CXL 3-1

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

- 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 ½ λ 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.

DESCRIPTION

- 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.

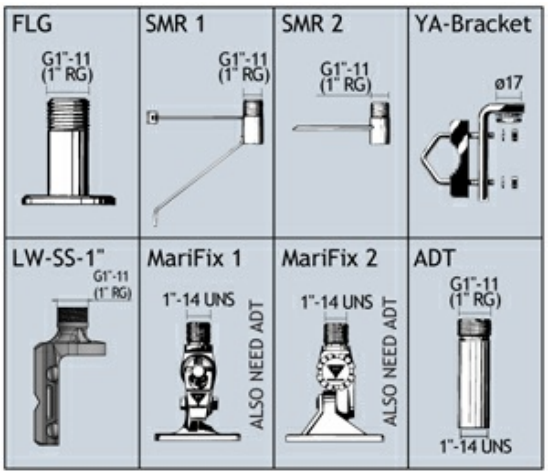
ORDERING DESIGNATIONS

TYPE	PRODUCT NO.	DESCRIPTION
CXL 3-1	100000068	UHF - female
CXL 3-1 N	100000070	N - female

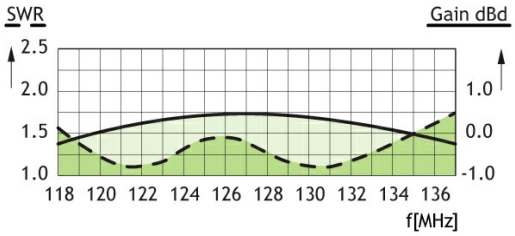
SPECIFICATIONS

ELECTRICAL	
MODEL	CXL 3-1
ANTENNA TYPE	½ λ coaxial dipol, broad-banded
FREQUENCY	Covering: 118 - 137 MHz
IMPEDANCE	Nom. 50 Ω
RADIATION	Omnidirectional
POLARIZATION	Vertical
GAIN	2 dBi 0 dBd
BANDWIDTH	19 MHz
SWR	≤ 1.75
MAX. POWER	150 W
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)
HCM CODE	HCM000ND00, 030DE00
MECHANICAL	
CONNECTOR	UHF-female (fitting PL-259) or N-female
WIND SURFACE	0.023 m²
WIND LOAD	29 N @ 160 km/h
MAX WIND SPEED	Tested to 200 km/h
COLOUR	White (RAL 9003)
MATERIALS	Radome: Polyurethane-coated glass fibre Mounting hardware: Bright chromed brass
TOTAL HEIGHT	Approx. 1.5 m
WEIGHT	Approx. 0.85 kg
MOUNTING	On 1" RG (G1" - 11) threaded water pipe or on optional mounting brackets (see accessories)

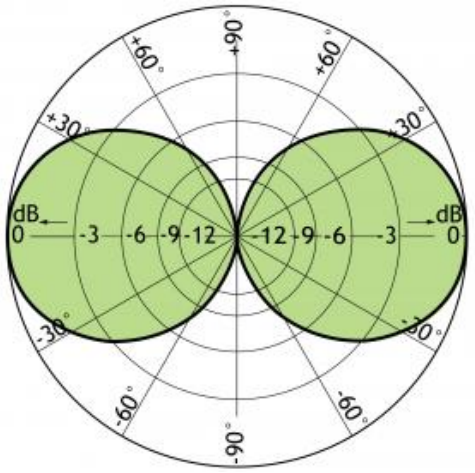
ACCESSORIES (TO BE ORDERED SEPARATELY)



TYPICAL GAIN AND SWR CURVES



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)