

Revision

1.0.0



# ANT-915-06A DATASHEET

RADIOTRONIX, INC.

# ANT-915-06A DATASHEET

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## Document Control

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## 1. Description

The ANT-915-06A is a  $\frac{1}{2}$  wave long range dipole antenna with a straight reverse polarity SMA connector. It covers a frequency range from 900-930 MHz. These antennas are designed to meet FCC certification approval for all our modular products, including our family of Wi.232 radio modules.

### 1.1. Features

- 900 – 930 MHz
- $\frac{1}{2}$  Wave Dipole
- Straight RPSMA Antenna connector
- RoHS Compliant
- Designed for long range performance

### 1.2. Applications

- Supports all 50 Ohm Antenna Requirements
- Supports all Wi.232<sup>TM</sup> Embedded Radios for FCC Certification
- Specially matched to Wi.232FHSS-250-R<sup>TM</sup> and Wi.232FHSS-250-FCC-R<sup>TM</sup> long range embedded modules

## 2. Mechanical Specifications

### 2.1. Chart

PARAMETERS	DESCRIPTION
Type	High Gain Dipole
Polarity of Connector	Reversed Polarity
Connector Type (Type, Angle, Plug)	SMA 180° (Plug)
Antenna Type	High Gain Dipole
Max. Dimension of Antenna	10.8 x 120.4 mm $\pm$ 2
Color of Surface	Black
Operation Temperature Range	-40 to +85 degrees C
Storage Temperature Range	-40 to +85 degrees C

Table 1, Mechanical Specifications Chart

### 2.2. Picture



### 3. Electrical Specifications

#### 3.1. Chart

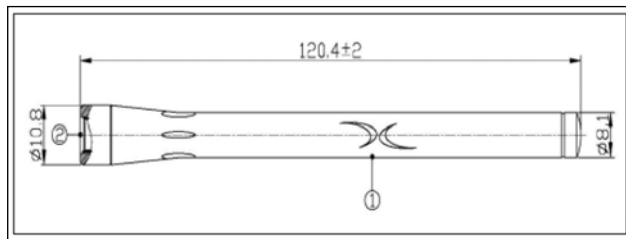
PARAMETERS	DESCRIPTION
Center Frequency	915 MHZ
Bandwidth	30 MHz
Nominal Impedance	50 Ohms
B.S.A.R. (Bare Site Axial Radio)	N/A
Polarization	Linear
Wave Length	$\frac{1}{2}$ Wave Length
V.S.W.R.	$\leq 2:1$
Radiation Pattern	Omni-directional Pattern
Antenna Peak Gain (including cable loss)	2 dBi

Table 2, Electrical Specifications Chart

Note A: The gain data shall include Radiation Pattern Data for both E&H plane.

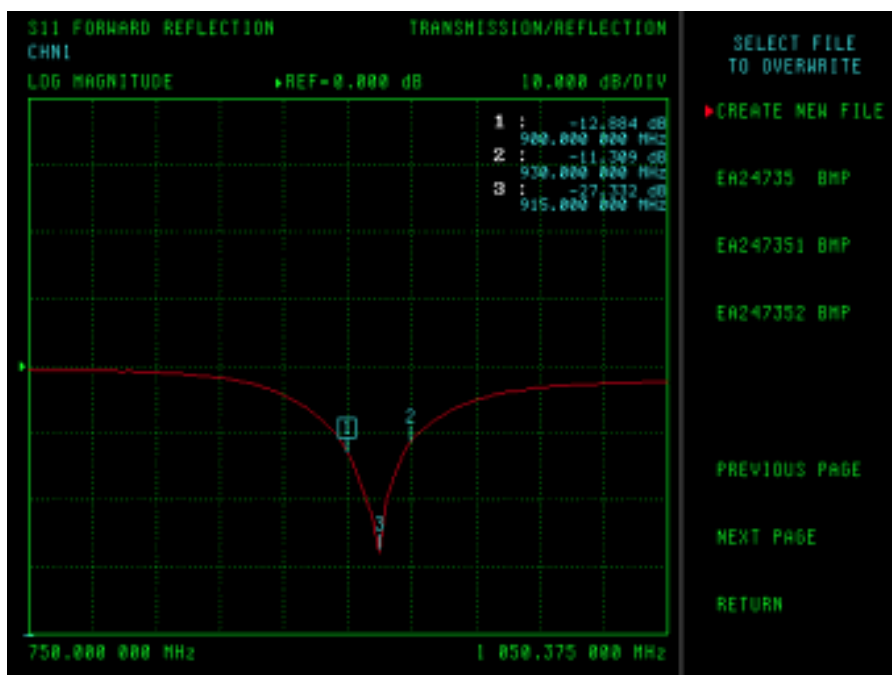


## 4. Engineering Drawing

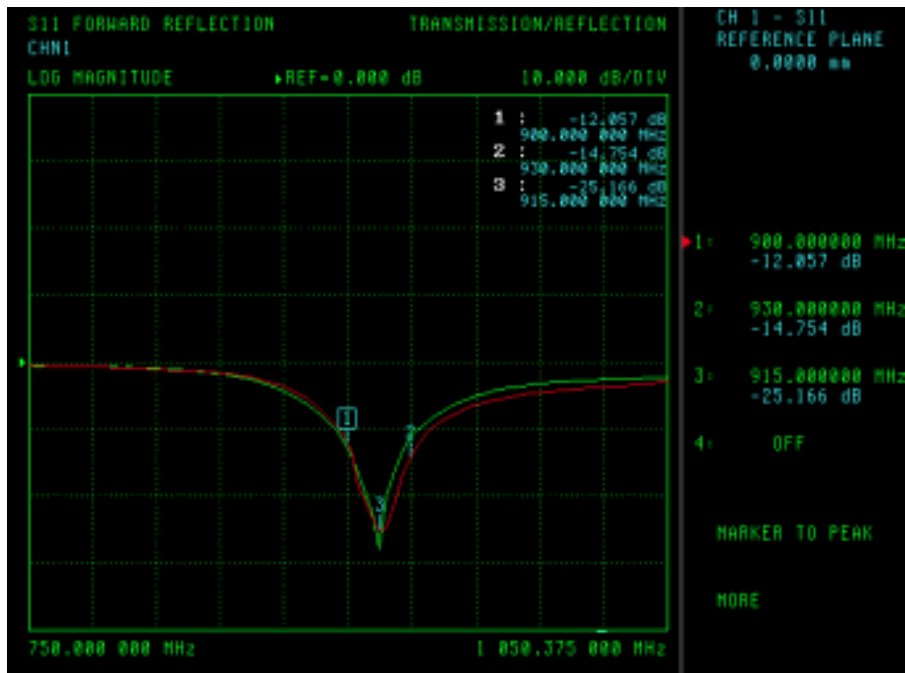


### 4.1. Frequency Graphs

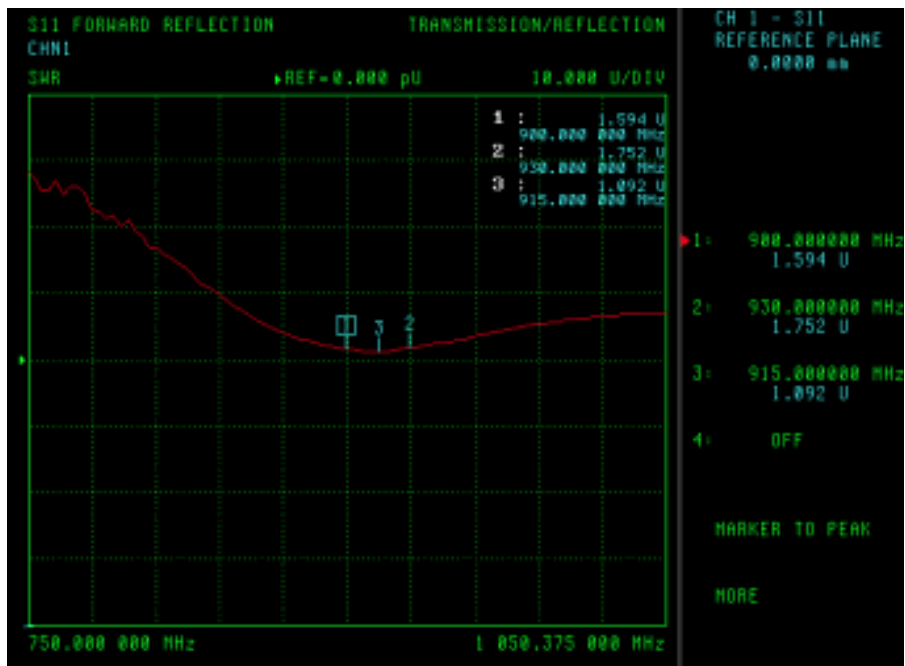
#### 4.1.1. Return Loss vs. Frequency: with square ground plane



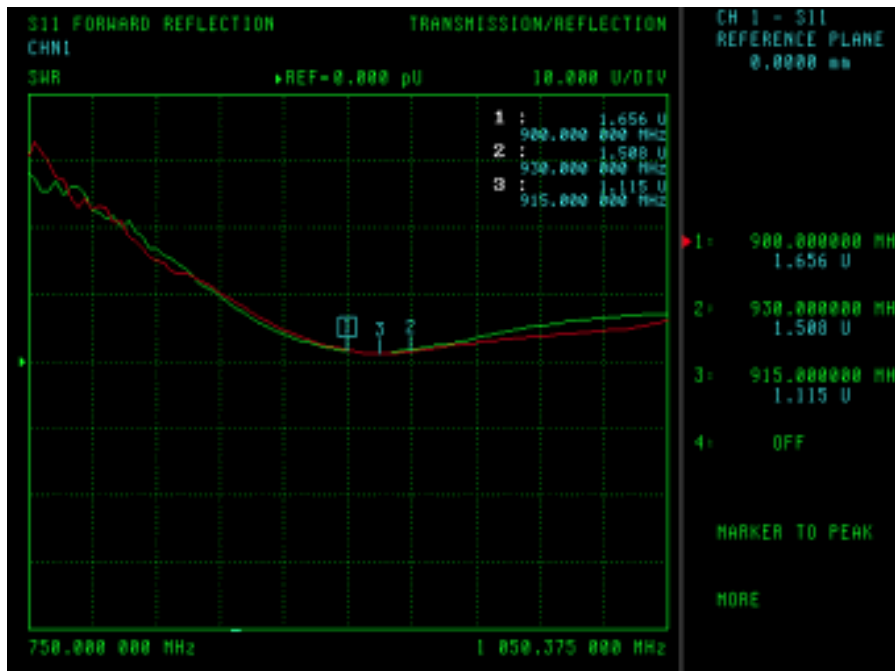
#### 4.1.2. Return Loss vs. Frequency: without square ground plane



#### 4.1.3. V.S.W.R. vs. Frequency: with square ground plane

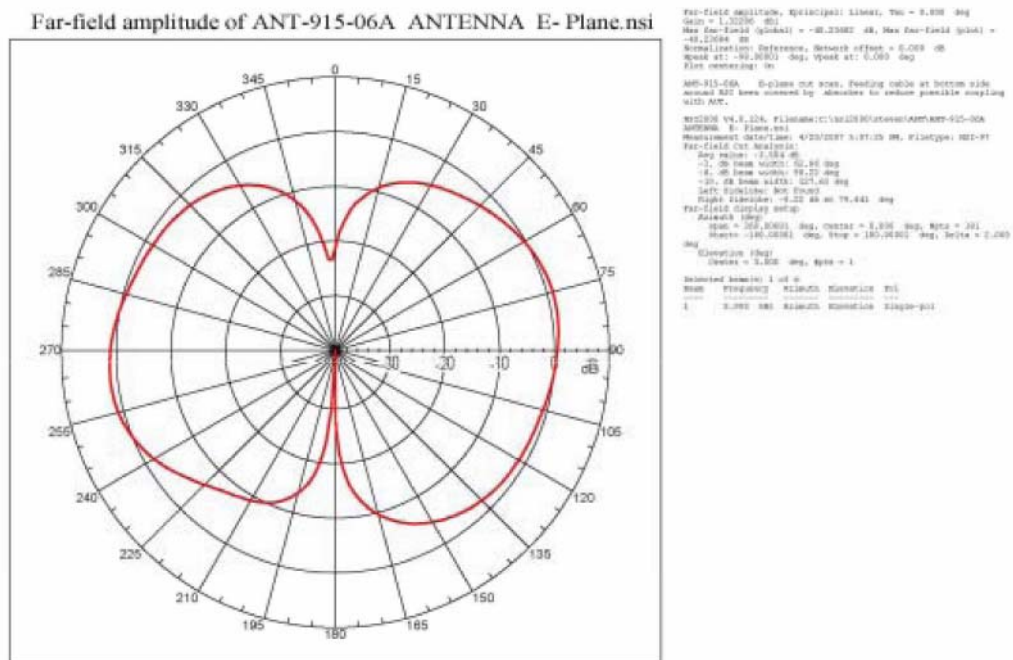


#### 4.1.4. V.S.W.R. vs. Frequency: without square ground plane



Green line with ground plane. Red line without ground plane.

#### 4.1.5. Radiation Pattern (Elevation) with square ground plane



For-field amplitude of ANT-915-06A ANTENNA H. Blende1 psi

## 5. Manufacturing Notes

The testing ground plane and fixture are for reference only. The published data on VSWR, gain and radiation pattern are tested on this fixture and ground plane. The actual antenna performance on practical environment may be either better or worse than the published performance based on the custom ground plane. Radiotronix recognizes this test idealization and offers custom antenna tuning for practical cases should volume warrant. For more assistance, please contact Radiotronix at [support@radiotronix.com](mailto:support@radiotronix.com).

## 6. Ordering Information

Product Part Number	Description
ANT-915-06A	900 – 930 MHz RPSMA Antenna

### 6.1. Contact Information

Corporate Headquarters:

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Moore, Oklahoma 73160

405-794-7730

website: [www.radiotronix.com](http://www.radiotronix.com)

support: [support@radiotronix.com](mailto:support@radiotronix.com)

#### 6.1.1. Technical Support

Radiotronix has built a solid technical support infrastructure so that you can get answers to your questions when you need them. Our primary technical support tools are the support forum and knowledge base found on our website. We are continuously updating these tools. To find the latest information about these technical support tools, please visit <http://www.radiotronix.com/support>. Our technical support engineers are available Mon-Fri between 9:00 am and 5:00 pm central standard time. The best way to reach a technical support engineer is to submit a Webcase. Webcase submissions can be made at <http://www.radiotronix.com/support/webcase.asp>. For customers that would prefer to talk directly to a support engineer, we do offer phone support free of charge.

#### 6.1.2. Sales Support

Our sales department can be reached via e-mail at [sales@radiotronix.com](mailto:sales@radiotronix.com) or by phone at 405-794-7730. Our sales department is available Mon-Fri between 8:30 am and 5:00 pm central standard time. Visit our web site at <http://www.radiotronix.com/corpsales.asp> for information on where to buy our products.