



## Type 107B/1 - 107BS/1

### High power capability base mounted marine HF whip antenna for naval vessels over 40 metres (130 feet) and base stations

The type 107B/1 is a 10.7 metre (35 ft) heavy duty free standing whip antenna with a continuous power capability of 1 kW in the frequency range 1.6 to 30 MHz, designed to provide efficient and reliable communications for the professional/ military services. NATO Stock No.s: 5985-66-137-0889 *base feed*, 5985-66-137-0890 *side feed*.

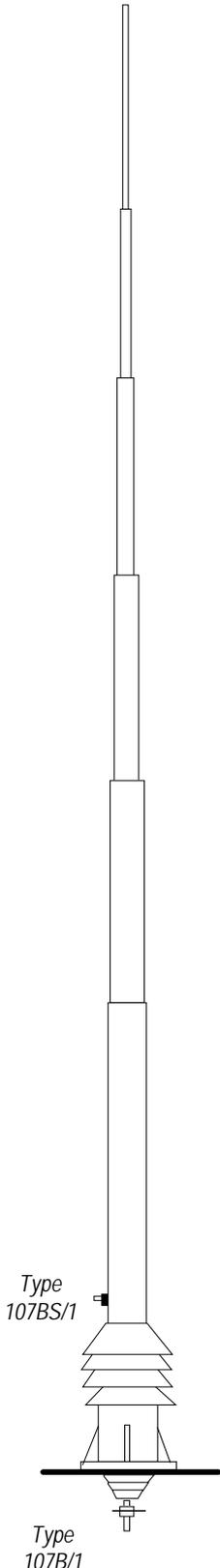
The antenna is base mounted and designed to withstand wind speeds of up to 240 km/h (150 mph) without permanent deformation. Construction is of heavy gauge marine grade aluminium alloy tubing, which provides a large low loss surface area for maximum radiating efficiency. The radiator and base flange are finished with a high durability epoxy based coating, highly resistant to chemical attack, abrasion and the effects of ozone and ultra-violet radiation.

A high reliability corona shield forms part of the base insulator. This reduces the effects of flashover caused by rain and saltwater spray and permits a rapid recovery from saltwater induced short circuits caused by splashing. The corona shield neither burns nor leaves tracks even when subject to severe surface arcing. It is made from a flexible modified polymer moulded over the antenna base insulator and is consequently impact resistant. The physical shape of the shield is arranged to provide a long and broken path to further assist with low leakage of RF energy.

For ease of transport, the antenna breaks down into three sections which slip together on "O" ring seals and are secured by three stainless steel locking set screws. Joint sealing kits and special grease are provided to prevent corrosion of the joint.

### Specifications

<b>Colour</b>	Standard is APO Grey
<b>HF Marine Band</b>	1.6-30 MHz
<b>Length</b>	10.67 metres (35 ft)
<b>Pattern</b>	Omnidirectional
<b>Polarisation</b>	Vertical
<b>Frequency Range</b>	Unloaded, 1.6-30 MHz with suitable ATU
<b>Power Capability</b>	1 kW continuous
<b>Construction of Radiator</b>	Aluminium 3 sections: 3m, 3.8m and 4m approx. (9.8, 12.5 and 13ft)
<b>Base Mounting</b>	Aluminium casting with 8 equally spaced securing holes on 273mm (10.75in) diameter
<b>Feed Connection</b>	Upper side feed above corona shield (107BS/1), or lower feed below through deckmount (107B/1)
<b>Wind Loading</b>	Antenna survival : 240 km/h (150 mph), 65 m/sec
<b>Packed Weight</b>	85 kg (187.4 lbs) Antenna and base unpacked 47 kg (103.6 lbs)



Specifications subject to change – Issued 01/09/13

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