

# Instruction Sheet

## SA24 Vertically Polarized Sector Antennas

**Step 1:** The high gain models come with a scissor bracket and the low gain models come with a standard tilt bracket.

**Step 2:** Scissor Bracket: Install to pole. Set rotation and tighten the top and bottom brackets to the pole. Adjust tilt per the tilt indicator and then tighten 3 sets of bolts to fix the tilt position.

**Step 3:** Standard Tilt Bracket: Decide if uptilt or downtilt is needed. Install tilt bracket in correct orientation to provide the necessary uptilt or downtilt. Attach bracket using 3 nuts. Install to pole using V block pole clamp and U-Bolt. Adjust to desired rotation and angular position and then tighten U-Bolt nuts.



### Specifications



Parameter	Min	Typ	Max	Units
<b>VSWR</b>		1.5:1		
<b>Impedance</b>		50		OHM
<b>Input Power</b>			100	W
<b>Pole Diameter (OD)</b>	1" (25)		2" (50)	Inch (mm)
<b>Operating Temperature</b>	-40		+70	Deg C

	SA24-90-9	SA24-120-9	SA24-45-20-WB	SA24-60-17-WB	SA24-90-17-WB	SA24-120-16-WB	SA24-180-14
<b>Gain (dBi)</b>	9.5 dBi	9 dBi	20 dBi	17 dBi	17 dBi	16 dBi	14 dBi
<b>Freq Range (MHz)</b>	2400-2485	2400-2485	2300-2700	2300-2700	2300-2700	2300-2700	2400-2485
<b>Horizontal Beam Width</b>	90 deg	120 deg	45 deg	60 deg	90 deg	120 deg	180 deg
<b>Vertical Beam Width</b>	40 deg		7 deg	8 deg	7 deg	9 deg	10 deg
<b>Front to Back</b>	25 dB		25 dB	25 dB	20 dB	21 dB	25 dB
<b>Mechanical Downtilt</b>	45 deg		30 deg				10 deg
<b>Weight</b>	25oz (0.7kg)		8.4lb (3.8kg)				11lb (5kg)
<b>Dimensions (LxWxH)</b>	10" x 6.5" x 2.5" (254 x 165 x 63.5mm)		34 x 7 x 3.5" (864x178x89mm)				40" x 10.25 x 7" (1020x260x180mm)

Wind Loading				
Model	Sq. In	100MPH	125MPH	100MPH 1/2" radial ice
SA24-xx-9	65	16.3 lb	25.4 lb	17 lb
SA24-xx-17-WB	247	61.8 lb	96.5 lb	62 lb
SA24-180-14	400	100	156	102