

# Instruction Sheet

## “RooTenna®”

### Compartment Antennas

**Step 1:** Install the RJ45 Ethernet Feedthru with the rubber washer on the outside of the unit. The RJ45 Ethernet feedthru allows passthru of the RJ45 connector to the inside of the unit and then clamps down on the CAT5 cable to form a waterproof seal.

**Step 2:** Install cable assembly to the SMA female connector. Install electronics equipment. There are 4 8-32 standoffs installed inside unit and a customer installation plate and screws provided with the unit. Install the electronics to this plate and then install the plate into the antenna.

**Step 3:** The backpanel comes with an integral gasket attached. Attach the backpanel with 8 screws. Tighten all the screws lightly, then perform final tightening in a criss-cross pattern so that all screws are tightened evenly. **DO NOT OVERTIGHTEN**, only light pressure is required to create a seal. **NOTE:** The back panel can only be installed in one orientation. Horizontal or Vertical polarization and uptilt or downtilt is determined by the mounting of the R2T to the bracket.

**Step 4:** Decide if installation will be Vertically Polarized (VPOL) or Horizontally Polarized (HPOL). The antenna is vertically polarized when the cable feedthru is in the lower left corner. Likewise the antenna is horizontally polarized when the cable feedthru is in the lower right corner. (as viewed from the back of the antenna). **NOTE:** The antenna must always be oriented so that the cable feedthru is on the bottom to avoid any moisture buildup within the compartment.

**Step 3:** Install the bracket. The pictures below will help in determining the proper bracket orientation to give the desired results.



VPOL with Downtilt



VPOL with Uptilt



HPOL with Downtilt

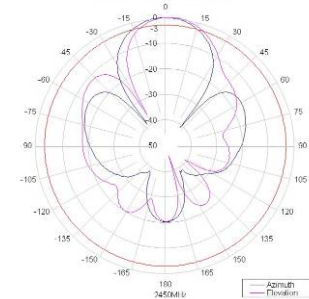


HPOL with Uptilt

Parameter	RT24-14	RT58-19	Units
<b>Frequency Range</b>	2300-2700	5150-5850	MHz
<b>Gain</b>	15	19	dBi
<b>3dB Beam Angle (E-Plane)</b>	30	15	deg
<b>3dB Beam Angle (H-Plane)</b>	30	15	deg
<b>VSWR</b>	1.5:1		
<b>Impedance</b>	50		OHM
<b>Input Power</b>	20		W
<b>Inside Dimension</b>	9" x 9" (228 x 228)		Inch (mm)
<b>Outside Dimension</b>	10.75" x 10.75" (267 x 267)		Inch (mm)
<b>Weight</b>	29 (0.8)		Oz (Kg)
<b>Operating Temperature</b>	-45 to +70		Deg C
<b>Pole Diameter (OD)</b>	1.5" (38) to 2"(51)		Inch (mm)

<b>Wind Loading</b>	<b>100MPH</b>	<b>125 MPH</b>
	27.8 lb	43.4lb

#### Antenna Patterns at 2.45GHz



#### Antenna Patterns at 5.25GHz

