



- **Automatic Antenna Tuner**
- **Handles 1kW input**
- **Controllable by Radio**
- **Smart Fault Reporting**

Housed in a fully weatherproof enclosure, the Barrett 1kW Automatic Tuning Unit (ATU) (BC407508) will tune long wire antennas effectively up to a length of 10 metres and wire loop antennas or whip antennas over a frequency range of 2 to 30 MHz and is suitable for both marine and land applications.

Tuning is rapid, typically 10 seconds the first time RF is applied, either whilst the operator is talking or when the "Tune" control is activated on the transceiver.

The 1kW ATU features a memory facility that stores the configuration required to tune to a frequency. On any subsequent use of that frequency, the 1kW ATU reconfigures to the stored settings in, typically, less than 150 milliseconds.

Following initial tuning, the antenna's VSWR is monitored. If any significant variation occurs, the 1kW ATU will re-tune the antenna automatically.

This unit is typically paired with the Barrett 4075 High Power HF Transmitter system.

BCA407535 4075 1kW ATU Shock/Vibration plate for Marine/Mobile installation sold separately.

The following recommended Control and Coaxial cables are sold separately, depending on required length:

- BCA407553 - 4075 1kW ATU Coaxial Cable LMR400 100m
- BCA407552 - 4075 1kW ATU Coaxial Cable LMR400 50m
- BCA407543 - 4075 1kW ATU Coaxial Cable RG213 30m
- BCA407542 - 4075 1kW ATU Control Cable 100m
- BCA407541 - 4075 1kW ATU Control Cable 50m
- BCA407540 - 4075 1kW ATU Control Cable 30m

## General Specifications

Frequency Range	Wire Antenna 23-46m (75-150ft) 2-30MHz Whip Antenna 15m* (48ft) 2-30MHz Whip Antenna 10m (32ft) 2.5-30MHz Whip Antenna 5m (16ft) 3-30MHz
Input Impedance	50 ohms
Power Rating	1kW PEP and average
DC input	+13.8 V DC (derived from 2000 or 4000 series transceiver via integral RF control cable)
Power consumption	Tuned - 400 mA (typical) Tuning - <800 mA
VSWR Typically	1.5:1
Tuning time	First tune: < 1 sec (typical) From Memory: less than 130 mSec (typical)
Memory addresses	Unlimited
Ingress Protection	To IP67
Temperature Protection	-20 to +55°C (operational) Open circuit antenna Short circuit antenna Over temperature High VSWR Voltage transients
EMC Certifications	CE Compliant MIL-STD-167-1A and MIL-STD-810G (with shock mount)
Case construction	Aluminum with marine grade paint
Dimensions	350 mm (h) x 380 mm (w) x 330 mm (d)
Weight	25kg

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