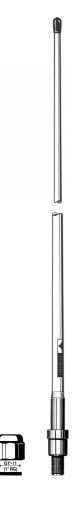
# CXL 3-1

# 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 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.
- A wide variety of accessory mounting hardware (see below) 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.



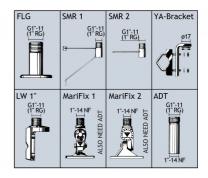
### ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
CXL 3-1	100000068

#### **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)
MECHANICAL	
CONNECTOR	UHF-female (fitting PL-259)
WIND SURFACE	0.023 m <sup>2</sup>
WIND LOAD	29 N @ 160 km/h
MAX WIND SPEED	Tested to 200 km/h
COLOUR	Marine white
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 below)

# ACCESSORIES (to be ordered separately)

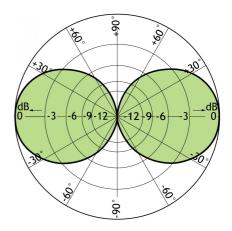




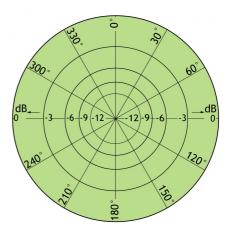
# TYPICAL GAIN AND SWR CURVES

# SWR Gain dBd 2.5 2.0 1.5 1.0 1.18 120 122 124 126 128 130 132 134 136 f[MHz]

# TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)





 $\ensuremath{\mathsf{PROCOM}}$  A/S reserve the right to amend specifications without prior notice.

16/09/13

