

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.

The AT100 is available as a two piece antenna as standard or as a four piece antenna to minimise shipping size.

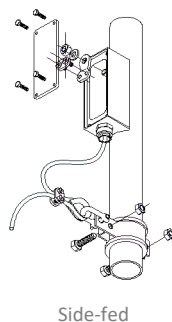
End-fed or side-fed options are available.

Electrical specifications:

Frequency range	1.6-30 MHz
Power rating	1.5 kW PEP
Impedance	See table on page 3
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) nominal
Weight	See table on page 2
Sections	See table on page 2
Wind rating	55 m/s = 125 mph
Moment of flexure	275 kph 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



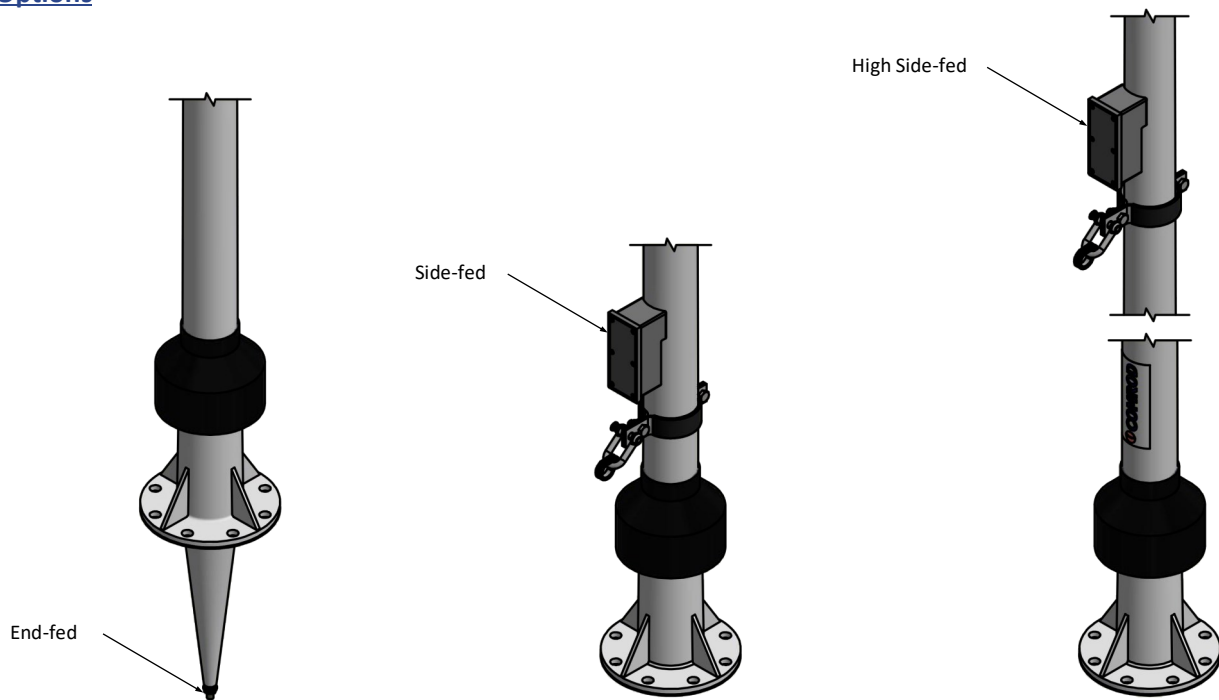
The AT100 Series is suited to mounting on top of the radio cabin. End-fed and side-fed options are available. See page 2 for details. If the end-fed insulator is not long enough, extensions are available.

The mounting flange holes are suitable for M12 bolts.

Dimension & Weights

	Two-Section	Four-Section
Dimensions	5m nominal section length	2.5m nominal section length
Weight	End-fed: 22 kg Side-fed: 19.8 kg	Side-fed: 23.4kg
Sections	Base section - End-fed: ATB50 - 18.5 kg Base section - Side-fed: ATB50DS - 16.3kg Base section - High side-fed: ATB50DS-H - 16.3kg Top section: APB50 - 3.5 kg	Base section - Side-fed: AT100DS-4B - 11.9kg Base section - High side-fed: AT100DS-H-4B - 11.9kg Lower section: AT100-4L - 8.5kg Middle section: ASM25-2 - 2.2kg Top section: APB25 - 0.8 kg

Feed Options



AT100D

Deck mounted, end-fed

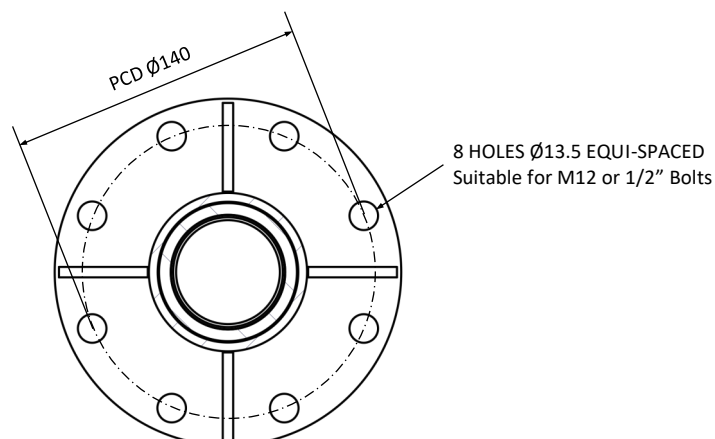
AT100DS

Deck mounted, side-fed
Fed cable positioned 500mm
above the mounting flange

AT100DS-H

Deck mounted, side-fed (high)
Uses the same side feed point as
the AT100DS but it is positioned
2 metres above the base flange

Base Flange Mounting Detail (common for all feed types)



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