

7 dBd Omnidirecctional Base Station Antenna for the 23 cm Amateur Band

DESCRIPTION

- The CXL 23-7C/... is a 7 dBd, vertically polarized, omnidirectional base station antenna, which covers 1240 – 1340 MHz in three models.
- The antenna is provided with the type "C" universal fixing bracket. The epoxy coated cast aluminium bracket and accompanying stainless steel "U" bolts are suitable for the most severe marine environment.
- The CXL 23-7C/... is suitable for 27 – 65 mm dia. mast tubes. The coaxial feeder cable can be routed either internally or externally to the support tube.
- The antenna has excellent VSWR and gain characteristics and is highly suitable for repeater operation.
- The radiating element of the antenna is housed in a sealed high quality tapered glass fibre tube providing low wind loading and excellent all weather performance.
- The antenna is DC grounded for static discharge protection.
- The CXL 23-7C/... is a vibration-proof, slim-line, corrosion resistant, modern style base station antenna.



ORDERING

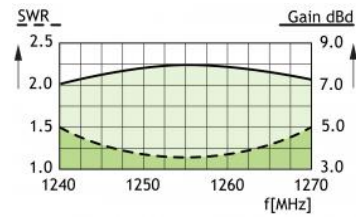
| Type         | Product No. | Frequency       |
|--------------|-------------|-----------------|
| CXL 23-7C/l  | 100000173   | 1240 - 1270 MHz |
| CXL 23-7C/h  | 100000174   | 1260 - 1300 MHz |
| CXL 23-7C/hh | 100000282   | 1300 - 1340 MHz |

SPECIFICATIONS

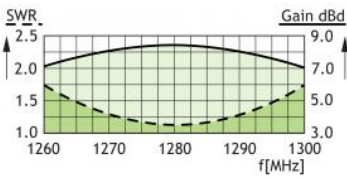
| Electrical              |   |
|-------------------------|---|
| Model                   | CXL 23-7C/...   |
| Frequency               | Covering: 1240 - 1340 MHz   |
| Antenna Type            | Collinear, broad-band   |
| 3 dB Beamwidth, H-Plane | Omnidirectional   |
| Polarisation            | Vertical  |
| 3 dB Beamwidth, E-Plane | 11 °  |
| Impedance               | 50 Ω  |
| Gain                    | 7 dBd (9.2 dBi)   |
| Maximum Input Power     | 100 W   |
| Bandwidth               | 30 MHz for CXL 23-7C/l<br>40 MHz for CXL 23-7C/h<br>40 MHz for CXL 23-7C/hh                               |
| Antistatic Protection   | All metal parts DC-grounded (Connector shows a DC-short)  |
| HCM Code(s)             |   |
| Mechanical              |   |
| Wind Area               | 0.03 sq. m / 0.32 sq. ft  |
| Connection(s)           | N(f)  |
| Materials               | Radome : Polyurethane-coated glass fibre<br>Mounting bracket : Seawater resistant aluminium, epoxy-coated |
| Colour                  | White (RAL 9003)  |
| Height                  | 1500 mm / 59.06 in.   |
| Wind Load               | 38 N (160km/h)  |
| Weight                  | 1.0 kg / 2.20 lb  |
| Mounting                | On 27 - 65 mm dia. mast tube  |

DIAGRAM

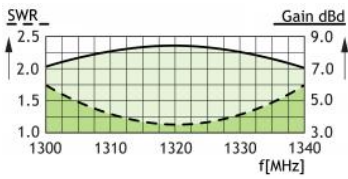
CXL 23-7C/l



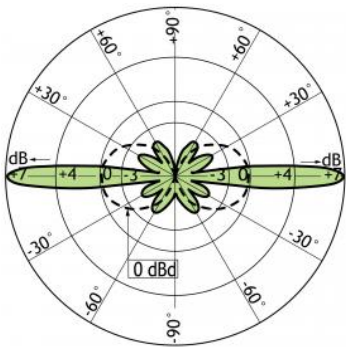
CXL 23-7C/h



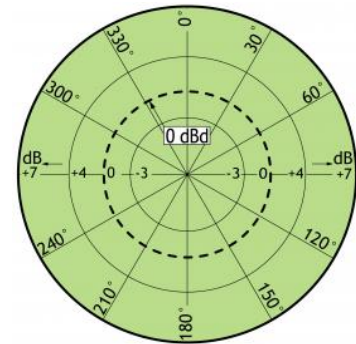
CXL 23-7C/hh



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



MULTI-PURPOSE MOUNTING BRACKET

