



### 2400-2485 MHz VERTICALLY POLARIZED SECTOR ANTENNAS

The vertically polarized sector antenna systems offered by Laird are constructed of UV stable fiberglass radomes for extremely long service life in the most demanding conditions. The antennas are constructed using corrosion resistant metal elements and a unique air dielectric system which are more stable than PCB based antenna systems because they don't absorb moisture, which can degrade the performance of PCB based antenna systems. The 14 dBi sectors come with a stainless steel scissor bracket system for ease of installation and alignment. The 9 dBi sector comes with a galvanized steel bracket with stainless steel hardware.

#### FEATURES



- Vertically polarized
- 90°, 120° and 180° models with gains from 9 dBi to 14 dBi
- Type N female integrated connector
- Extremely rugged for long service life in extreme environments
- Weatherproof

#### MARKETS

- 2.4 GHz ISM band applications
- 802.11b and 802.11g wireless systems
- WiFi base station antennas
- Point-to-multi-point systems
- Wireless internet
- WiMAX

PARAMETER	SA24-90-9	SA24-120-9	SA24-180-14
Frequency range	2400 - 2485 MHz	2400 - 2485 MHz	2400 - 2485 MHz
Input return loss (S11)	-14 dB	-14 dB	-14 dB
VSWR	1.5:1	1.5:1	1.5:1
Impedance	50 ohm	50 ohm	50 ohm
Input power	100 W	100 W	100 W
Pole diameter (OD)	1 - 2 in (25-50 mm)	1 - 2 in (25-50 mm)	1 - 2 in (25-50 mm)
Operating temperature	-40 to +70°C	-40 to +70°C	-40 to +70°C
Gain	9.5 dBi	9 dBi	14 dBi
Horizontal beamwidth	90°	120°	180°
Vertical beamwidth	30°	30°	10°
Front-to-back	25 dB	25 dB	25 dB
Down tilt (mechanical)	45°	45°	10°
Weight (with bracket)	25 oz (0.7 kg)	25 oz (0.7 kg)	11 lbs (5 kg)
Dimensions (L x W x H)	10 x 6.5 x 2.5 in (254 x 165 x 63.5 mm)	10 x 6.5 x 2.5 in (254 x 165 x 63.5 mm)	40 x 10.25 x 7 in (1020 x 260 x 180 mm)

#### WIND LOADING

MODEL	SQ. IN	100 MPH	125 MPH	100 MPH 1/2 IN RADIAL ICE
SA24-xx-9	65	16.3 lb	25.4 lb	17 lb
SA24-180-9	400	100 lb	156 lb	102 lb

#### SYSTEM ORDERING

SA24-90-9	9 dBi 90° 2.4 GHz VPOL sector antenna
SA24-120-9	9 dBi 120° 2.4 GHz VPOL sector antenna
SA24-180-14	14 dBi 180° 2.4 GHz VPOL sector antenna

