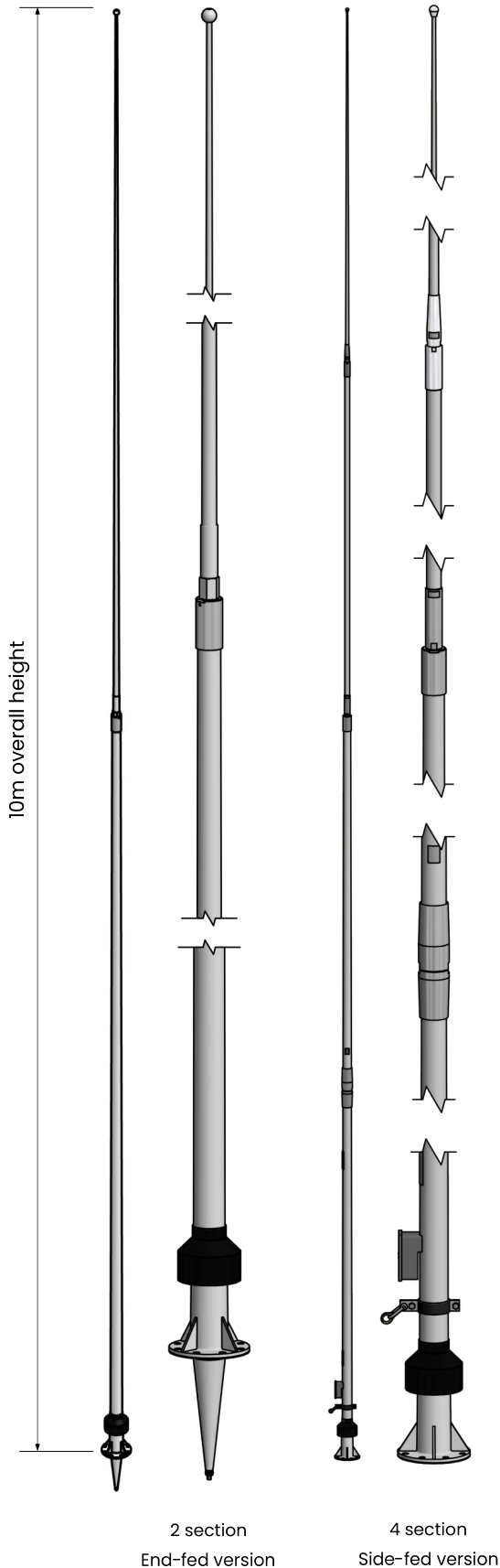


AT100 Series

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

Tactical Antennas: Tactical and Base Station



2 section
End-fed version

4 section
Side-fed version

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.

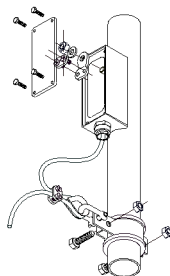
End-fed or side-fed options are available.

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 |



Side-fed

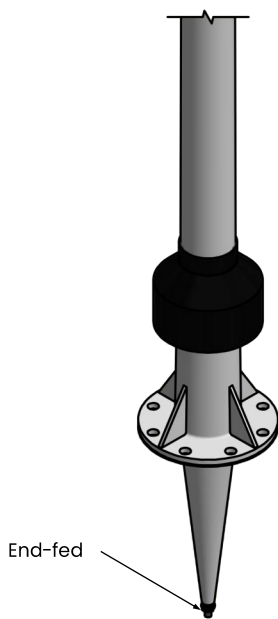
The AT100 Series is suited to mounting on top of the radio cabin. End-fed and side-fed options are available. See page 2 for details. If the end-fed insulator is not long enough, extensions are available.

The mounting flange holes are suitable for M12 bolts.

Dimensions and Weights

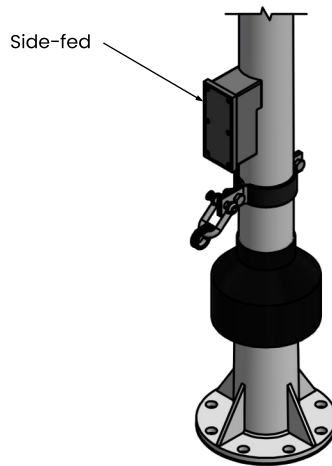
| | Two-Section | Four-Section |
|-------------------|--|--|
| Dimensions | 5 m nominal section length | 2.5 m nominal section length |
| Weight | End-fed 22 kg Side-fed 19.8 kg | End-fed 25.6 kg Side-fed 23.4 kg |
| Sections | Base section End-fed: ATB50 18.5 kg Base section Side-fed: ATB50DS 16.3 kg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

Feed Options



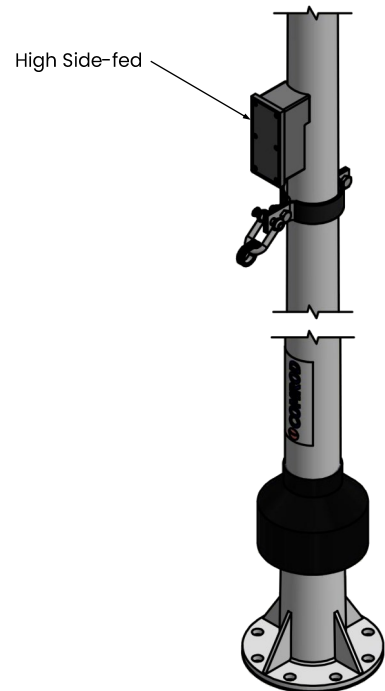
AT100D

Deck mounted, end-fed



AT100DS

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

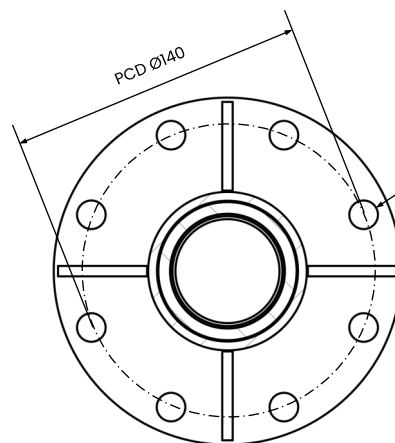


AT100DS-H

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)



8 HOLES \varnothing 13.5 EQUI-SPACED
Suitable for M12 or 1/2" Bolts

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 |

August 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

Partnered Supplier



sales@eylex.com.au
www.eylex.com.au

