

L-Band Sector Antenna

1.15 – 1.4 GHz

Product Code: SECT-A0021

VERSION: 2.3



SPECIFICATIONS:

Product code:	
SECT-A0021-01	N(f) connector
SECT-A0021-02	TNC(f) connector
Electrical:	
Frequency	1.15 – 1.4 GHz
VSWR	< 2:1
Nominal input impedance	50 Ω
Power handling	12 W
Gain	12 dBi (typical) 11.5 dBi (minimum)
Elevation (E-plane) -3 dB beamwidth	> 18°
Azimuth (H-plane) -3 dB beamwidth	110° ($\pm 5^\circ$)
Polarisation	Vertical, linear
Surge/ESD protection	DC shorted
Mechanical:	
Dimensions (h x d)	870 mm x 70 mm (excl. bracket)
Weight	< 5kg
Colour	Black
Mounting	Stainless steel mounting for mast or wall (wall bolts not provided)
Groundplane requirement	Groundplane independent
Environmental: designed to meet the following specifications	
Wind survival	100 km/h
Temperature (operational/storage)	-31 °C to +71 °C
Shock	20 g's /10 ms (all axis)
Vibration	MIL-STD-167-1 type 1
Water ingress rating	MIL-STD-820F (506.4)

PRODUCT FEATURES:

- Collinear four element design
- Compact design
- Wideband operation
- Low VSWR in operational band
- Low sidelobe and backlobe levels
- Rugged

APPLICATIONS:

- Wireless communications base station antenna

PRODUCT DESCRIPTION:

The SECT-A0021 is a compact L-band sector antenna for communications applications operating with high gain in the band 1.15 to 1.4 GHz. The antenna provides excellent cross-pol and low sidelobe and backlobe, levels, making use of a reflector-backed collinear omni design.

The design provides for a large elevation coverage area of $\pm 9^\circ$, not requiring the need to tilt the antenna when mounted. Mounting equipment is provided for mast-mounting in the form of stainless steel U-bolts, and wall mounting, which can be accomplished by bolting the antenna mounting bracket to a wall or other vertical flat surface (wall bolts are not provided)

The antenna is rugged and designed for long-term outdoor installation in harsh environments. It is provided with a low impedance path to earth to protect radio equipment against surges and static buildup.

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VSWR, gain and efficiency plots for standard 5.8 m elements

NOTE: Provided gain data is REALISED gain and includes effect of mismatch loss and efficiency

