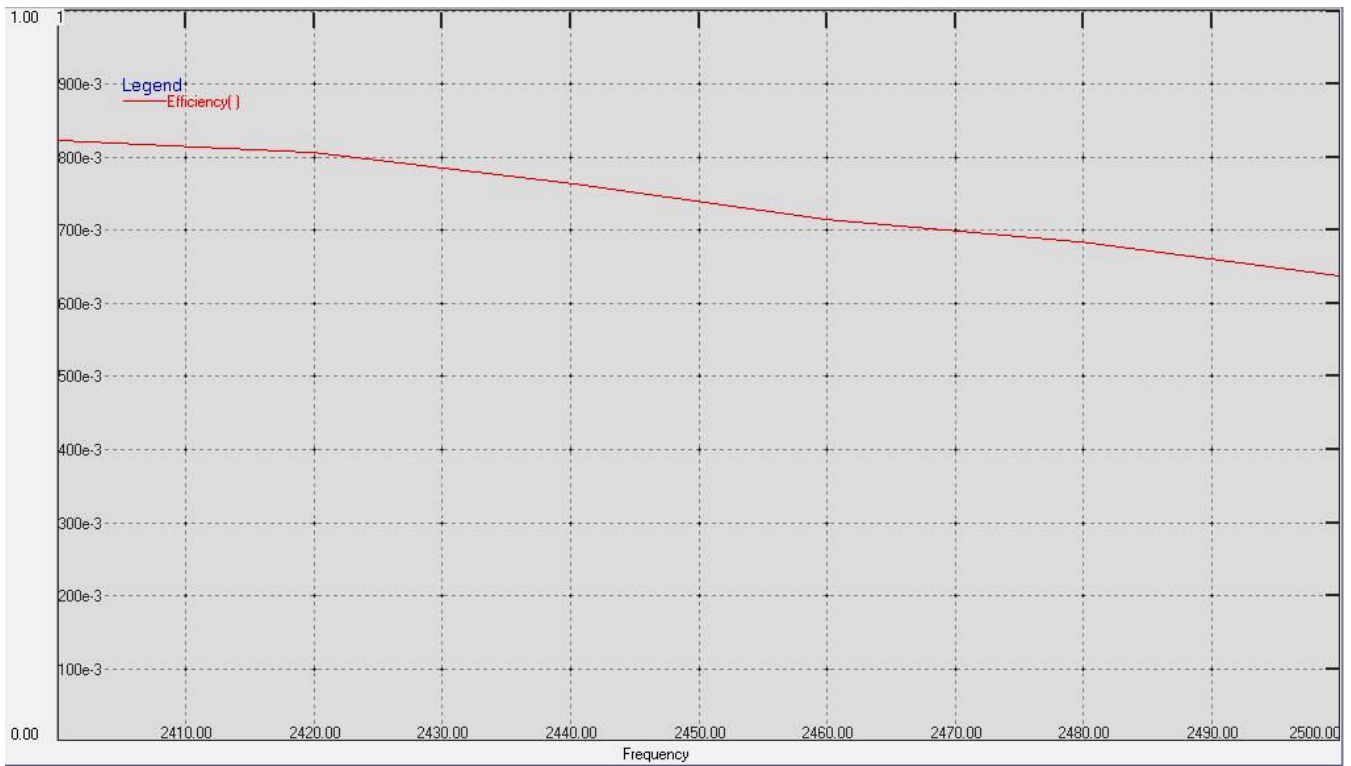


**Note:** There is no need for any additional Cables or Connectors. This eliminates the possibility of additional overhead for the Clients. Antenna is soldered directly in place on the Eval board.

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



### Total Radiation Efficiency of the Antenna in % (including VSWR losses)



Peak Gain of the Antenna in dBi

