

AD-302N

Dipole Antenna, 3dBi/2dBi 2.4G/5GHz

RP-SMA(M) connector



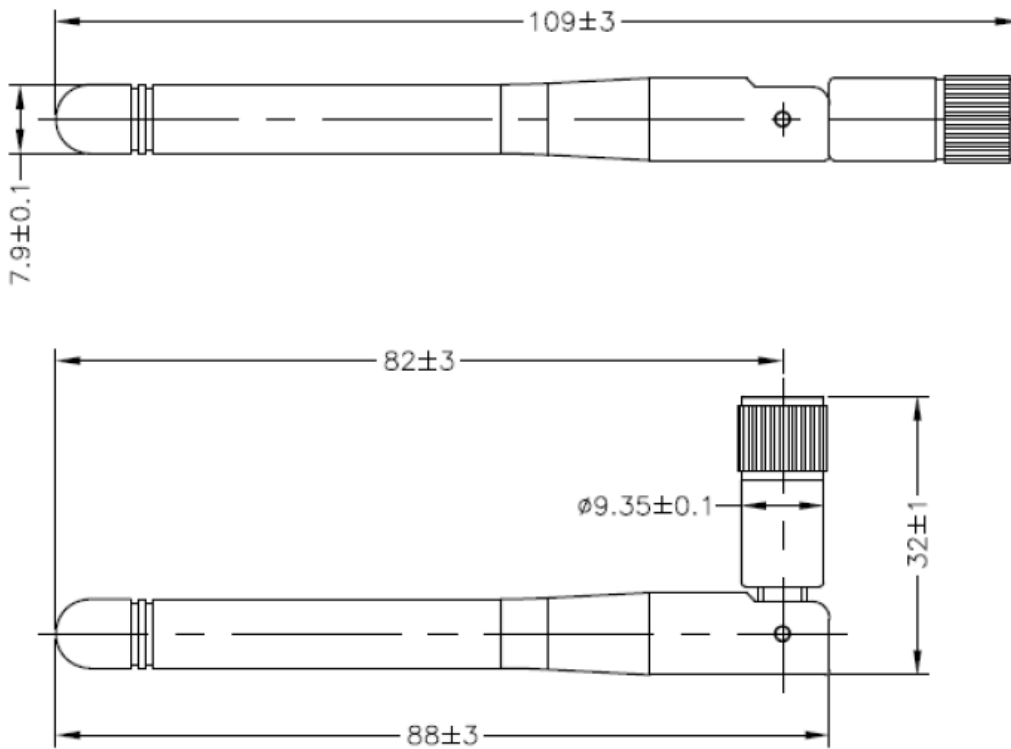
Wireless Embedded System Antenna Solution

Ant. AD-302N is a dual-band dipole antenna for the 2.4 to 2.5 GHz and 5.15 to 5.825 GHz band with 3 dBi and 2 dBi gain on each band. This antenna has a RP-SMA plug connector can provides broad coverage and ideally suited for wireless LAN.

Specification

| | | |
|-----------------------------------|---------------------------|--------------------|
| Description | Model Name | Ant. AD-302N |
| | Color | Black |
| Electrical Characteristics | Antenna Type | Dual-Band Dipole |
| | Operating Frequency Range | 2400 to 2500 MHz |
| | | 5150 to 5825 MHz |
| | Polarization Type | Liner ; Vertical |
| | Type of Radiation | Toroidal |
| | Peak Gain | 2.4-2.5GHz@3dBi |
| | | 5.15-5.825GHz@2dBi |
| Impedance | 50 Ohms | |
| V.S.W.R. | ≤ 2.0 | |
| Mechanical Characteristics | Connector Type | RP-SMA (M) |
| Raw Material | Coaxial Cable | RG-178 |
| | Housing | TPU |
| | Hinge | PC+ALLOY |

Drawing Antenna

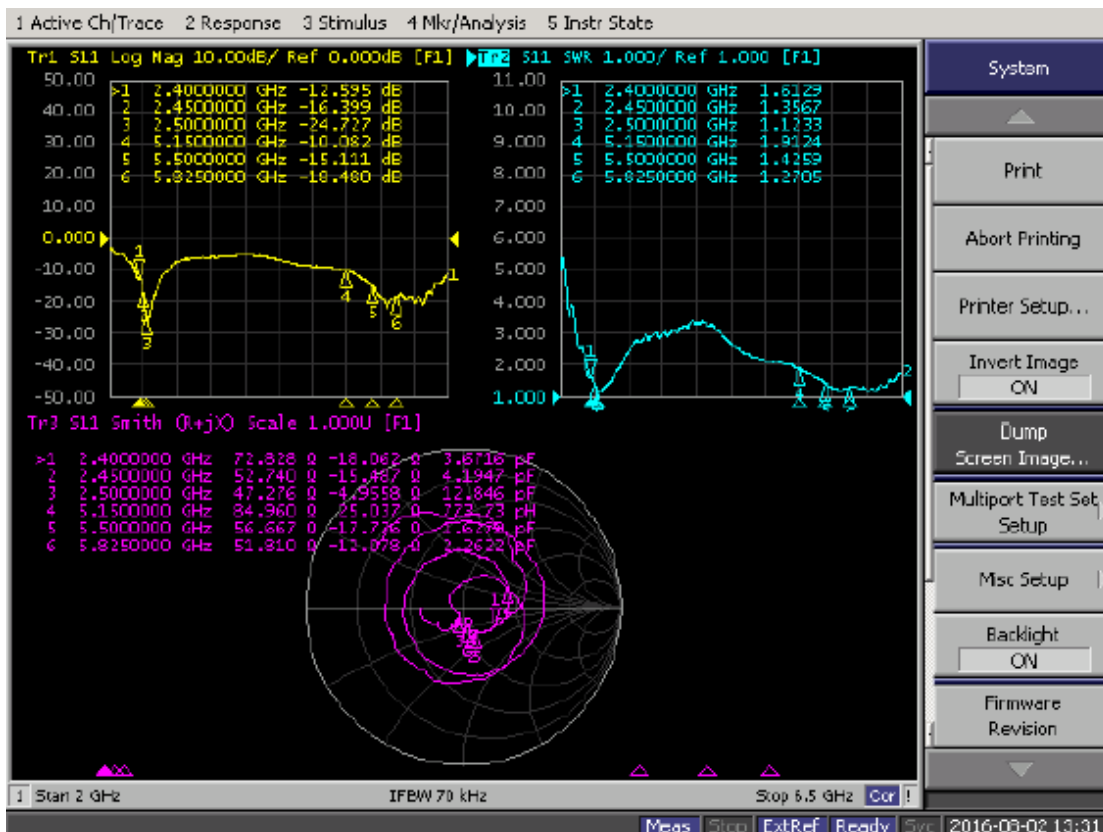


Tolerances:

- X: ± 0.5
- X.X: ± 0.3
- X.XX: ± 0.1
- Angular: $\pm 5.0^\circ$

Electrical Properties

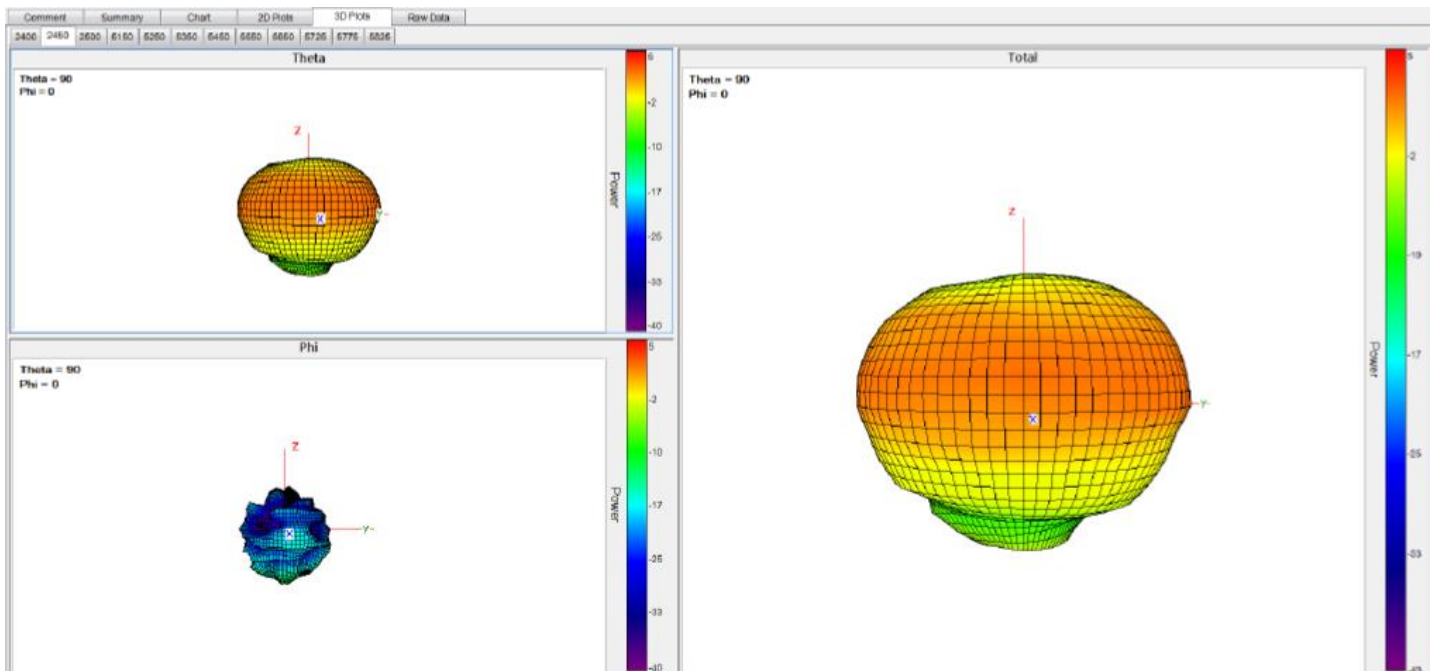
Ant S-Parameter, VSWR & Smith Chart



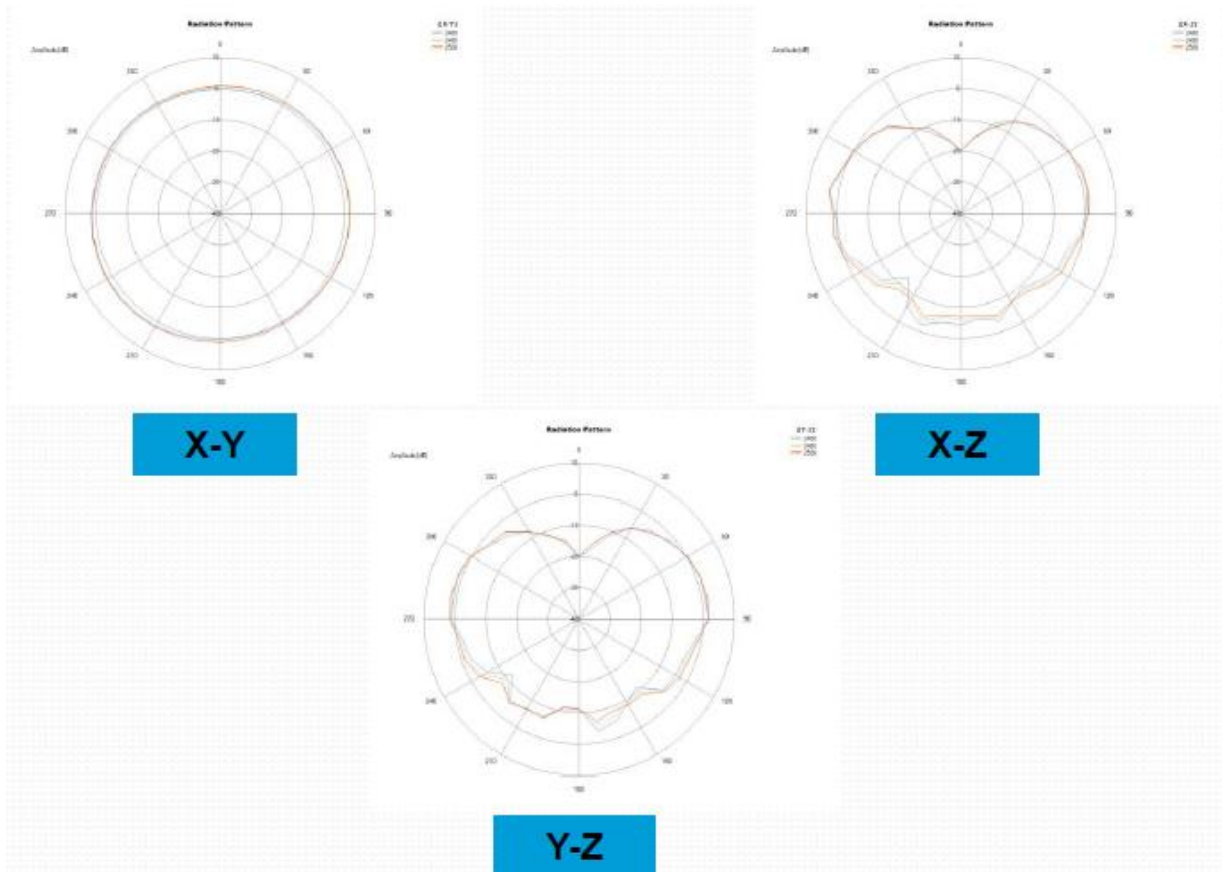
Typical Performance

| Ant | | | | | | | | | | | | |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Frequency (MHz) | 2400 | 2450 | 2500 | 5150 | 5250 | 5350 | 5450 | 5550 | 5650 | 5725 | 5775 | 5825 |
| Efficiency (dB) | -1.66 | -1.24 | -1.22 | -1.86 | -1.52 | -1.51 | -1.63 | -2.13 | -2.14 | -2.08 | -2.17 | -2.19 |
| Peak Gain (dBi) | 2.89 | 3.14 | 2.95 | 2.5 | 2.74 | 2.67 | 2.87 | 2.73 | 2.56 | 2.35 | 2.27 | 1.63 |
| Efficiency (%) | 68.24 | 75.09 | 75.56 | 65.16 | 70.48 | 70.68 | 68.67 | 61.21 | 61.07 | 61.9 | 60.64 | 60.41 |

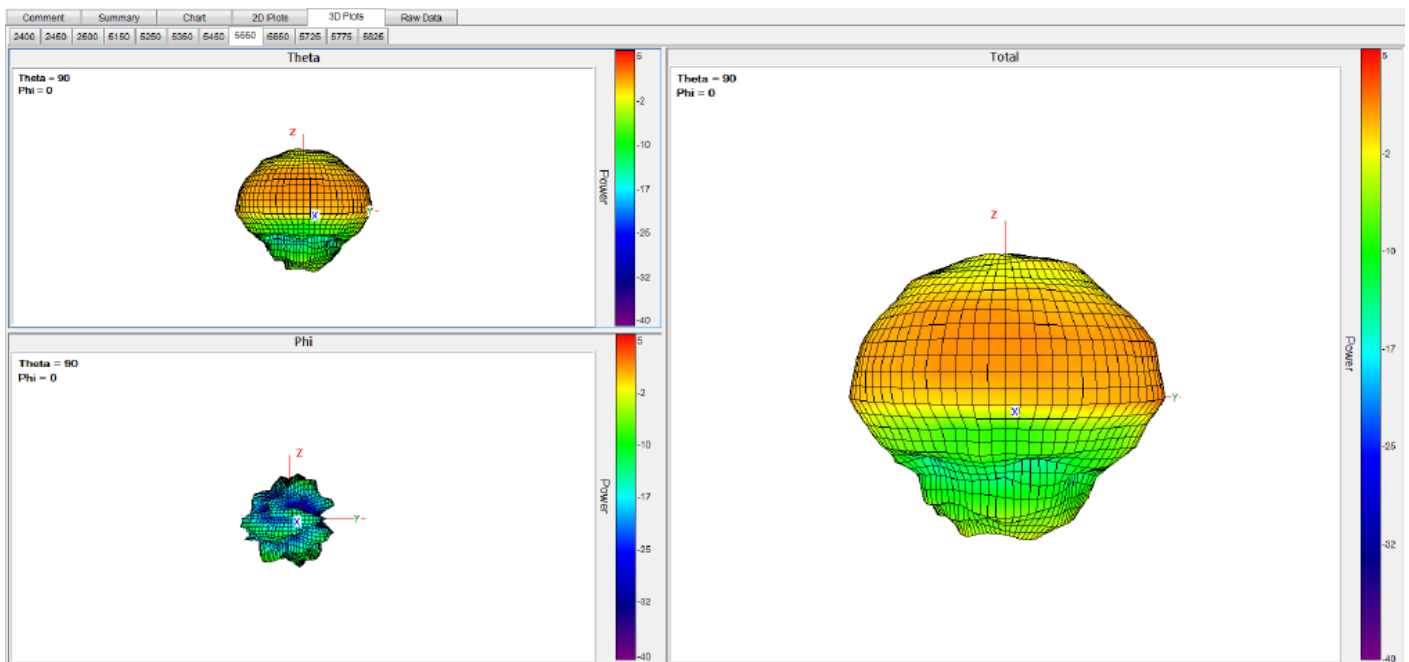
2.4G 3D Gain pattern



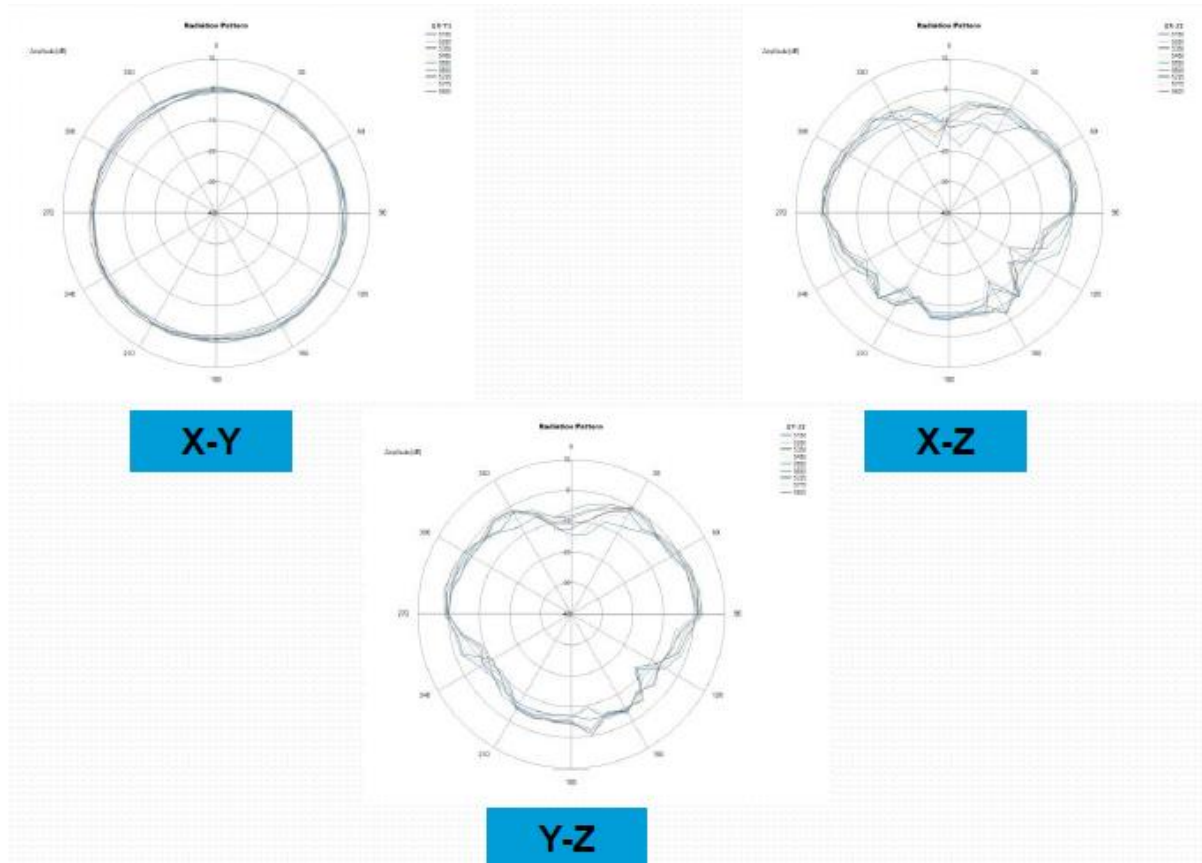
2.4G 2D Gain pattern



5G 3D Gain pattern



5G 2D Gain pattern



Ordering Information

| Product Name | Part Number | Description |
|------------------------------|-------------|--|
| Ant. AD-302N | R3410110221 | Dipole Antenna, 3dBi/2dBi 2.4G/5GHz, RP-SMA(M) connector |