

# Instruction Sheet

## ES58-17 Echo Series Directional Antenna 5400 to 5850 MHz Operation

**Step 1:** Decide if the installation will require the antenna to be horizontally (HPOL) or vertically (VPOL) polarized and if the installation will require uptilt or downtilt. Install the bracket to the back of the antenna in the correct orientation for the desired polarity and desired up or down tilt. Follow the label indication for horizontal or vertical polarization.

**Step 2:** Attach the bracket to the back of the antenna with 3 nuts. Install the V Block pole clamp and U bolt and attach to pole.

**Step 3:** Attach your RF cable to the antenna N Female Connector. Waterproof the connection using self annealing rubber tape (or equivalent) followed by a layer of electrical tape.

**Step 4:** Adjust tilt and rotation for optimum signal strength and tighten the two U-Bolt nuts.



### Specifications

Parameter	Min	Typ	Max	Units
<i>Frequency Range</i>	5400		5850	MHz
<i>Gain</i>		17		dBi
<i>Horizontal Beamwidth</i>		25		Deg
<i>Vertical Beamwidth</i>		25		Deg
<i>Front to Back</i>	30			dB
<i>Input Return Loss (S<sub>11</sub>)</i>		-14		dB
<i>VSWR</i>		1.5:1		
<i>Impedance</i>		50		OHM
<i>Input Power</i>			50	W
<i>Operating Temperature</i>	-40		+70	Deg C
<i>Pole Size</i>	1" (25)		2" (50)	In (mm)
<i>Weight</i>	20 (567)			oz (g)
<i>Dimension (Dia x Depth)</i>	10" x 2.5" (254x63)			In (mm)
<i>Bracket Tilt</i>	45			Deg



### Antenna Patterns @ 5.8GHz

