

Application:

The AT100 Series antenna is a high quality glass fibre transmitting antenna for marine coastal and HF telephony bands. It matches well all modern SSB marine telephony transmitters.

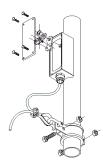
End fed or side fed options are available.

Electrical specifications:

Frequency range	1.6-30 MHz	
Power rating	1.5 kW PEP	
Impedance	See table on page 2	
Pattern	Omnidirectional	
Polarization	Vertical	
Electrical length	10 m (33 ft)	

Mechanical specifications:

Design	Self supporting fiberglass rod with stainless steel armature
Height	10 m (33 ft)
Weight	End Feed: 22 kg Side Feed: 19.8 kg
Sections	Base section - end fed: ATB50 - 18.5 kg Base section - side feed: ATB50D/S - 16.3kg Base section - side feed: ATB50DS/H - 16.3kg Top section: APB50 - 3.5 kg
Wind rating	55 m/s = 125 mph
Moment of flexure	275 kpm at 55 m/s
Deflection due to wind load	5 m (16.7 ft) at tip ball at 55 m/s wind load
Finish	Polyurethane lacquer, white, other colours available on request
Temperature range	-55 °C, +55 °C; -67 °F, +131 °F
Water proofing	IP67



Side feed

Mounting:

The AT100 Series is suited to mounting on top of the radio cabin. End fed and side feed options are available. See page 2 for details.

If the end fed insulator is not long enough, extensions are available.

The mounting flange holes are suitable for M12 bolts.

5.1m Lower Whip 10m overall height 4.9m Upper Whip AT100D - End Fed shown Side feed versions available

Impedance at CF and HF

Frequency in MHz, normal installation

Frequency (MHz)	Impedance AT100 Series
1.6	5-j1000
2.0	6-j600
3.0	10-j350
4.0	11-j200
6.0	24-j34
7.0	48+j57
8.0	80+j140
9.0	180+j275
11.0	750+j60
12.0	500-j350
13.0	250-j360
14.0	150-j300
16.0	70-j180
17.0	55-j135
22.0	200+j130
23.0	350+j60
25.0	275-j200
30.0	68-j52.5

AT100D

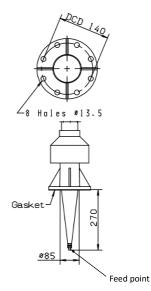
Deck mounted, end feed

<u>AT100DS</u>

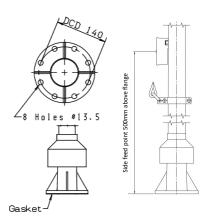
Deck mounted, side feed

AT100DS/H

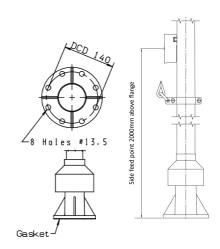
Deck mounted, side feed (high)



End fed RF cable installation



Side feed RF cable positioned 500mm above the mounting flange



The AT100DS/H uses the same side feed point as the AT100DS but it is positioned 2 metres above the base flange