



GPA-80 / GPA-80HP

HF Vertical Antenna Assembly & Installation Guide



Frequency TX
80-6m with external ATU

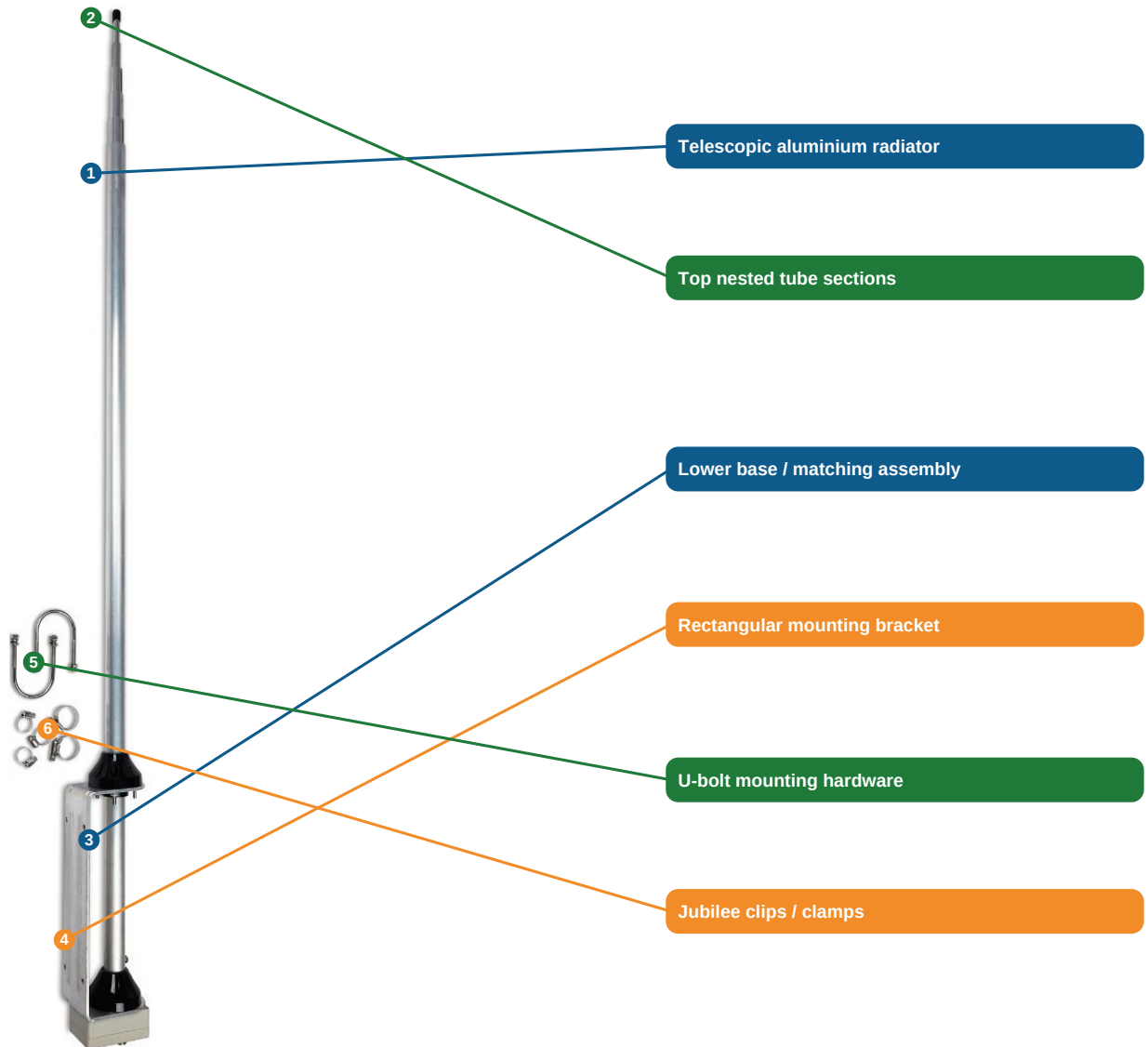
Power
400 W / 1000 W models

Length
Approx. 6 m

Connector
SO-239

Product Identification

This guide covers both the GPA-80 standard model and the GPA-80HP high-power model. The supplied photograph shows the assembled antenna with its vertical radiator, lower base assembly, rectangular mounting bracket, U-bolt and mounting hardware. The annotated image below is intended to help identify the major visible components before installation.

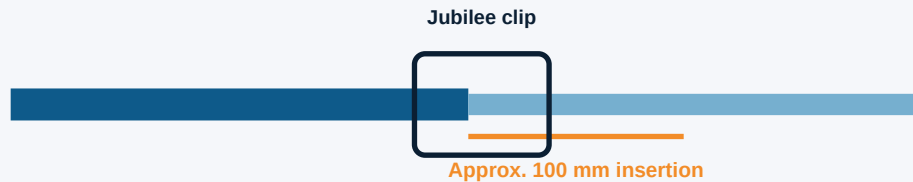


Annotated from supplied product photograph. Exact hardware position may vary by kit contents.

Assembly Instructions

Before assembly, lay the antenna and fixings on a clean surface and check that all parts are present. The antenna sections should be fitted carefully so the completed radiator remains straight.

Tube section assembly



Keep sections straight and tighten clamps firmly without crushing the aluminium tubing.

- 1 Insert each aluminium tube section approximately 100 mm into the next smaller/larger section as applicable.
- 2 Align the aluminium tube sections so the antenna remains straight.
- 3 Secure each joint using the supplied jubilee clips. Tighten firmly, but do not overtighten.
- 4 Continue until all sections are assembled.
- 5 Check every clamp, bracket fixing and connection before raising the antenna.

Mounting Guidance

- Fit the rectangular mounting bracket to a suitable mast or support using the supplied U-bolt hardware.
- Mount the antenna vertically and keep it as clear as possible from buildings, trees, metal structures and other obstructions.
- Use good quality 50 Ohm coaxial cable and weatherproof outdoor connections.
- For best results across the stated transmit range, use a suitable external ATU.

Specifications

Specification	Value
Frequency TX	80-6m (3.5-57 MHz) when used with an external ATU
Frequency RX	2.0-90 MHz
Power Rating	GPA-80: 400 W / GPA-80HP: 1000 W
Length	Approximately 6 m
Impedance	50 Ohms
Socket	SO-239
VSWR with ATU	1.5:1 or better with an ATU

Typical VSWR without tuner

The original document states that VSWR without a tuner depends on installation. The table below reproduces the supplied approximate values.

Band	Frequency	Typical VSWR without tuner
80m	3.5 MHz	1.5:1 approx
40m	7.0 MHz	2.0:1 approx
30m	10 MHz	1.5:1 approx
20m	14 MHz	2.5:1 approx
17m	18 MHz	3.5:1 approx
15m	21 MHz	1.5:1 approx
12m	24 MHz	3.5:1 approx
10m	28 MHz	1.5:1 approx
6m	50 MHz	3.5:1 approx

Safety & Final Checks

- Never install or maintain the antenna near overhead electricity cables or power lines.
- Do not assemble or raise the antenna during thunderstorms, heavy rain or high winds.
- Ensure the mast, mounting bracket, U-bolt and all jubilee clips are secure before use.
- Check VSWR at low power first and use a suitable ATU where required. Use the correct model rating: GPA-80 400 W, GPA-80HP 1000 W.
- Inspect the antenna periodically, especially after severe weather.

Important

The exact VSWR and performance can vary depending on installation height, ground conditions, surrounding structures and cable quality. Ensure all outdoor connections are weatherproofed.

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