# CXL 70-5C/...

# Collinear, 5 dBd Base Station and Marine Antenna for the $450\ \text{MHz}$ Band

- CXL 70-5C/... is a 5 dBd, vertically polarized, omnidirectional base station and marine antenna, which covers within 350 - 620 MHz band in 9 models.
- The antenna is provided with our "C" universal fixation bracket made of epoxy-coated, seawater resistant aluminium. The accompanying U-bolts and fittings are made of stainless steel.

#### **DESCRIPTION**

- > CXL 70-5C/... can be mounted on 27 to 65 mm dia. mast tubes and it is possible to lead the cable either along the inside or on the outside of the mast tube.
- The carefully designed radiating element is sealed in a high-quality, conical glass fibre tube with low wind-load, which will ensure performance undisturbed by corrosive environments.
- To substantially reduce noise caused by atmospherical discharges, all metal parts in the antenna are DCgrounded. Consequently, the antenna shows a DCshort across the coaxial cable.
- > The exceptional mechanical capabilities of this antenna ensure long dependable service in all environments.

#### **ORDERING DESIGNATIONS**

| TYPE         | FREQUENCY     | PRODUCT NO. |
|--------------|---------------|-------------|
| CXL 70-5C/ls | 350 - 370 MHz | 100000593   |
| CXL 70-5C/ss | 360 - 390 MHz | 100000594   |
| CXL 70-5C/s  | 380 – 410 MHz | 100000120   |
| CXL 70-5C/f  | 406 – 430 MHz | 100000115   |
| CXL 70-5C/I  | 420 – 450 MHz | 100000118   |
| CXL 70-5C/h  | 440 – 470 MHz | 100000117   |
| CXL 70-5C/hh | 470 - 490 MHz | 100000595   |
| CXL 70-5C/vh | 490 - 520 MHz | 100000596   |
| CXL 70-5C/uh | 590 - 614 MHz | 100000597   |



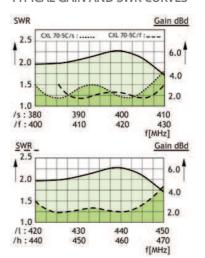


### **SPECIFICATIONS**

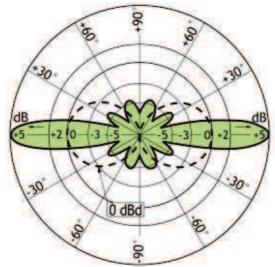
| ELECTRICAL               |                  |  |             |  |
|--------------------------|------------------|--|-------------|--|
| MODEL                    | CXL 70           | CXL 70-5C/   |             |  |
| ANTENNA TYPE             | Colline          | Collinear, broad-banded  |             |  |
| FREQUENCY                | 30 MH<br>350 - 6 | 30 MHz wide frequency segments within 350 - 620 MHz.               |             |  |
| IMPEDANCE                | Nom.             | Nom. 50 Ω  |             |  |
| RADIATION                | Omnic            | Omnidirectional  |             |  |
| POLARIZATION             | Vertica          | Vertical   |             |  |
| GAIN                     | 7 dBi 5          | 7 dBi 5 dBd  |             |  |
| HALF POWER<br>BEAMWIDTH  | 18°              | 18°  |             |  |
| BANDWIDTH                | (Deper           | 20 - 30 MHz<br>(Dependent on model. See ordering<br>designations)  |             |  |
| SWR                      | Туре             | SWR < 1.5  | SWR < 2.0   |  |
|                          | /ls              | 350-370 MHz  | 380-390 MHz |  |
|                          | /ss              | 360-380 MHz  |             |  |
|                          | /s               | 380-400 MHz  | 400-410 MHz |  |
|                          | /f               | 406-426 MHz  | 426-430 MHz |  |
|                          | /I               | 420-440 MHz  | 440-450 MHz |  |
|                          | /h               | 440-460 MHz  | 460-470 MHz |  |
|                          | /hh              | 470-490 MHz  |             |  |
|                          | /vh              | 490-510 MHz  | 510-520 MHz |  |
|                          | /uh              | 590-614 MHz  |             |  |
| MAX. POWER               | 150 W            | 150 W  |             |  |
| ANTISTATIC<br>PROTECTION | All me           | All metal parts DC-grounded<br>(Connector shows a DC-short)Publish |             |  |

| MECHANICAL         |   |  |
|--------------------|---|--|
| TEMP. RANGE        | -35°C 70°C  |  |
| CONNECTOR          | N-female  |  |
| WIND SURFACE       | 0.045 m <sup>2</sup> / 0.48 ft <sup>2</sup>   |  |
| WIND LOAD          | 57 N @ 160 km/h / 99.42 mph.  |  |
| COLOUR             | Marine white  |  |
| MATERIALS          | Shroud: Polyurethane-coated glass<br>fibre<br>Mounting bracket: Seawater resistant<br>aluminium,<br>epoxy-coated<br>Clamps: Stainless steel |  |
| TOTAL HEIGHT       | Approx. 2.2 m / 86.61 in. (dep. on freq.)   |  |
| DIA. IN TOP END    | 13 mm / 0.51 in.  |  |
| DIA. IN BOTTOM END | 25 mm / 0.98 in.  |  |
| WEIGHT             | Approx. 2.8 kg / 6.17 lb.   |  |
| MOUNTING           | On 27 - 65 mm / 1.06 - 2.56 in. dia. mast<br>tube   |  |

## TYPICAL GAIN AND SWR CURVES



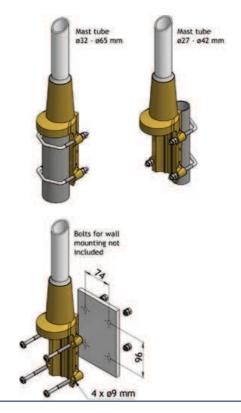
TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



MULTI-PURPOSE MOUNTING BRACKET





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

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