

8.5 Procom CXL 2-1/I Maritime VHF Antenna with FLG Bracket

CXL 2-1/I Marine VHF Antenna

PROCOM

DESCRIPTION:

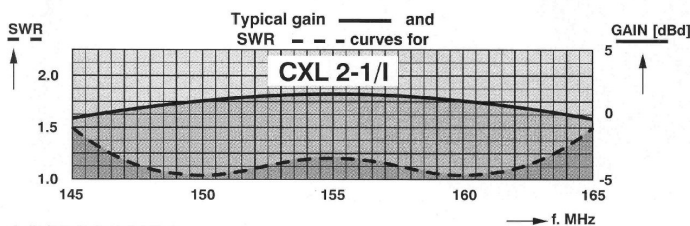
- ★ This maritime VHF antenna is developed for use on board ships and thanks to the 1" revolving nut mounting system it can be mounted in the mast, in the auxiliary mast as well as on the cross-beam. By means of PROCOM's flange mount it can also be mounted on deck or rooftop.
- ★ Bear in mind that the higher the antenna is mounted the better coverage.
- ★ Avoid mounting the antenna parallel with and in the neighbourhood of other metal parts, such as mast, supporting wires etc. Free mounting and as high as possible is most preferable, otherwise the SWR and the radiation diagram will be influenced.
- ★ The antenna is a $1/2 \lambda$ design and this means that it needs neither loading coils, ground-plane, radials nor other auxiliary arrangements.
- ★ CXL 2-1/I can, without problems, operate with duplex radios and on the semi-duplex channels, owing to the fact that it is broad-banded (see SWR diagram). In other words, CXL 2-1/I has a shipshape SWR on the RX-frequencies, which is just as important as it is for the TX-frequencies.
- ★ Furthermore, the antenna is a grounded radiator antenna and therefore it shows a DC-short across the coaxial cable.
- ★ A conical glassfiber tube completely encloses the carefully designed radiating element to ensure long dependable service in all climates.

SPECIFICATIONS:

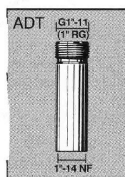
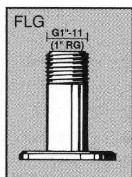
ELECTRICAL	
MODEL	CXL 2-1/I
ANTENNA TYPE	$1/2 \lambda$ coaxial, broad-band
FREQUENCY	144-165 MHz
IMPEDANCE	Nom. 50 Ω
POLARISATION	Vertical
GAIN	0 dBd (2 dBi)
BANDWIDTH	21 MHz
SWR	< 1.5
MAX. POWER	150 watt
MECHANICAL	
TEMP RANGE	-30° C → +70° C
CONNECTOR	UHF-female (standard)
ANTENNA COLOUR	Marine white
DIA. IN TOP END	8 mm
DIA. IN BOTTOM END	16 mm
TOTAL HEIGHT	Approx. 1.15 m
WEIGHT	Approx. 300 g
MOUNTING	On 1" RG (G1"-11) threaded water pipe or on optional mounting brackets (see below)

ORDERING DESIGNATIONS

TYPE NO.	CONNECTOR
CXL 2-1/I	UHF-female
CXL 2-1/I-N	N-female
CXL 2-1/I-TNC	TNC-female



ACCESSORIES:



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

8.6 Procom GPS 4 Antenna

GPS 4/...
Active Receiving Antenna for the 1575 MHz NAVSTAR GPS Satellite Navigational System

DESCRIPTION:

- ★ Full hemispherical coverage due to quadrifilar helix antenna element.
- ★ Built-in high gain, low noise amplifier.
- ★ Input filter for thorough RF-overload protection.
- ★ Right-hand circular polarisation (RHCP).
- ★ High rejection of cross-polarised reflections prevents fading caused by multipath propagation.
- ★ Choice between 5 V or 12 V supply voltage.
- ★ DC supply via RF-connector.
- ★ EMC tested to IEC 801 and IEC 255.
- ★ Total design carried out to make the antenna withstand tough environments.
- ★ Comprehensive range of accessory mounting brackets available.

SPECIFICATIONS:

ELECTRICAL	
General specifications	
ANTENNA TYPE	Quadrifilar helix active antenna
FREQUENCY	1575 MHz
IMPEDANCE	Nom. 50 Ω
POLARISATION	Circular right-hand
COVERAGE	Hemispherical
GAIN (in axial direction)	> 32 dBi
CROSS-POLARISATION ATT.	> 10 dB
Built-in amplifier	
GAIN	> 30 dB
NOISE FIGURE	< 3 dB (incl. input filter). Typ. approx. 2.5 dB
1 dB COMPRESSION POINT	> 10 dBm
SELECTIVITY	> 20 dB down at ± 100 MHz
OUT OF BAND ATTENUATION	0.03– 1 GHz : > 40 dB down 2 – 10 GHz : > 40 dB down
SWR (output)	< 2.0
SUPPLY VOLTAGE	GPS 4: 5±0.5 VDC GPS 4/12V: 9–15 VDC
CURRENT CONSUMPTION	Approx. 44 mA
EMC	Full protection (IEC 801, IEC 255)
MECHANICAL	
MATERIALS	Antenna dome: Weather-resistant low-loss plastic
ANTENNA COLOUR	Marine white
INSULATION	Connector ground terminal is galvanically insulated from the mounting hardware
WIND SURFACE	Approx. 0.0072 m ²
MAX. WIND SPEED	200 km/h
WIND LOAD	Approx. 9.6 N (at 150 km/h)
TEMP. RANGE	-30° C → + 70° C
CONNECTOR	FME male (pin)
SUGGESTED DOWNLEAD CABLE	< 10 m : RG 58 > 10 m : RG 213
TOTAL HEIGHT	Approx. 23 cm
WEIGHT	Approx. 150 g
MOUNTING	On 1" water pipe or on PROCOM 1" mounting brackets (see accessories below)

MODEL SURVEY:

TYPE NO.	SUPPLY VOLTAGE
GPS 4	5 V DC (4.5–5.5 V)
GPS 4/12 V	12 V DC (9–15 V)

ACCESSORIES:

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