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

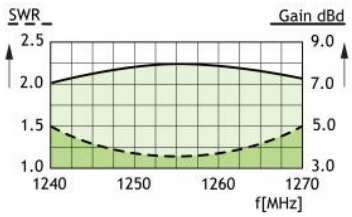
SPECIFICATIONS

Electrical	
Model	CXL 23-7C/...
Frequency	Covering: 1240 - 1340 MHz
Antenna Type	Collinear, broad-band
Max. Input Power	100 W
Polarisation	Vertical
3 dB Beamwidth, E-Plane	11 °
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	7 dBd (9.2 dBi)
Bandwidth	30 MHz for CXL 23-7C/l 40 MHz for CXL 23-7C/h 40 MHz for CXL 23-7C/hh
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	

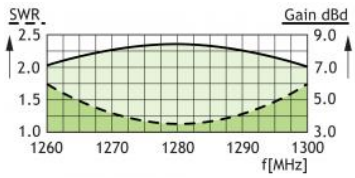
Mechanical	
Connection(s)	N(f)
Materials	Radome : Polyurethane-coated glass fibre Mounting bracket : Seawater resistant aluminium, epoxy-coated
Colour	White (RAL 9003)
Wind Area	0.03 sq. m / 0.32 sq. ft
Wind Load	38 N (160km/h)
Height	1500 mm / 59.06 in.
Weight	1.0 kg / 2.20 lb
Mounting	On 27 - 65 mm dia. mast tube

DIAGRAM

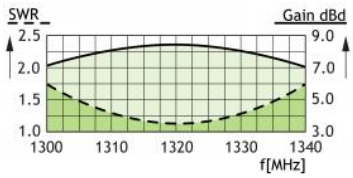
CXL 23-7C/l



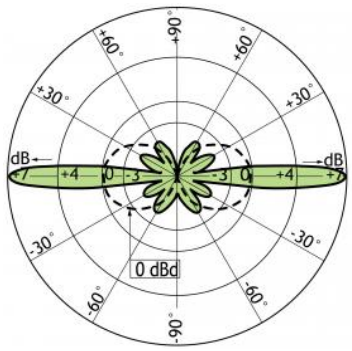
CXL 23-7C/h



CXL 23-7C/hh



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)

MULTI-PURPOSE MOUNTING BRACKET