

SAILOR 6300 MF/HF Transceiver Unit & Antenna Tuning Unit 150/250/500W

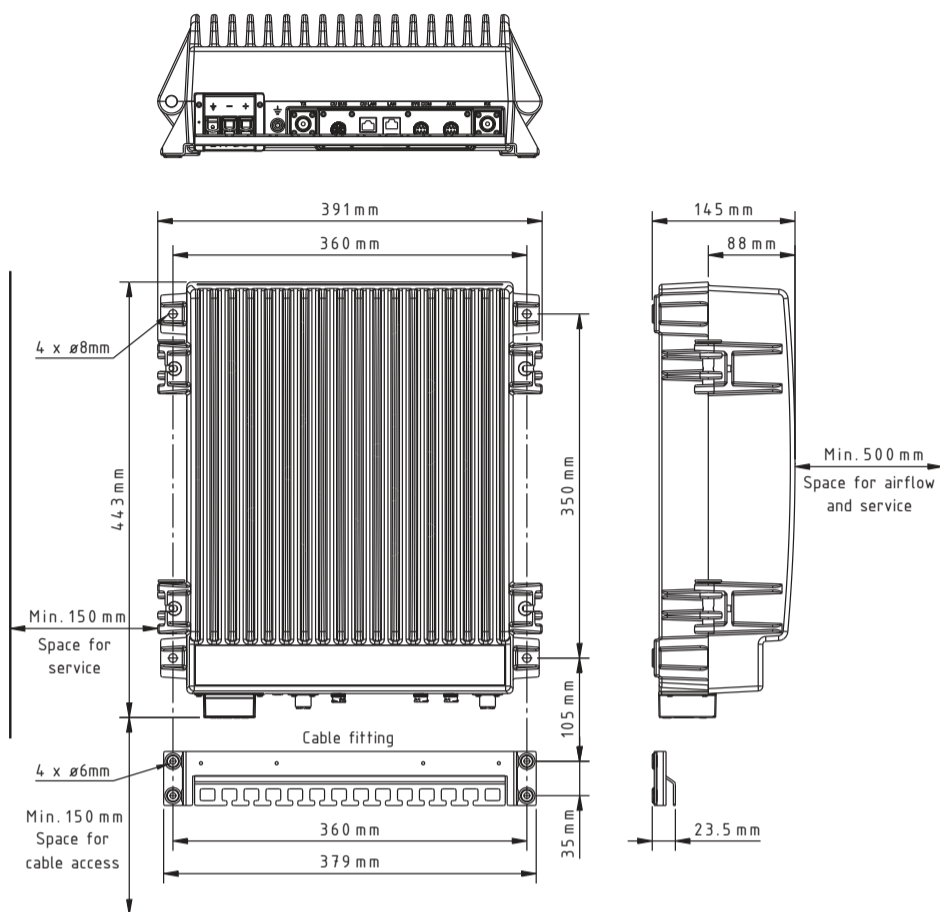
Installation guide

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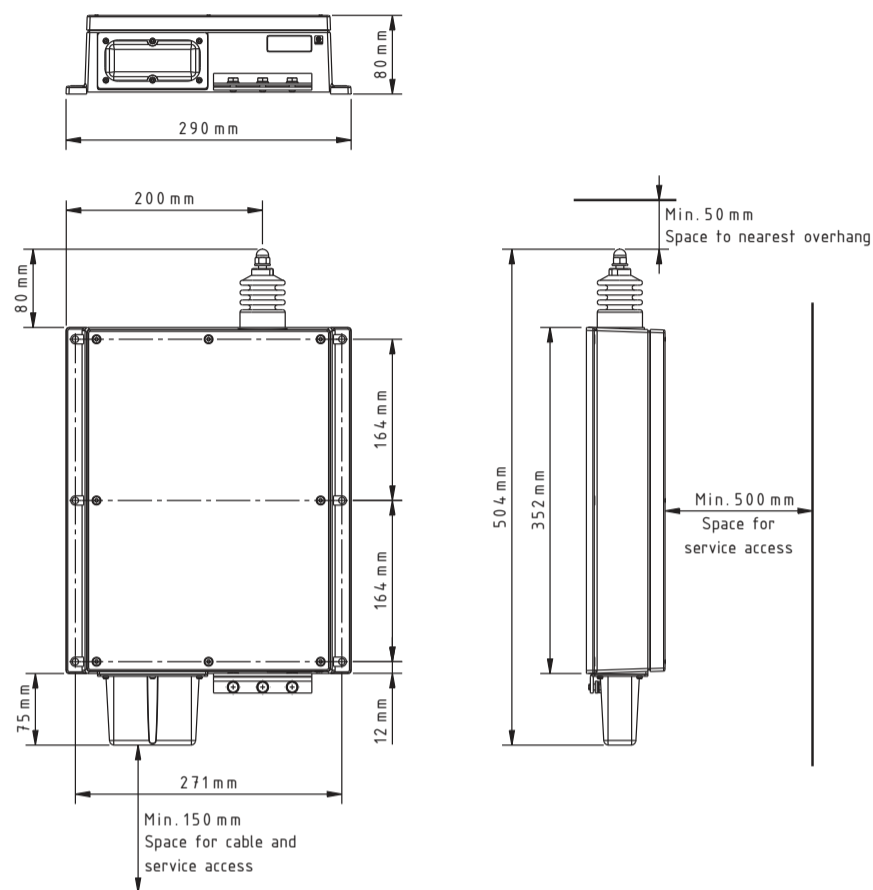
Thrane & Thrane A/S is trading as Cobham SATCOM.

How to install the Transceiver Unit 150/250W



Weight: 19 kg (41.9 lbs)

How to install the Antenna Tuning Unit 150/250W



Weight: 3.3 kg (7.3 lbs)

How to install the Transmitter Antenna

In general a 12 metres antenna installation is preferred and can be made using an 8 metres whip and 4.5 metres feeder or a 10 metres whip and 2.5 metres feeder. In both cases the whip should be mounted on a pole providing sufficient height to have the Antenna Tuning Unit mounted such that it allows for the feeder to be erected at an angle of 45 to 60 degrees, creating a combined 12 metres vertical antenna system.

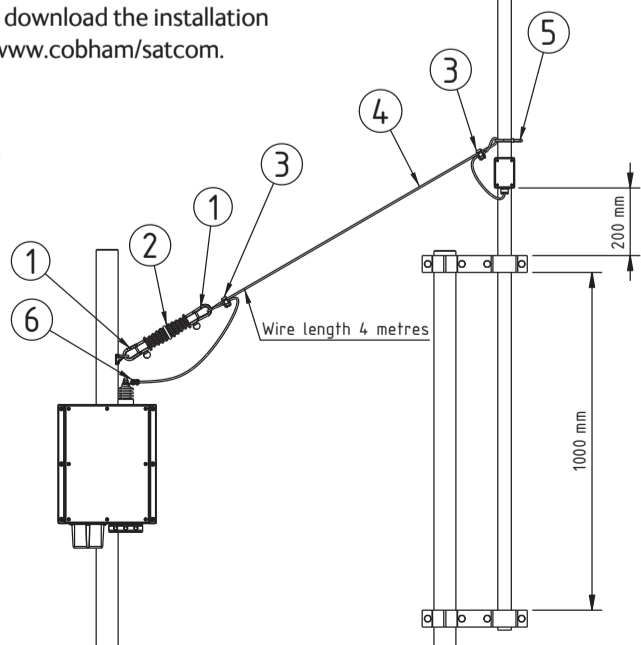
The feeder wire is terminated at the antenna horn at the top of the Antenna Tuning Unit. Use a supporting insulator near the ATU to carry mechanical stress from the feeder wire. Use a short flexible part of the feeder wire between the supporting insulator and the ATU horn in order not to apply mechanical stress to the antenna horn.

To maximize the radiated power and avoid flash over, keep distance to metal parts as long as possible, preferable more than 100 mm. Use a short direct ground connection from the ground clamp at the bottom end at the Antenna Tuning Unit to nearest suitable metal ground plane.

It is recommended to use the ATU mounting bracket for the physical fitting of the ATU.

For further information, download the installation manual 98-144591 at www.cobham/satcom.

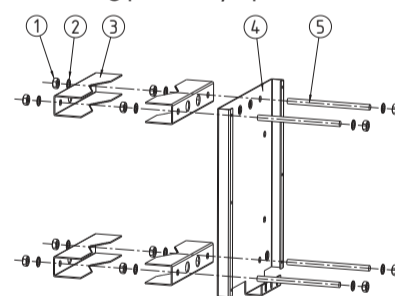
Optional accessories:
Antenna connection kit part no 406300-960.



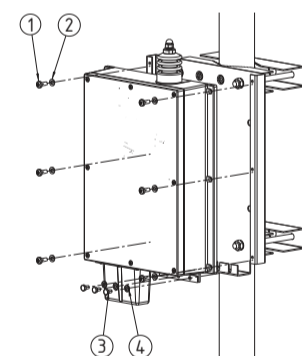
1. Shackle
2. Isolator
3. Wire clamp
4. Wire
5. Cable tie
6. Wire lug

How to install the Antenna Tuning Unit mounting bracket

Optional accessories:
Mounting plate and fittings for mast part no 737589.
Mounting plate only - part no 737588.



1. Nut M10
2. Tooth lock washer M10
3. Fitting for mast
4. Mountingplate for ATU
5. Treadrod M10



1. Pan head screw M6x16 mm
2. Washer M6
3. Hexagon head screw M6x10 mm
4. Flat washer ø6.4xø12x1.6 mm

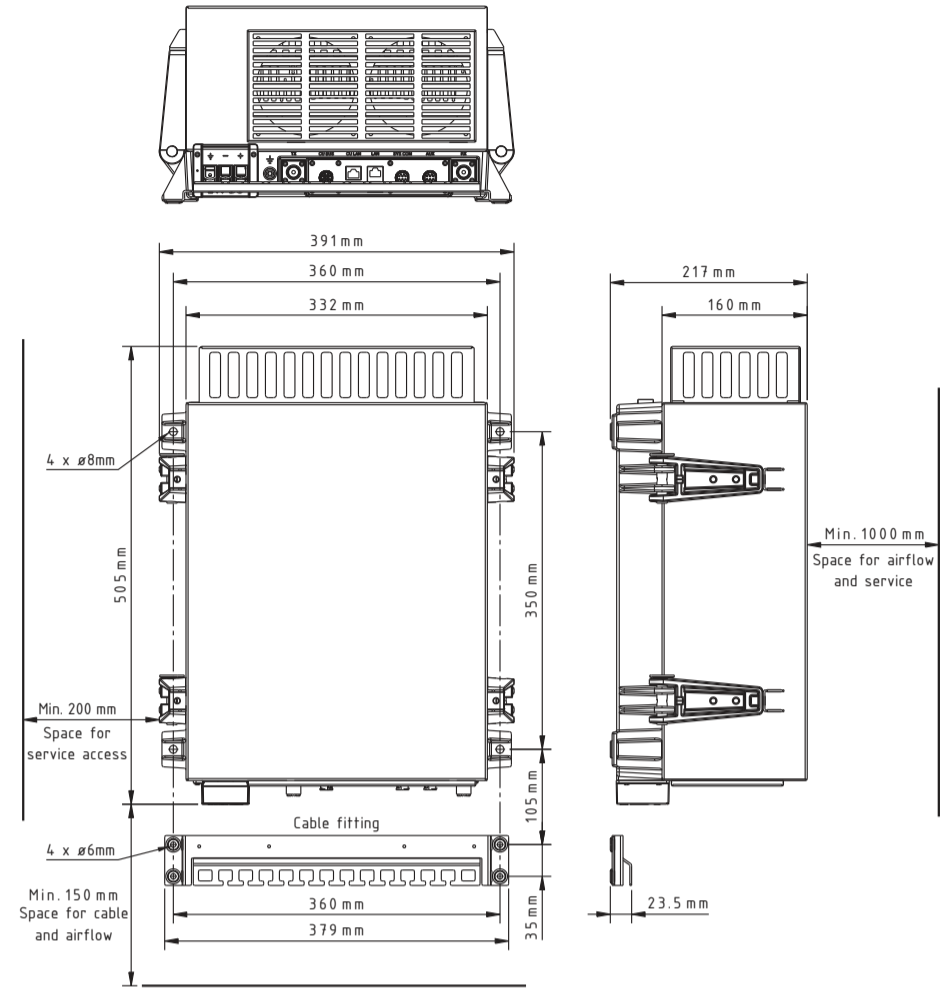
How to install the Receiver Antenna

A passive type antenna of 6-10m electrical length is recommended as receiver antenna. The antenna should be erected well in the clear and kept away as far as possible from electrical equipment to minimize noise interference.

It is recommended to provide the installation with an impedance matching transformer inserted at the antenna. The matching transformer grounding cable should be as short as possible and connected to ground through welded bolt. The antenna feed-in shall be by coaxial cable.

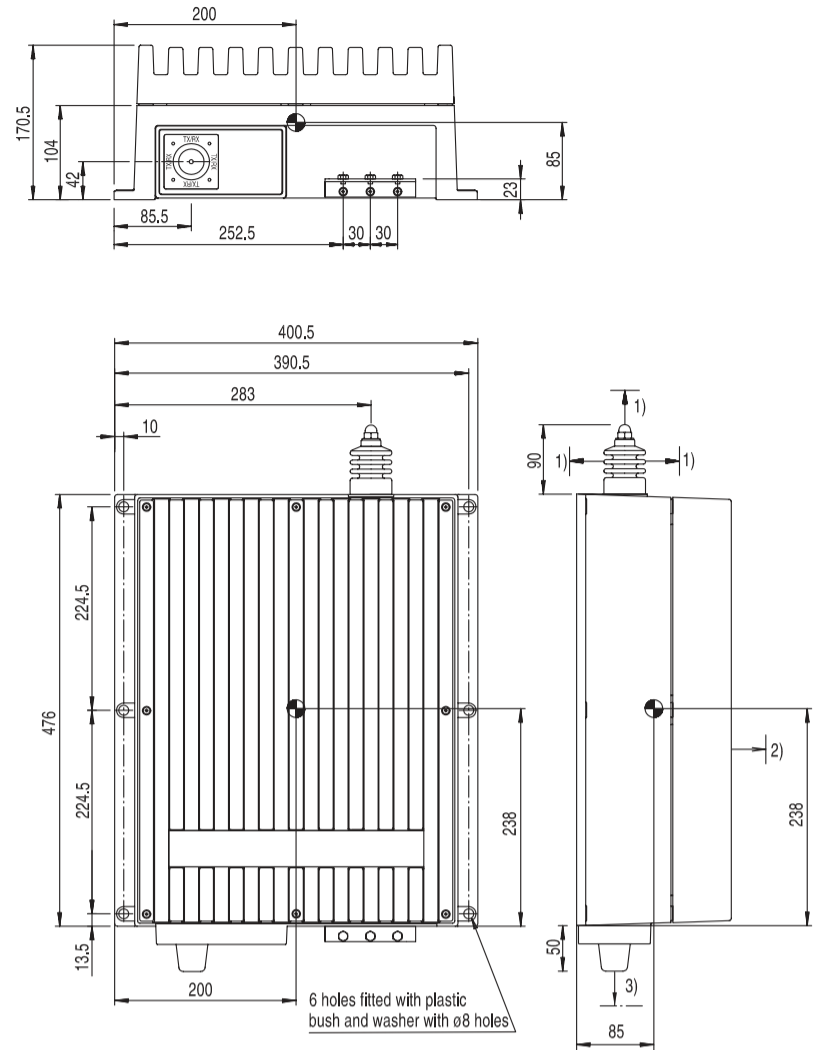
In case a passive antenna for practical reasons cannot be installed, it may be replaced by an active type antenna. It is however, important to emphasize that an active antenna may decrease the receiving capabilities through reduction in received signal level and receiver dynamic range. The installation of an active antenna should follow the same installation precautions as for a passive type antenna.

How to install the Transceiver Unit 500W



Weight: 28 kg (61.7 lbs)

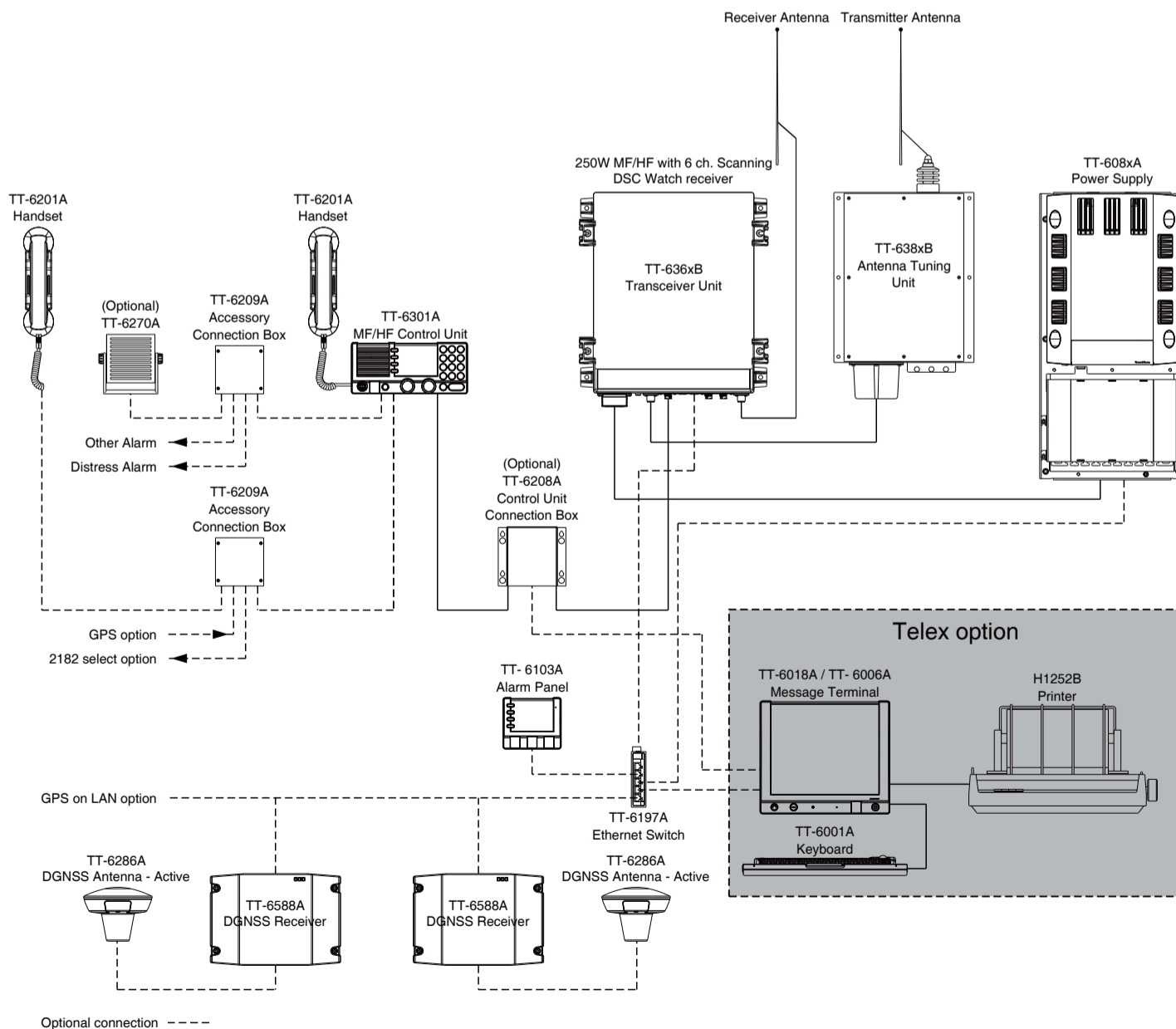
How to install the Antenna Tuning Unit 500W



1. Distance to metal constructions: min. 150
 2. Space for service access: min. 500
 3. Space for cable and service access: min. 200
- Dimensions are in mm

Weight: 17 kg (37.4 lbs)

System configuration - Example



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