

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

DESCRIPTION

- CXL 3-1 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.
- The antenna can be mounted on threaded 1" water pipe using the supplied 1" revolving nut. In this way, a nice, slim installation is obtained.
- A wide variety of accessory mounting hardware (see accessories) gives ample choice regarding alternative ways of installation.
- To substantially reduce noise caused by atmospherical discharges, all metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable.
- 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.



SPECIFICATIONS

Electrical	
Model	CXL 3-1
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

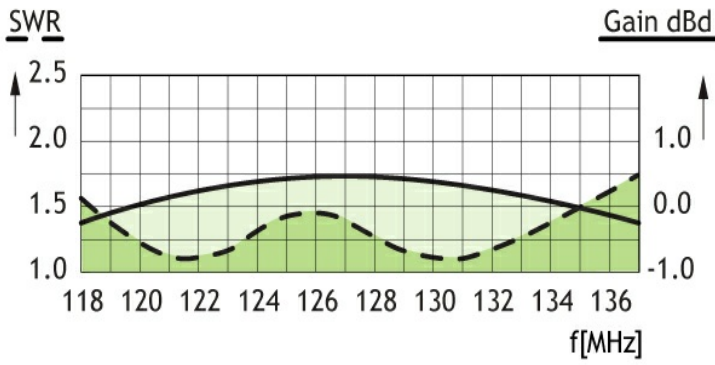
Mechanical	
Connection(s)	UHF(f) (fitting PL 259) or N(f)
Materials	Radome : Polyurethane-coated glass fibre Mounting hardware : Bright chromed brass
Colour	White (RAL 9003)
Wind Area	0.023 sq. m / 0.25 sq. ft
Wind Load	29 N (160 km/h)
Height	Approx. 1500 mm / 59.06 in.
Weight	Approx. 0.85 kg / 1.87 lb.
Mounting	On 1" RG (G1" - 11) threaded water pipe or on optional mounting brackets (see accessories)

Environmental	
Survival Wind Speed	200 km/h

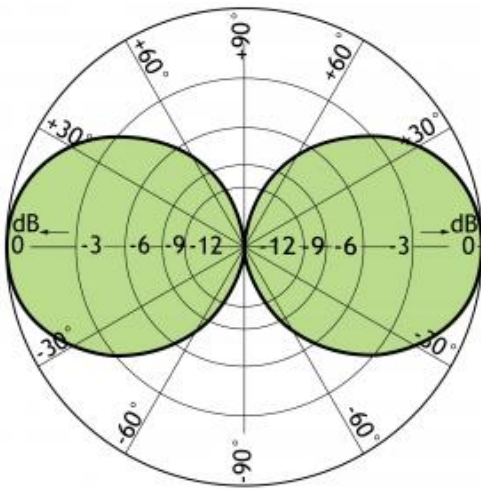
ORDERING

Model	Product No.	Description
CXL 3-1	100000068	UHF(f)
CXL 3-1-N	100000070	N(f)

TYPICAL GAIN AND VSWR CURVE



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



ACCESSORIES (TO BE ORDERED SEPARATELY)

<p>FLG</p>	<p>SMR 1</p>	<p>SMR 2</p>	<p>YA-Bracket</p>
<p>LW-SS-1"</p>	<p>MariFix 1</p> <p>ALSO NEED ADT</p>	<p>MariFix 2</p> <p>ALSO NEED ADT</p>	<p>ADT</p> <p>1"-14 UNS</p>

