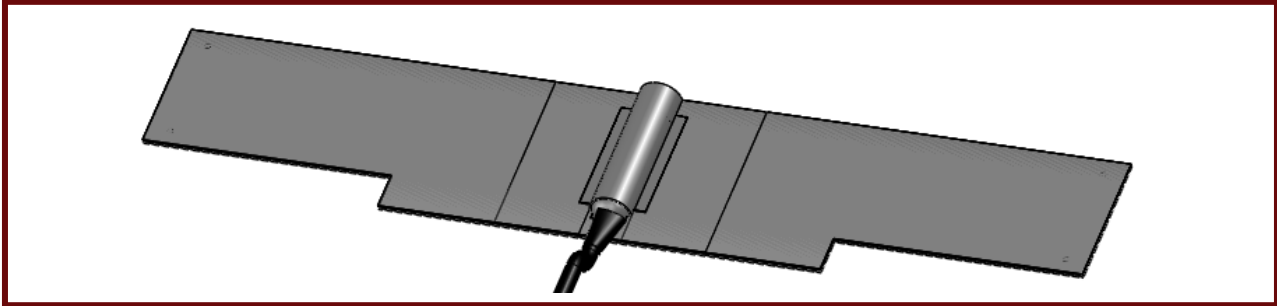




Picture of the Part



Application

The WPANT40015-CB antenna is an aesthetic, efficient coupler antenna for Electric Meters that operates in both 900 MHz and 2.4 GHz ISM Bands. This Antenna works properly on any typical Electric Meter. Standard cable is RG316/RG174 & Straight Type N Female connector.

WP Wireless 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. Please contact sales@wp-wireless.com with your specific application requirements.

Electrical Properties

Parameter	Dual Band Antenna Performance	
	ISM 915 MHz	ISM 2.4 GHz
Operating Frequency [GHz]*	902 ~ 928MHz	2.40 ~ 2.50GHz
Recommended Impedance of the customer Radio Module[Ω]	50 Ohms	
VSWR installed on GE meter*	< 3:1	<3:1
Peak Gain [dBi] (Typical)*	0 to 3 dBi	2 to 3.5 dBi
Efficiency (in %)*	40 to 60 %	40 to 65 %
Polarization	Linear	
Pattern	Near Omni-Directional	
Accepted Power [W] (Max)*	2 watts (+33dBm)	

***Note:** The above mentioned relevant performance metrics are recorded, with the Antenna placed on a typical meter cap/drum.

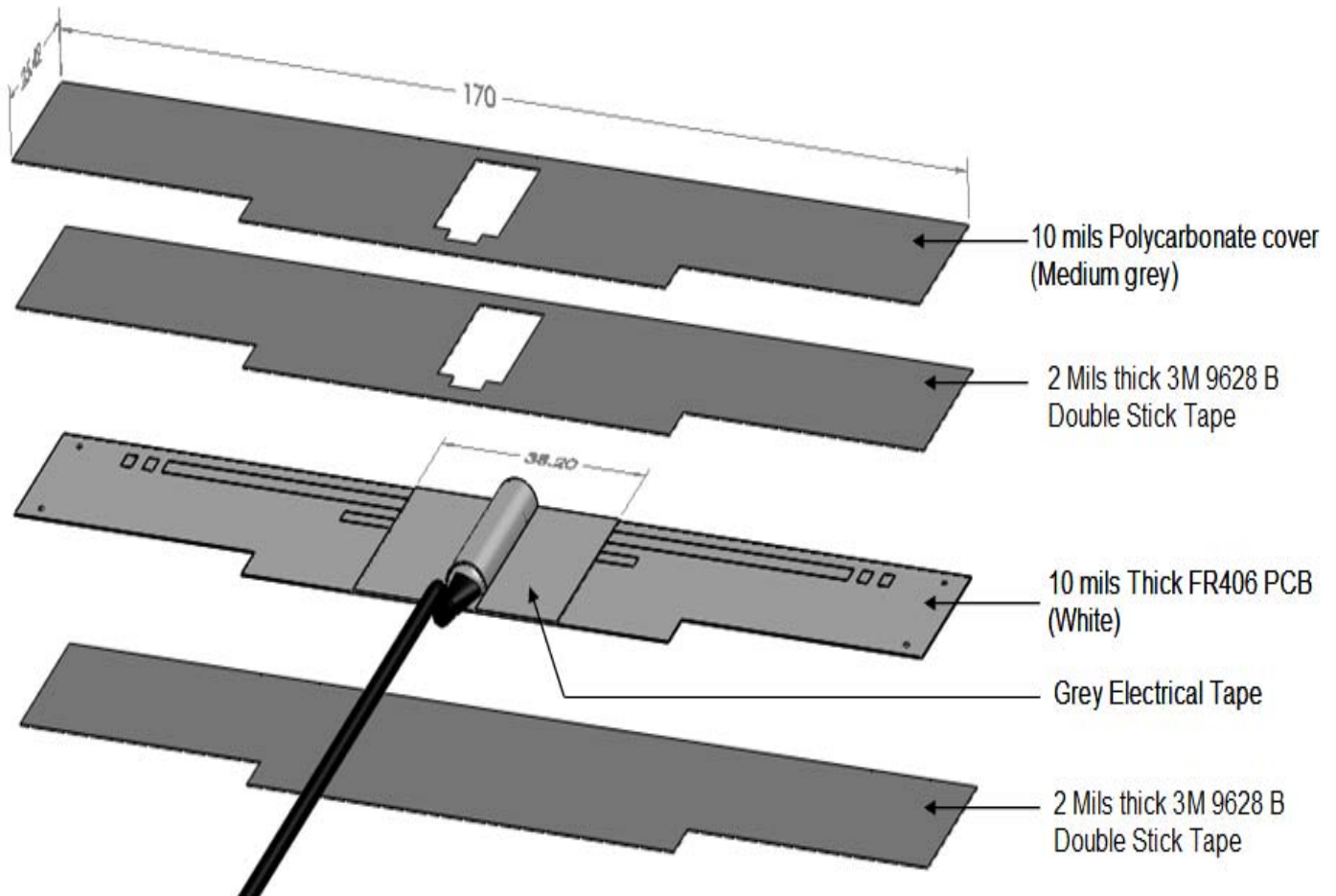


Mechanical/Environmental Properties

Item	Value
PCB Size	170mm X 32.42mm X 0.25mm
PCB	UL 94-V compliant
PCB Color	10 mils thick, White
Polycarbonate Cover	10 mils thick, Medium Grey
Cable Type	17.5-18" RG316/RG174, Black Color
Connector Type	Type N Female
Operating / Storage Temperature	-40°C to +90°C
Humidity	<75% RH
Pull Strength	Max 1.5Kg/ft
Shock & Vibration	Complies with IEC61169-36 & MIL-STD-202
Environmental	Meets standards for UL 94V-0
Hazardous Materials	RoHS compliant

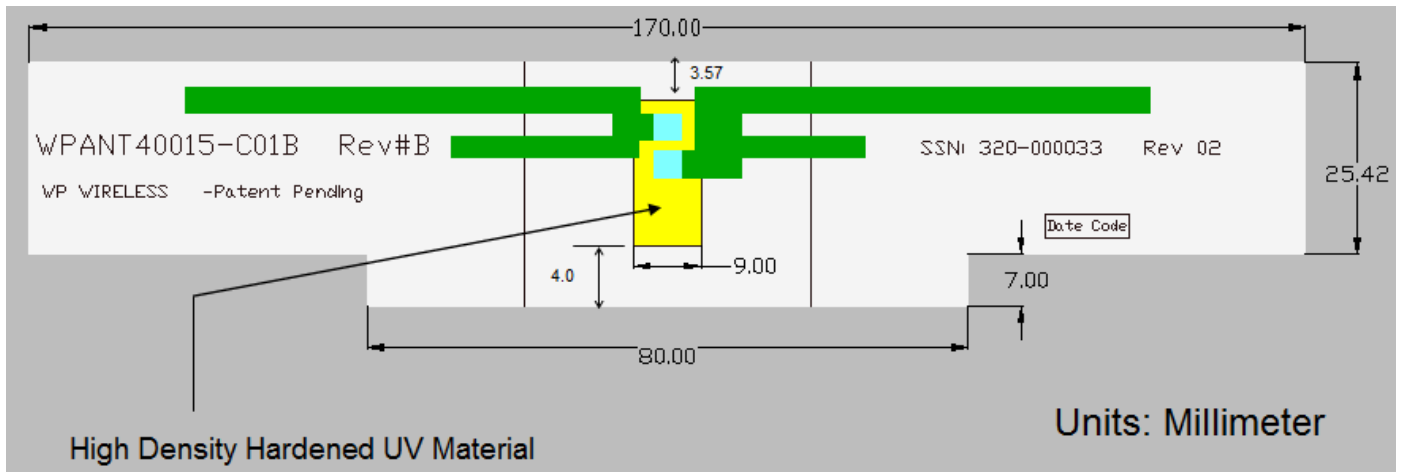


Drawings of the Antenna



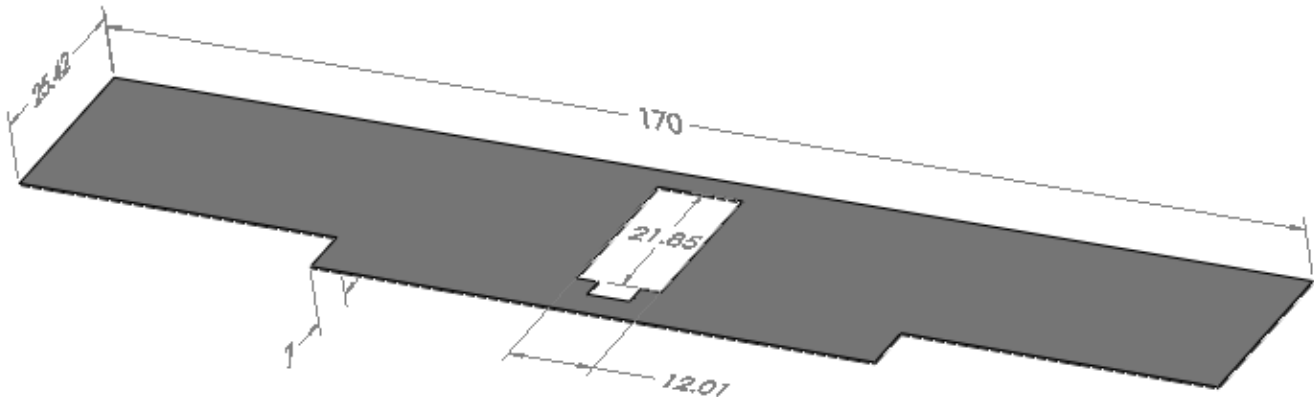


PCB FRONT SIDE VIEW



Note: UV Material will not contain any Carbon or Metallic content in it.

10 Mils thick Polycarbonate Cover (Medium Grey)



Note: Artwork will be supplied by PG&E (TBD)

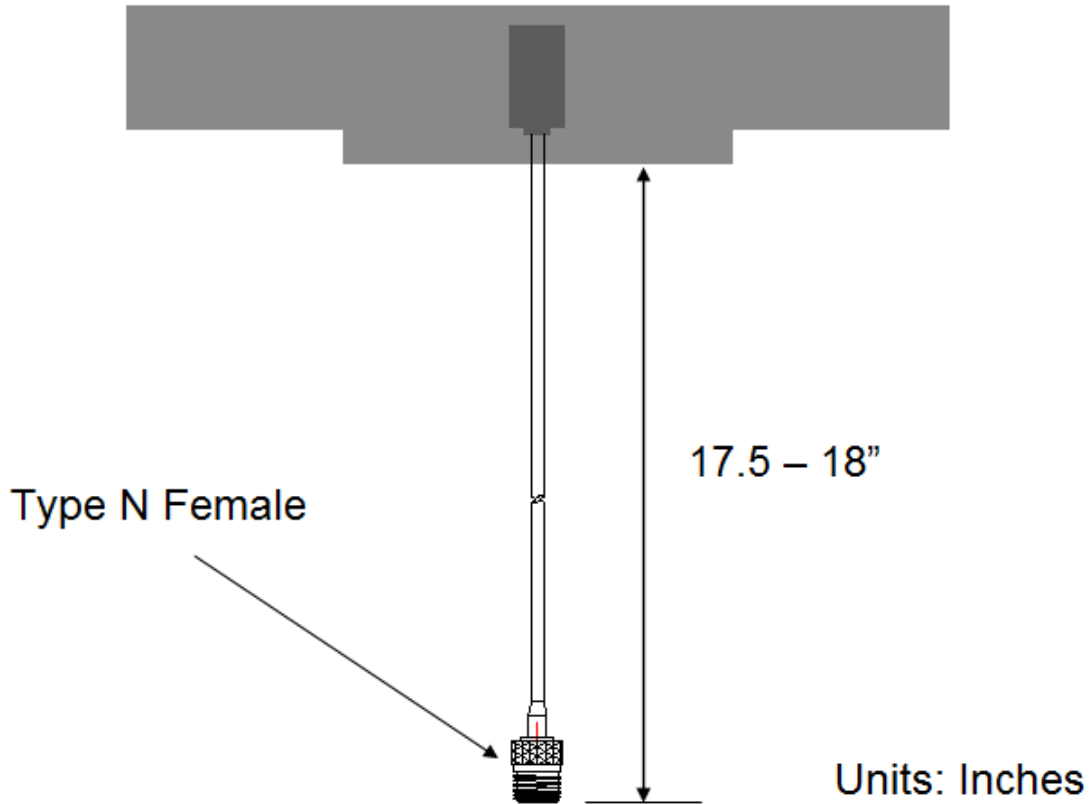


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WPANT40015-CB

ISM Dual Band Coupler Antenna For Electric Meter



Cable: RG316/RG174
Connector: Type-N Female



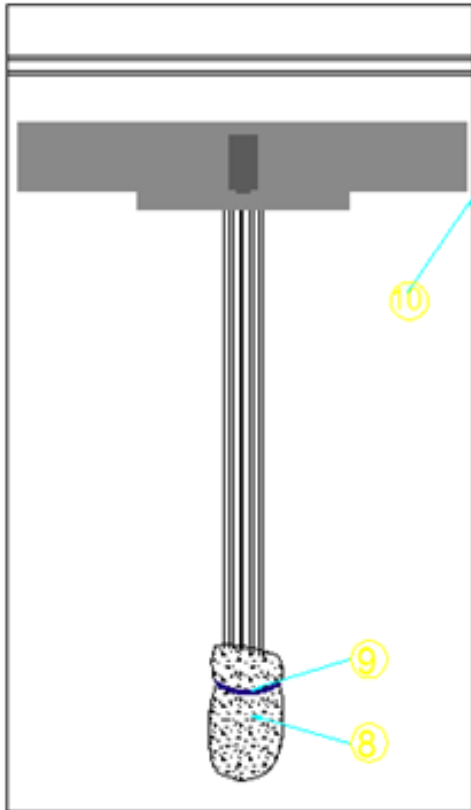
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Packaging



⑩	PE BAG	520*230*T0.05mm	1/20PCS
⑨	RUBBER BAND	COLOR:WHITE	1/20PCS
⑧	PEARL COTTON BAG	COLOR:WHITE 40mm*40mm	1PCS



Factory Test Fixture & Test Method

Test #1: VSWR Test

The Factory will perform VSWR tests of the Antennas on a standard WPI test fixture.

- Test 25 Antennas for a PO of 4999pcs or less
- Test 50 Antennas for a PO between 5000pcs & 9999pcs
- Test 100 Antennas for a PO of 10,000pcs or more

Note: If 1 piece fails, then the factory will test additional 2 sample lots for possible failures. If additional failures are detected in these 2 sample lots, then the full lot will be 100% tested.

Test #2: Conductivity Test

The Conductivity Test is different from the VSWR Test. It's a quick Go-No Go test to find out whether the Antenna is dead or alive. The Antenna will be placed flat on a Styrofoam piece, the connector will be plugged to a VNA and the VSWR response will be observed. The antenna will be flexed at different locations while observing the VSWR response. If the response looks smooth & normal (as expected) then it's a PASS. If there is no response or if it's Jittery/abnormal then it's a FAILURE & the Antenna will be rejected.

- 100% of the Antennas will be subjected to the Conductivity Test



Client: Silverspring Networks

Client P/N : 320-000033 Rev#2

WP Wireless P/N : WPANT40015-CB

Customer Approval Signature: _____

Customer Name: _____

Title: _____

Approval Date: _____

WP Wireless Engineering Approval: Brad Podduturi

Date Approved: 07/21/10