



CBRS Broadband Wireless Antenna 3.3-3.8 GHz





Laird Connectivity's SJS330065-17-001 wideband, dual slant sector antenna, covers frequencies from 3.3 to 3.8 GHz making this an excellent CBRS wireless network solution. 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's 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.

Outside of CBRS applications, the antenna's wide bandwidth characteristics allows the antenna to be inventoried for eventual use by any carrier using any portion of the 3.3-3.8 GHz frequency band.

#### FEATURES AND BENEFITS

- 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

#### **APPLICATIONS**

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

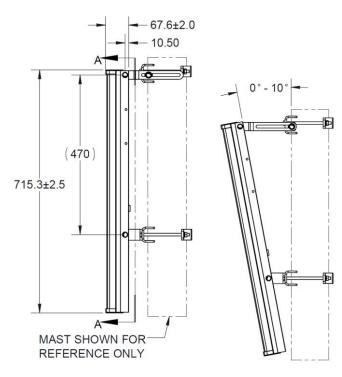
ELECTRICAL SPECIFICATIONS		
Model Name	SJS330065-17-001	
Operating Frequency (GHz)	3.3 – 3.8	
VSWR – Max	1.5:1	
Gain (dBi)	17.0 ± 1	
Nominal Impedance (Ohms)	50	
Max Power - Ambient 25°C (W)	30	
Polarization	Dual slant ± 45°	
Vertical Plane 3 dB Beamwidth	7°	
Horizontal Plane 3 dB Beamwidth	65°	
Elevation Null Fill (dB) – Minimum	Down to -25°	
1 <sup>st</sup> Null	-18	
2 <sup>nd</sup> Null	-33	
3 <sup>rd</sup> Null	-36	
Sidelobes – Azimuth (dB) – ETSI EN 302.326-3 SS2	>35	
Front-to-Back Ratio (dB) – ETSI EN 302.326-3 SS2	>35	
Cross-polarization at Boresight (dB)	> 22	
Cross-polarization ± 30° to Boresight (dB)	18 min. (20 typ.)	

MECHANICAL SPECIFICATIONS	
Dimensions – mm (inches)	715 x 122 x 68 (28.1 x 4.81 x 2.66)
Weight – kg (lbs.) – without bracket kit	3.0 (6.6)
Mounting Hardware	Tilt mount kit 1.5 to 4.5-iinch diameter
Connector Type	2x Type N female

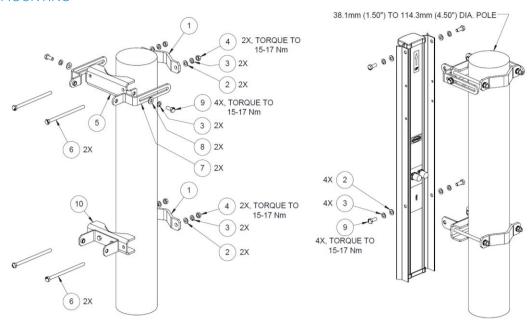
ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature – °C (°F)	-40 to +70°C (-40 to +158°F)
Wind Operational – km/hr (mph)	160 (100)
Wind Survival – km/hr (mph)	218 (136)
Vibration – Environmental	ETSI 300.019-2-4 T4.1E
Ingress Protection Rating	IP54
Material Substance Compliance	RoHS
Lightning Protection	DC Grounded



### **MECHANICAL DRAWING**



### MOUNTING



### Antenna Mounting Parts

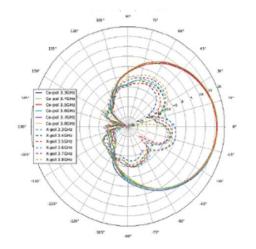
ITEM #	PART NUMBER	DESCRIPTION	QTY
1	196292-001	Reversible clamp, sheet metal	2
2	016490	Washer, flat, [M8], SS, PA	8
3	016491	Washer, Slock, [M8], SS, PA	10
4	016553	Nut, hex, [M8x1.25], SS, PA	4
5	197581-001	Upper mast clamp	1

ITEM #	PART NUMBER	DESCRIPTION	QTY
6	016948	Screw, HHC, [M8x1.25 x 140 mm], SS, PA	4
7	197580	Bent slotted bracket	2
8	017562	Washer, flat, narrow, [M8], SS, PA	2
9	017564	Screw, HHC, [M8x1.25 x 20 mm], SS, PA	6
10	457572-001	Bracket assy, lower pivot	1

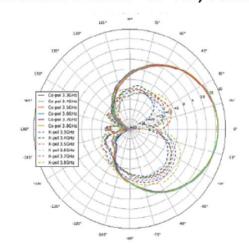


#### **RADIATION PATTERNS**

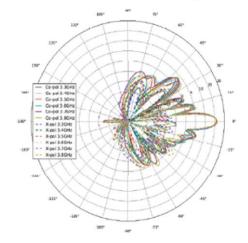
## Azimuth Pattern -45° Pol, Port A



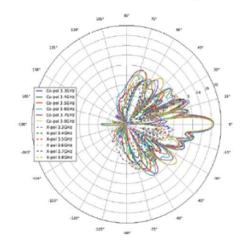
## Azimuth Pattern +45° Pol, Port A



# Elevation Pattern -45° Pol, Port A



### Elevation Pattern +45° Pol, Port A



### ✓ RoHS

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