

## Unity-Gain, Omnidirectional Base Station Antenna for the International Aircraft Band

### DESCRIPTION

- CXL 3-1LW is a 0 dBd, vertically polarized, omnidirectional base station antenna for the 118 - 137 MHz civil aircraft band.
- The antenna is a broad-banded  $\frac{1}{2} \lambda$  dipole design, and it is equipped with our type "LW" mast mount, which is a lightweight, multi-purpose, epoxy-coated aluminium mounting bracket with stainless steel fittings.
- The antenna can be mounted on vertical or horizontal mast tubes, 16 to 54 mm in outer diameter. Further, the construction of the mount makes it possible to lead the cable either along the inside or on the outside of the mast tube.
- A conical glass fibre tube with very low wind-loading completely encloses the carefully designed radiating element to ensure long dependable service in all climates.
- To substantially reduce noise caused by atmospheric discharges, all metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable.
- CXL 3-1LW is a vibration-proof, lightweight, slim-line, corrosion-resistant, modern style base station antenna.



### SPECIFICATIONS

Electrical	
Model	CXL 3-1LW
Frequency	Covering: 118 - 137 MHz
Antenna Type	Coaxial dipole, broad-banded
Max. Input Power	150 W
Polarisation	Vertical
Pattern Type	Omnidirectional
3 dB Beamwidth, E-Plane	66 °
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	0 dBd (2.2 dBi)
VSWR	< 1.75:1
Bandwidth	19 MHz
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	HCM000ND00, 030DE00

Mechanical	
Connection(s)	N(f)
Materials	Radome : Polyurethane-coated glass fibre Mounting bracket : Seawater resistant aluminium, epoxy-coated
Colour	White (RAL 9003)
Wind Area	0.0162 sq. m / 0.17 sq. ft
Wind Load	25 N (160km/h)
Height	1500 mm / 59.06 in.
Weight	0.80 kg / 1.76 lb
Mounting	On 16 to 54 mm dia. mast tube

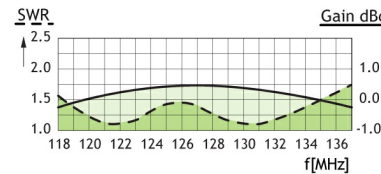
Environmental	
Operating Temperature Range	-40°C to +70°C
Ingress Protection	IP66

### ORDERING

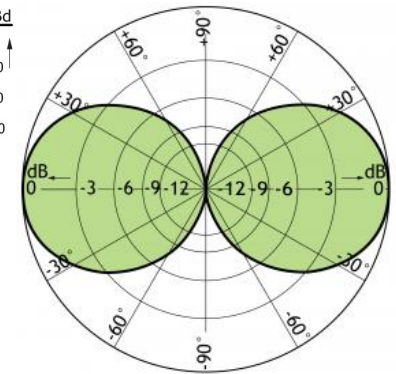
Type	Product No.
CXL 3-1LW	100000075

### DIAGRAM

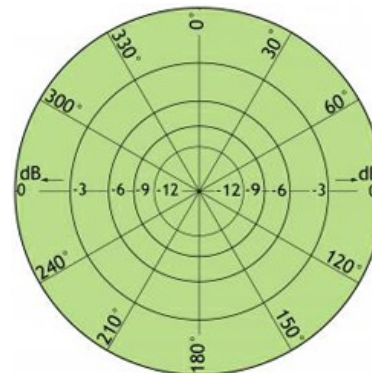
TYPICAL GAIN AND SWR CURVES



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



MULTI-PURPOSE MOUNTING BRACKET

