

# Broadband Wireless Antenna

## J51016V00-90N



### 5.0 GHz VERTICAL POLARIZATION HIGH-PERFORMANCE 90° SECTOR

The Laird J51016V00-90N 5.0 GHz wideband, vertically polarized 90° sector antenna, covers frequencies from 4.9 to 5.9 GHz. Extremely low side lobes, null fill below the horizon, and uniform energy distribution with the coverage area are achieved thanks to our highly skilled engineering staff and the utilization of our proprietary Artificial Intelligence RF Optimizing development tool. The antenna meets all aspects of ETSI EN 302.326-3 SS3. The Laird suite of high-performance sector antennas features proprietary design elements, resulting in extremely high levels of system performance and ruggedness while maintaining very slim profiles with low wind and ice loading.

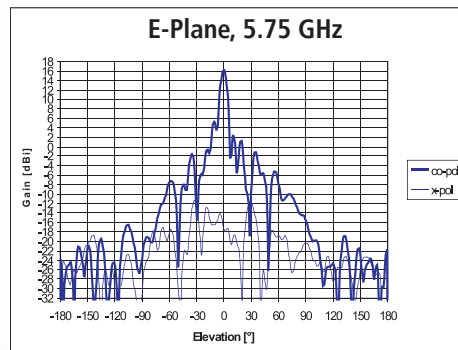
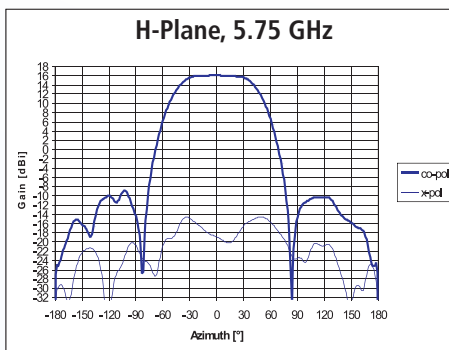
#### FEATURES

- 4.9 to 5.9 GHz full-band coverage
- Ultra-low side lobe performance
- Maximum null fill below the horizon
- Uniform cell coverage
- Rugged carrier class construction

#### MARKETS

- High multi-path environment
- Large carrier class deployment
- Wireless broadband service provider
- Optimized for MIMO space time processing
- WiMAX

#### ANTENNA PATTERNS

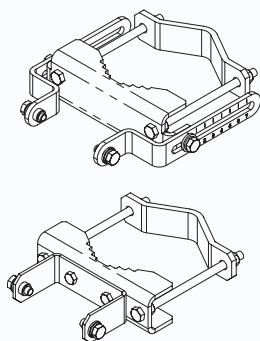


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### SPECIFICATIONS

PARAMETER	SPECIFICATIONS
Antenna part number	J51016V00-90N
Frequency range	4.9-5.9 GHz
Peak gain	16.5 dBi (165 dBi typical)
Minimum gain	15 dBi @ 5.15-5.3 GHz, 14.5 dBi @ 4.9 GHz
Maximum VSWR	1.7:1
3 dB beamwidth- Azimuth	90°
3 dB beamwidth- Elevation	7°
Front-to-back ratio	> 35 dB
Azimuth and elevation sidelobes	ETSI EN 302.326-3 SS3
Cross-polarization	ETSI EN 302.326-3 SS3
Elevation null fill	Down to -25°
Polarization	Vertical
Input impedance	50 ohm
Maximum input power	20 W average, 240 W peak
Mounting hardware	Tilt mount kit 1.5 in to 4.5 in dia.
Lightning protection	DC-grounded
Temperature	-40°C to +70°C
Mechanical size	18.2 in x 4.7 in x 3.1 in
Antenna weight	1.2 kg
Wind survival rating	Operational 100 mph/ Survival 136 mph
Antenna connection	Type N female
Radome	ASA / Aluminum
Mount style	Mast mount



**Mounting Kit:  
JBXRK-01-TM5**

ANT-DS-J51016V00-90N 1125

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