

# CXL 3-1LW

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.



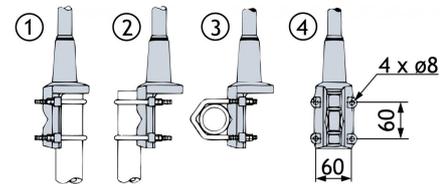
## ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
CXL 3-1LW	100000075

## SPECIFICATIONS

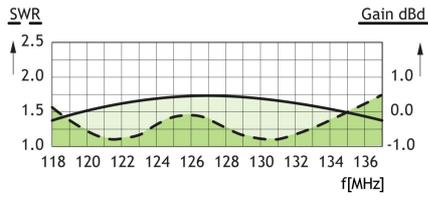
ELECTRICAL	
MODEL	CXL 3-1LW
ANTENNA TYPE	$\frac{1}{2} \lambda$ coaxial dipol, broad-banded
FREQUENCY	Covering: 118 - 137 MHz
IMPEDANCE	Nom. 50 $\Omega$
RADIATION	Omnidirectional
POLARIZATION	Vertical
GAIN	2 dBi 0 dBd
BANDWIDTH	19 MHz
SWR	$\leq 1.75$
MAX. POWER	150 W
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)
MECHANICAL	
TEMP. RANGE	-40° C $\rightarrow$ +70° C
CONNECTOR	N-female
WIND SURFACE	0.0162 m <sup>2</sup>
WIND LOAD	25 N @ 175 km/h
COLOUR	Marine white
MATERIALS	Radome: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated
TOTAL HEIGHT	Approx. 1.5 m
WEIGHT	Approx. 0.80 kg
MOUNTING	On 16 - 54 mm dia. mast tube

## MULTI-PURPOSE MOUNTING BRACKET

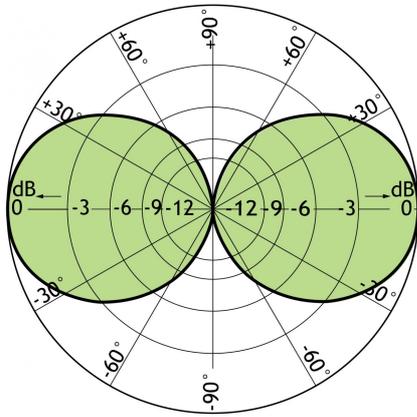


- ① Mast tube Di. min. = 30 mm  
Mast tube Do. max. = 54 mm
- ② Mast tube Do. min. = 54 mm  
Mast tube Do. max. = 16 mm
- ③ Mast tube Do. max. = 54 mm  
Mast tube Do. min. = 16 mm

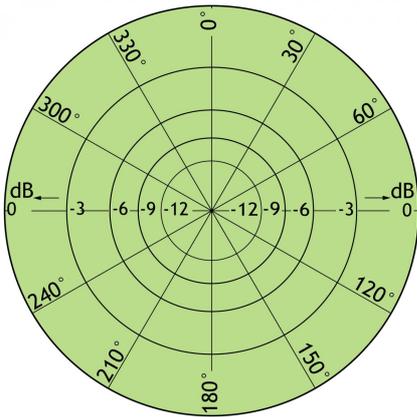
TYPICAL GAIN AND SWR CURVES



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



PROCOM A/S reserve the right to amend specifications without prior notice.

27/04/12