

# SA24-180-12

## Vertically Polarized Sector Antennas



### VERTICALLY POLARIZED SECTOR ANTENNAS 2400 TO 2485 MHz OPERATION

The vertically polarized 180° sector antenna system offered by Laird Technologies is 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 is more stable than PCB based antenna systems because they don't absorb moisture. The 12 dBi sectors come with a stainless steel tilt bracket system for ease of installation and alignment. The antennas can be mounted anywhere along the length of a mounting pole which increases installation flexibility.

#### FEATURES

- Vertically polarized
- 180° horizontal 3 dB beamwidth, 12 dBi gain
- Type N female integrated connector
- Stainless steel tilt bracket for up or down tilt
- Low cost weatherproof sector antenna system

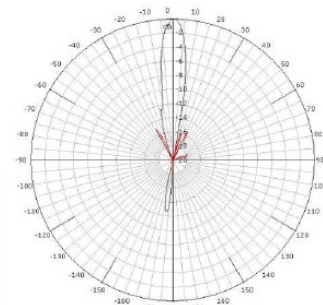
#### MARKETS

- 2.4 GHz ISM band applications
- 802.11b and 802.11g wireless systems
- Base station antennas
- Point to multi-point systems
- WLAN access points
- WiMAX

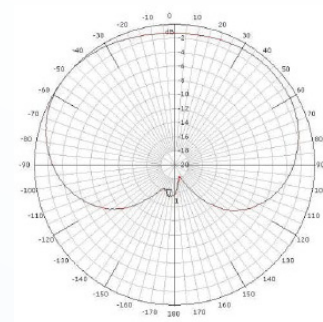
| PARAMETER                        | SPECIFICATIONS                                               |
|----------------------------------|--------------------------------------------------------------|
| Frequency range (MHz)            | 2400 - 2485                                                  |
| VSWR (Typical)                   | 1.5:1                                                        |
| Impedance (ohms)                 | 50                                                           |
| Input Power (watts)              | 100 Typical                                                  |
| Pole Diameter in (mm)            | 1 - 2 (25 - 50) OD                                           |
| Operating Temperature (°C)       | -40° to +70°                                                 |
| Gain                             | 12 dBi                                                       |
| Horizontal beamwidth             | 180°                                                         |
| Vertical beamwidth               | 10°                                                          |
| Front-to-Back                    | >15 dB                                                       |
| Mechanical Tilt                  | +/-10°                                                       |
| Antenna Weight lbs (kg)          | 3 (1.4)                                                      |
| Dimensions in (mm)               | 40 x 3 x 3 (1016 x 76 x 76)                                  |
| Wind Loading 120 in <sup>2</sup> | 30 @ 100 mph<br>47 @ 125 mph<br>32 @ 100 mph 1/2" radial ice |

#### MARKETS

SA24-180-12 12 dBi 180° 2.4 GHz VPOL sector antenna



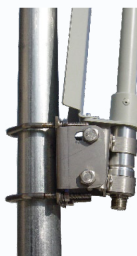
E-Plane



H-Plane



Bracket uptilt  
close up



Bracket downtilt  
close up

global solutions: local support™

Americas: +1.847.839.6907  
IAS-AmericasEastSales@lairdtech.com

Europe: +1.32.80.7866.12  
IAS-EUSales@lairdtech.com

Asia: +1.65.6.243.8022  
IAS-AsiaSales@lairdtech.com

www.lairdtech.com

ANT-DS-SA24-180-12 0611

Any information furnished by Laird Technologies, Inc. and its agents is believed to be accurate and reliable. Responsibility for the use and application of Laird Technologies materials rests with the end user, since Laird Technologies and its agents cannot be aware of all potential uses. Laird Technologies makes no warranties as to the fitness, merchantability or suitability of any Laird Technologies materials or products for any specific or general uses. Laird Technologies shall not be liable for incidental or consequential damages of any kind. All Laird Technologies products are sold pursuant to the Laird Technologies' Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2011 Laird Technologies, Inc. All Rights Reserved. Laird, Laird Technologies, the Laird Technologies Logo, and other marks are trade marks or registered trade marks of Laird Technologies, Inc. or an affiliate company thereof. Other product or service names may be the property of third parties. Nothing herein provides a license under any Laird Technologies or any third party intellectual property rights.