

# Instruction Sheet

## RT18 “RooTenna” 2.4GHz Panel Antennas

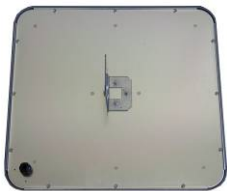
**Step 1:** Install the Cable Feed thru. The cable feedthru is designed for sealing outdoor rated CAT5 cable. Other cables can be used, just check for good seal.

**Step 2:** Install cable assembly to the SMA female connector. Install electronics equipment. Install grounding clip by loosening one of the screws on the antenna plate and slipping grounding clip under the screw head and tightening the screw.

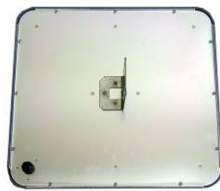
**Step 3:** Install 12 captive screws into the plastic cover. Screws are designed to stay in place once installed. The backpanel comes with an integral gasket attached. Attach the backpanel with the 12 screws. Tighten all the screws lightly, then perform final tightening in a criss-cross pattern so that all screws are tightened evenly.

**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.

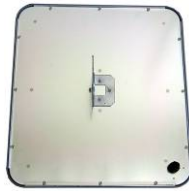
**Step 3:** Install the bracket. The pictures below will help in determining the proper bracket orientation to give the desired results.



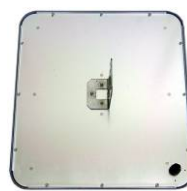
VPOL with Downtilt



VPOL with Uptilt



HPOL with Downtilt



HPOL with Uptilt

Parameter	RT14	Units
<b>Frequency Range</b>	2400-2485MHz	MHz
<b>VSWR</b>	1.5:1	
<b>Gain</b>	19	dBi
<b>3dB Beam Angle (E-Plane)</b>	15	deg
<b>3dB Beam Angle (H-Plane)</b>	20	deg
<b>Impedance</b>	50	OHM
<b>Input Power</b>	20	W
<b>Inside Dimension</b>	16.25"x14.75"x1" (413 x 375 x 25)	Inch (mm)
<b>Outside Dimension</b>	18.5"x16.8"x 2.5" (470 x 427 x 64)	Inch (mm)
<b>Weight</b>	6 (2.7)	Lb (Kg)
<b>Operating Temperature</b>	-45 to +70	Deg C
<b>Rated Wind Velocity</b>	125	mph
<b>Pole Diameter (OD)</b>	1.5" (38) to 2"(51)	Inch (mm)

**Antenna Patterns at  
2.45GHz**

