

# VERTICALLY POLARIZED SECTOR ANTENNAS

## S4901xx



### 4900-5850 MHZ VERTICALLY POLARIZED SECTOR ANTENNA

The vertically polarized ultra wide-band 5GHz sector antenna systems offered by Laird Technologies are constructed of UV stable ASA plastic radomes and galvanized steel brackets with stainless steel hardware for long service life in the most demanding conditions. The ultra wide-band operation allows a single antenna to cover a wide frequency range thereby allowing the operator maximum flexibility in his network. The antennas are DC Grounded for lightning/ESD protection. The heavy duty bracket system adjusts for up to 15° of downtilt.

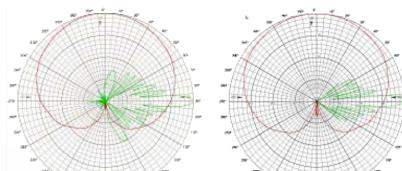
#### FEATURES

- High-gain 16 and 17dBi in a small form factor
- Low wind loading: 160MPH survivability
- Vertically polarized, ultra wide-band operation
- Type N female integrated connector
- Galvanized steel tilt bracket for up to 3.5" dia pole

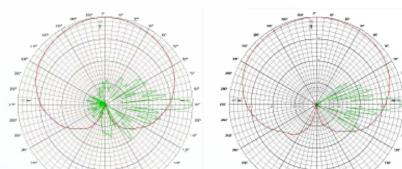
#### MARKETS

- 5.8GHz U-NII band applications
- Point-to-multi-point systems
- Base station antennas
- 802.11a applications
- Public safety

| PARAMETER              | S4901790PNF                               | S49016120PNF                              |
|------------------------|---|---|
| Frequency range        | 4900 - 5850 MHz                           | 4900 - 5850 MHz                           |
| VSWR                   | 1.8:1                                     | 1.8:1                                     |
| Impedance              | 50 ohm                                    | 50 ohm                                    |
| Input power            | 10W                                       | 10W                                       |
| Pole diameter (OD)     | 1.5" - 3.5" (38-89mm)                     | 1.5" - 3.5" (38-89mm)                     |
| Operating temperature  | -40 - +70°C                               | -40 - +70°C                               |
| Gain                   | 17 dBi                                    | 16 dBi                                    |
| Horizontal beamwidth   | 90°                                       | 120°                                      |
| Vertical beamwidth     | 6°  | 6°  |
| Polarization           | Vertical                                  | Vertical                                  |
| Front-to-back          | >25 dB                                    | >25 dB                                    |
| Cross polarization     | >15 dB                                    | >15 dB                                    |
| Mechanical downtilt    | 15°                                       | 15°                                       |
| Weight                 | 2 lbs (1.3 kg)                            | 2 lbs (1.3 kg)                            |
| Dimensions (L x W x H) | 24.6" x 2.7" x 1.7"<br>(625 x 69 x 43 mm) | 24.6" x 2.7" x 1.7"<br>(625 x 69 x 43 mm) |



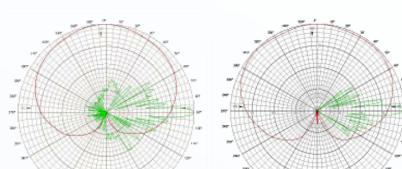
**S4901790PNF 4900MHz**



**S49016120PNF 4900MHz**



**S4901790PNF 5470MHz**



**S49016120PNF 5470MHz**

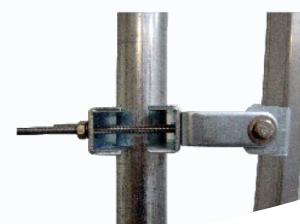
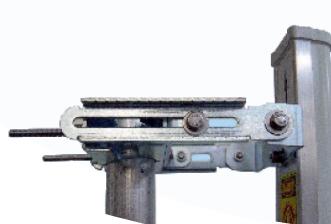
#### WIND LOADING

| MODEL   | SQ. IN | 100 MPH | 125 MPH |
|---------|--------|---------|---------|
| S4901xx | 66.4   | 16.6 lb | 24.9 lb |

#### SYSTEM ORDERING

S4901790PNF 4900-5850MHz 90deg 17dBi VPOL sector antenna  
 S49016120PN 4900-5850MHz 120deg 16dBi VPOL sector antenna

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