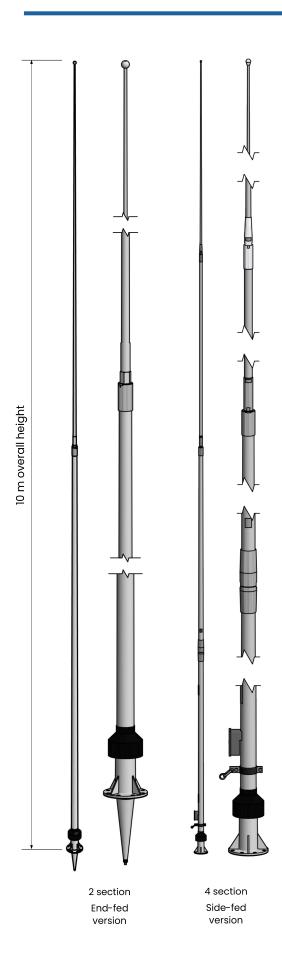
#### **AT100 Series**

10 m, HF, two-piece sectional whip, monopole, end feed, 1.6-30 MHz

#### Naval Antennas and Systems: Shipboard





### **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	
Polarisation	Vertical	
Electrical Length	10 m	

## **Mechanical Specifications**

Design	Self supporting fibreglass rod with stainless steel armature
Height	10 m nominal
Weight	See table on page 2
Sections	See table on page 2
Wind Rating	55 m/s = 201 km/h
Moment of Flexure	275 km/h at 55 m/s
Deflection due to Wind Load	5 m at tip ball at 55 m/s wind load
Finish	Polyurethane lacquer, white Other colours available on request
Temperature Range	- 55°C to + 55°C
Water Proofing	IP67



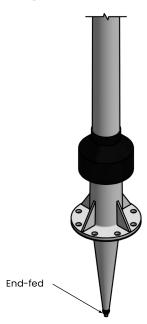
The AT100 Series is suited to mounting on top of the radio cabin. End-fed and side-fed options are available. See page 2 for details. If the end-fed insulator is not long enough, extensions are available.

The mounting flange holes are suitable for M12 bolts.

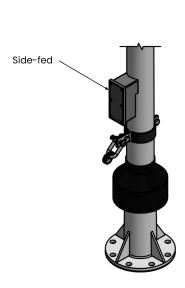
## **Dimensions and Weights**

	Two-Section	Four-Section
Dimensions	5 m nominal section length	2.5 m nominal section length
Weight	End-fed: 22 kg Side-fed: 19.8 kg	End-fed: 25.6 kg Side-fed: 23.4 kg
Sections	Base section - End-fed: ATB50 - 18.5 kg Base section - Side-fed: ATB50DS - 16.3 kg Base section - High side-fed: ATB50DS-H - 16.3 kg	Base section - End-fed: AT100D-4B - 14.1 kg Base section - Side-fed: AT100DS-4B - 11.9 kg Base section - High side-fed: AT100DS-H-4B - 11.9 kg
	Top section: APB50 - 3.5 kg	Lower section: AT100-4L - 8.5 kg Middle section: ASM25-2 - 2.2 kg Top section: APB25 - 0.8 kg

# **Feed Options**

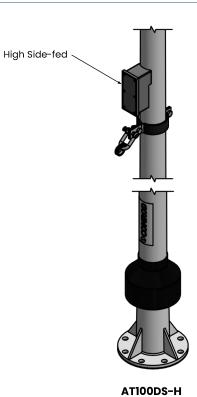


**AT100D**Deck mounted, end-fed



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

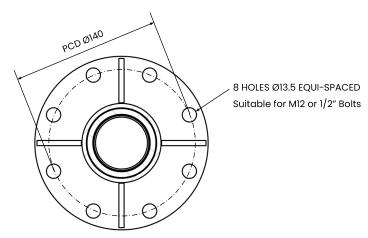
AT100DS



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



September 2019

All specifications are subject to change without notice
The information contained herein is for reference only and does not constitute a warranty of performance



