

## **Broadband Wireless Antenna**

SKS230090-16N-001

Innovative **Technology** for a **Connected** World



#### 2.5 GHz HIGH-PERFORMANCE 90° BEAMWIDTH DUAL 45° SLANT SECTOR

The Laird Technologies SKS230090-16N-001wideband, dual slant sector antenna, covers frequencies from 2.3 to 2.7 GHz. Significantly reduced upper side lobes and null fill below the horizon are achieved thanks to our highly skilled engineering staff and the utilization of our proprietary Artificial Intelligence RF Optimizing development tool. Laird Technologies' suite of high-performance sector antennas features proprietary design elements and low-loss feed network, resulting in extremely high levels of system performance and ruggedness while maintaining very slim profiles with low wind and ice loading.

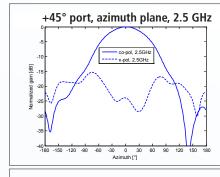
#### FEATURES **✓** RoHS

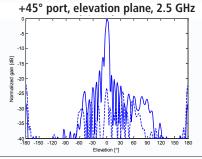
- Suppression of the first two upper side lobes
- 1st null fill below the horizon
- Low-loss feed stripline feed network and efficient dipole radiators provide high efficiency and gain
- Excellent matching of the radiating elements and feed network allows for superior pattern control in elevation
- Optimized for maximum ratio combining
- Two Type N-f connectors at the bottom for easy installation

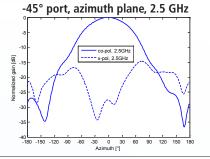
#### **MARKETS**

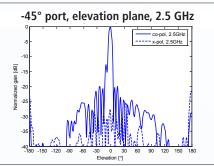
- High multi-path environment
- Large carrier class deployment
- WiMAX service provider
- Ideal base station antenna for high density wireless network coverage in mobile and fixed applications

#### **ANTENNA PATTERNS**









### global solutions: local support ™

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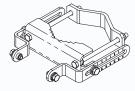
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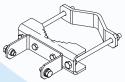
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#### **SPECIFICATIONS**

PARAMETER	SPECIFICATIONS
Antenna part number	SKS230090-16N-001
Frequency range	2.3-2.7 GHz
Gain @ 2.5 GHz	16.5 dBi
Maximum VSWR	1.5:1
3 dB beamwidth- Azimuth	90°
3 dB beamwidth- Elevation	5.5°-6.5°
Elevation null fill	1st null > -20 dB
Upper sidelobe level reduction (1st and 2nd)	< -16 dB
Polarization	+45° and -45°
Cross-polarization level in zero azimuth	< - 20 dB
Cross-polarization ratio within $\pm 60^{\circ}$ azimuth	> 10 dB
Port-to-port isolation	> 25 dB
Front-to-back ratio (co-polar)	> 25 dB
Maximum input power	20 W average, 480 W peak
Input impedance	50 ohm
Mechanical size	1140 mm x 165 mm x 75 mm
Antenna weight	3.9 kg (8.5 lbs); 6.3 kg (13.0 lbs) with bracket
Wind survival rating	Operational 100 mph / Survival 136 mph
Antenna connection	Type N female at the bottom
Radome	Light grey UV resistant plastic
Mount style	Mast mount
Mounting hardware	Tilt mount kit 1.5 in to 4.5 in dia.
Temperature	-40°C to +65°C
Lightning protection	DC-grounded



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



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