

Application

AT82M is a high performance glass-fibre transmitting antenna for marine coastal and HF telephony bands (simplex and duplex SSB). It matches well modern SSB marine telephony transmitters.

The antennas can be part of any MF/HF communication system but is specially designed to satisfy the demands of the GMDSS.

The AR82M can be supplied as a two or three section antenna. The three section (AT82M-3) has a shipping dimension of under three metres.

Electrical specifications

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

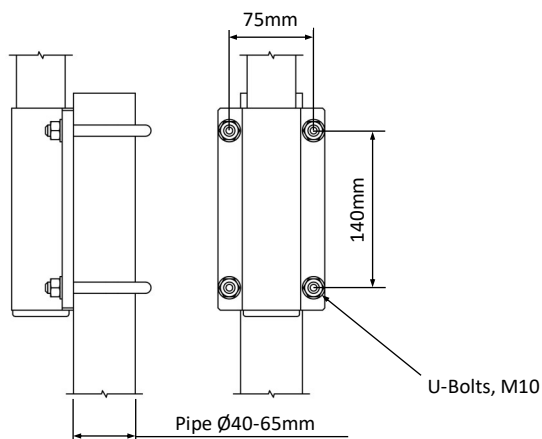
Mechanical specifications

Design	Self supporting fiberglass rod with plated aluminium mounting hardware.
Height	8 m (27 ft) nominal
Weight	2-section: 8.2 kg 3-section: 8.3 Kg
Sections	2-section: Base: AXB42 Bracket, side feed Top: APB41 3-section: Base: AXB32M-S (with U-Bolts) Middle: ASM25-2 Top: APB25
Wind rating	55 m/s = 125 mph
Moment of flexure	90 kpm at 55 m/s
Deflection due to wind load	4.6 m (15 ft) at tip ball at 55 m/s wind load
Finish	Polyurethane lacquer, white
Temperature range	-55 °C, +55 °C, -67 °F, +131 °F
Ice build-up	Not affected
Water Proofing	IP67

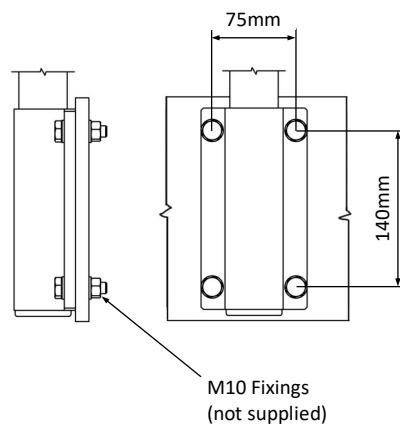
Mast/wall mounting

Mounting by means of U-bolts with nuts (included) or directly on wall or steel plate.

Pole Mounting



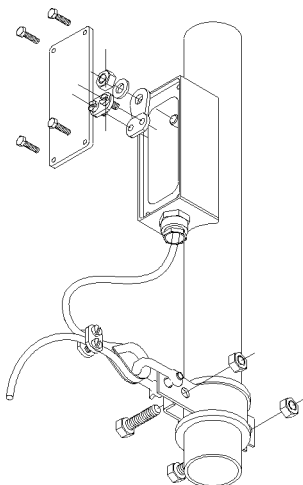
Wall/Bulkhead Mounting



Feed Options

The AT82M can be supplied as standard with a side feed or with an optional passive transformer.

Side Feed (standard)



Passive Transformer AT-T (option)



The AT-T is a broadband transformer with gain comparable to a commercial marine tuner. It has a 50 ohm N-Type female connector and a power rating of 150W.

See datasheet AT-T for a detailed specification.

Impedance Measurements

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

Frequency (MHz)	Transmitting Antenna 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