

### **Description:**

The Comrod AT83 series antenna is a fully ruggedized, high quality fibre-glass transmitting antenna suitable for HF frequency bands. The antenna matches well with all military HF shipboard transmitters as well as modern SSB marine telephony transmitters. The antennas can be part of any MF/HF communication system and is designed to satisfy the demands of the GMDSS.

The antenna is a two piece whip with a 5 metre lower whip and 3 metre upper whip. The larger diameter lower whip produces a stiffer antenna suited to more rugged applications.

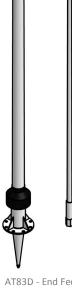
Feed point options are available depending on the installation required. See page 2 for details.

#### **Electrical specifications:**

Frequency range	1.6-30 MHz
Power rating	1.5 kW PEP
Impedance	See table
Polarization	Vertical
Pattern	Omnidirectional
Electrical length	7.5 m (25 ft)

# **Mechanical specifications:**

Design	Self supporting two piece fiberglass sections
Height	Overall Height - 8 m (26.5 ft)
	Lower Whip - 5 m (16.5 ft)
	Upper Whip - 3 m (10 ft)
Weight	Base: ATB50D - 18.5 kg
	ATB50D/S - 18.9 kg
	Top: APB31 - 1.8 kg
Sections	Base: ATB50D (end feed)
	ATB50D/S (side feed)
	Top: APB31
Wind rating	55 m/s = 125 mph
Moment of flexure	90 kpm at 55 m/s
Finish	Polyurethane lacquer, grey
Temperature range	-55 °C, +55 °C, -67 °F, +131 °F
Ice build-up	Not affected
Water Proofing	IP67



AT83D - End Fed Side feed also available

# **Impedance Measurements:**

Antenna mounted on a 2 m steel pipe over flat steel roof. Feed line 2 m.

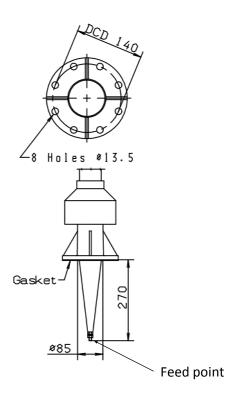
Frequency	Transmitting Antenna
(MHz)	8 m
1.6	4-j1.060
2.0	5-j800
3.0	9-j470
4.0	11-j290
5.0	20-j145
6.0	28-j38
7.0	55+j55
8.0	60+j155
10.0	200+j400
12.0	1000+j300
16.0	500-j500
18.0	250-j450
22.0	70-j80
25.0	240-j200
30.0	400-j300

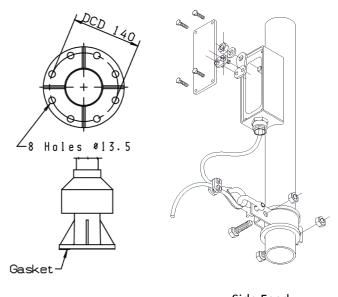
### **AT83D**

Deck mounted, end feed

### **AT83D/S**

Deck mounted, side feed





Side Feed -Installation of cable