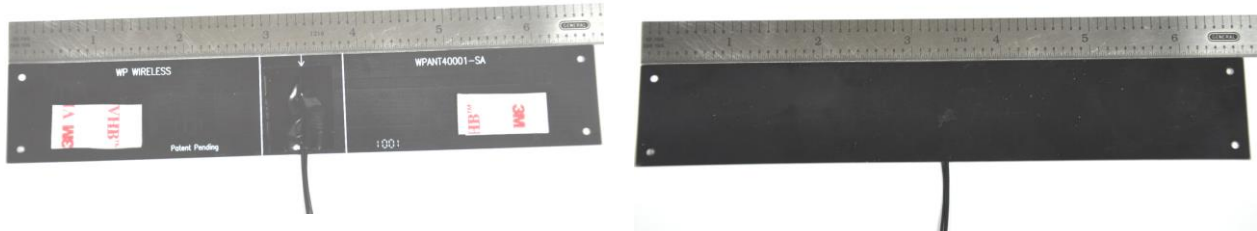


## WPANT40001-SC1

### 850/1900 MHz Dual-band Cellular Wrap-Around AMI Antenna



### Description / Application

This is a standard WPI antenna, designed for Metering applications that operate in US Cellular band. The antenna is designed such a way that it performs optimum when it is wrapped around a meter's surface, as shown in the pictures in the following pages. It is designed to operate with healthy efficiency figures in both 824-894 MHz & 1850-1990 MHz bands, in spite of the heavy interference (Noise/ RF blockage) inside of a typical meter. The antenna, if installed right, can provide best Signal / Noise figure for the overall RF system. This particular configuration of the antenna comes with a 200mm 1.13mm dia micro co-ax cable and an IPX / Hirose equivalent connector.

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

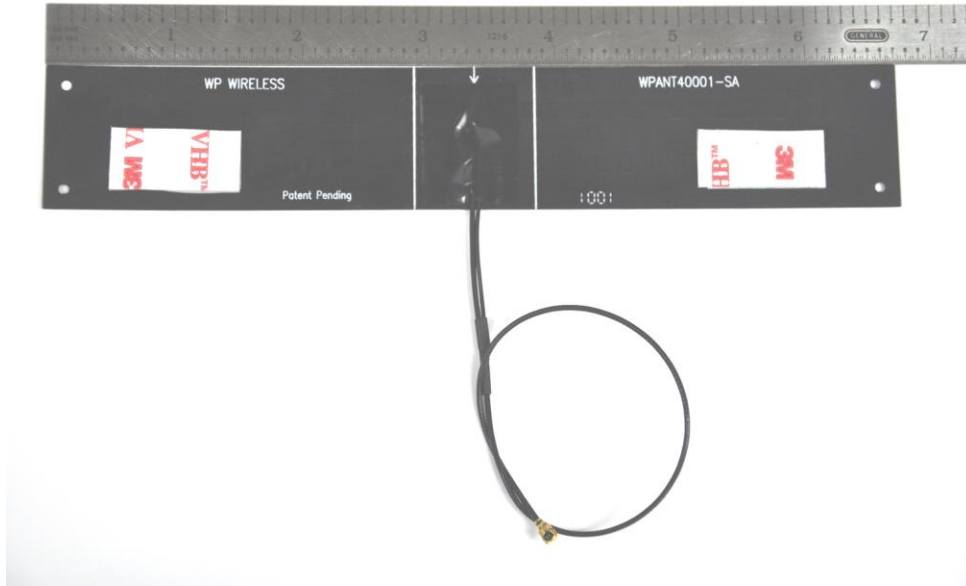
<b>Operating Frequency</b>	824 – 960 MHz	1850 – 1990 MHz
<b>Approximate Antenna Impedance [<math>\Omega</math>]</b>	50 $\Omega$	50 $\Omega$
<b>VSWR – Typical*</b>	< 2.5:1	< 2.5:1
<b>Peak Gain [dBi] (Typical)*</b>	1.5 to 2.5 dBi	2.5 to 3.5 dBi
<b>Efficiency [%] (Typical)*</b>	~ 65 %	~ 60 %
<b>Polarization</b>	Linear	Linear
<b>Pattern</b>	Near Omni-directional	Near Omni-directional

\*Note: The above mentioned relevant performance metrics are recorded with the Antenna wrapped around (installed) the meter's surface, inside the upper plastic cap/drum.

### Mechanical / Environmental Properties

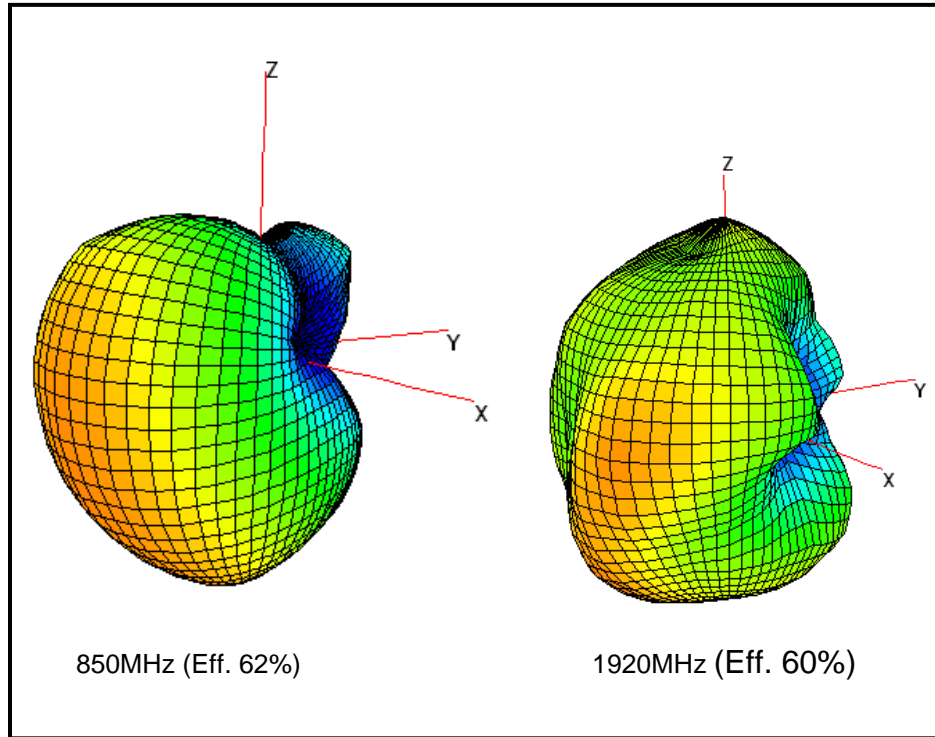
<b>Antenna Dimensions</b>	6.7" X 1.2" X 10mils (170mm X 29.5mm X 0.25mm)
<b>Antenna Color</b>	Black
<b>Cable</b>	7.9" long (from the edge of the PCB) 1.13mm dia Micro Co-ax U.FL
<b>Connector</b>	IPX / Hirose equivalent
<b>Tape</b>	0.64mm thick Standard 3M double stick
<b>Operating / Storage Temperature</b>	-40°C to +90°C
<b>UV Tolerance</b>	100% UV Resistant
<b>Environmental</b>	Meets standards for UL 94V-0
<b>Hazardous Materials</b>	RoHS Compliant

**Pictures of the Antenna (by itself and as installed on a typical Electric Utility Meter)**





### 3D Radiation Pattern of the Antenna – as installed on the Meter



Note: The 3D Gain pattern and efficiency shown above is as measured with the antenna mounted on a particular GE meter at 3'O Clock position.