



1kW Antenna Tuner

02-4100 | 1kW

01

Data Sheet

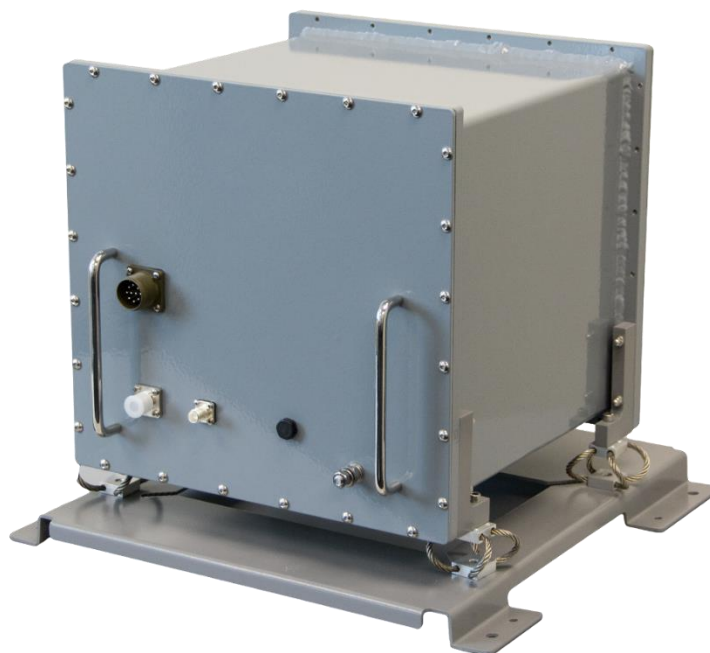


Figure 1 – Tuner with Shock-mount

The Lencom® 02-4100 is a modern, fast, automatic tuner that handles up to 1kW inputs and provides flexible options for control and scanning.

The Tuner uses Lencom's custom tuning algorithm to identify the optimum settings for each frequency. Once the initial tune is complete, the tuner swaps seamlessly between memory tunes with tune speeds of 500ms or less.

The 02-4100 comes with its own Power Supply and includes a number of control options such as:

- Bypass to an auxiliary receive antenna for scan
- Tuner on/off controllable by the radio
- Smart fault reporting

The 02-4100 is designed to have a very low tuned power state both to conserve power and to minimise noise.

With cable lengths up to 100m, the tuner can be located well away from the radio and power supply.

The auxiliary receive antenna can be any broad band antenna running up to 12V 1A. Lencom offers an Active E-probe or Active Broad band Loop.

When attached to the optional shock-mount, the 02-4100 is a rugged solution that is rated to MIL-STD-810G for shock and MIL-STD-167-1A for vibration.



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Key Characteristics

Main Unit

<i>Frequency range</i>	
<i>Wire 23m to 46m (75-150ft)</i>	2-30MHz
<i>Whip¹ 15m (48ft)</i>	2-30MHz
<i>Whip 10m (32ft)</i>	2.5-30MHz
<i>Whip 5m (16ft)</i>	3-30MHz
<i>Power rating</i>	1kW PEP and Average
<i>Duty Cycle</i>	Full voice and data
<i>Input impedance</i>	50Ω
<i>VSWR</i>	Typically < 1.5
<i>Tune Time</i>	Memory 500ms Initial Tune 5s (typical)
<i>Tune Power</i>	20W Nominal 40W Max
<i>Memory Channels</i>	Unlimited
<i>Tune Modes</i>	Fully Automatic and Memory.
<i>RF connector type</i>	N socket
<i>Control connector type</i>	
<i>From radio</i>	D 9 pin
<i>Between PSU and Tuner</i>	D 15 to 10 pin MS
<i>RF connector type</i>	N socket
<i>Auxiliary receive antenna connector type</i>	TNC
<i>Auxiliary receive antenna power</i>	12V 1A
<i>Operational Temperature</i>	-20 to +55°C
<i>Finish</i>	Marine grade paint – haze grey/desert sand/white
<i>Enclosure</i>	Aluminium sealed to IP67
<i>Certifications</i>	CE for EMC MIL-STD-167-1A and MIL-STD-810G (with shock mount)
<i>Dimensions</i>	350 x 380 x 330mm
<i>Packed dimensions/weight</i>	500 x 500 x 500mm 25kg

¹ For whip operation, the whip needs to have a radiating diameter of at least 40mm



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Power Supply

<i>Input voltage</i>	230/115 (switchable)
<i>Dimensions</i>	2RU
<i>Power connector type</i>	10A IEC (fused)
<i>Control connector type</i>	D15
<i>AC power switching</i>	Tuner switching may be slaved to radio or independent

Available Accessories

<i>Radiator</i>	<i>Auxiliary Receive Antenna</i>	<i>Cables</i>	<i>Mechanical</i>
Long wire 7.7m Whip 9.5m Whip	Active E-probe Broadband Loop	Up to 100m as specified	Shock mount Sun shade Stub mast Wall bracket Ground mat Earthing kit