



- **1.5 - 30 MHz Tuning Range**
- **Compact Size**
- **Easy installation in space-restricted locations**
- **150 W (Digital, voice and Data)**
- **Internal GPS**
- **ALE 2G/3G Compatible**
- **Memory Tune (100 ms)**
- **Mil-STD 810G**

The Barrett 4047 Automatic Tuning HF Horizontal Dipole (P/N BC404701) is specifically designed to interface with Barrett 4000 series HF transceivers. It is designed for base station applications where space is limited but high performance is still required.

Mounted on a standard 50mm pole, the antenna can be mounted as close as 6 metres from the ground making it extremely easy to install. With a packed length of only 2.1 metres, the antenna can be transported by air. For compatible masts please download the Barrett Mast Guide.

The Barrett 4047 is fitted with an internal GPS. This internal unit can be used to provide GPS data as part of a GPS tracking network without the need to install a separate GPS, simplifying the system installation.

Providing a frequency coverage of 1.5 to 30 MHz, the Barrett 4047 features rapid tuning (typically less than 1.5 s) and low power consumption capabilities.

When paired with a Barrett 4000 series HF Transceiver, the 4047 memory tune feature eliminates the need to retune an antenna after a channel change. When returning to a previously tuned channel, the transceiver sets the 4047 with a stored tuning result in less than 100 ms.

The active tuning elements of the antenna are housed in a waterproof, high-impact resistant molding. The main antenna body has RF and control connectors. The 4047 is supplied as standard with a 30 metre composite RF control cable. Due to its rugged RF design, the Barrett 4049 antenna can be used with high duty cycle applications such as HF Data Systems.

## Specifications

### General

Frequency range	1.5 - 30 MHz (continuous)
Power	150 W PEP (digital, voice and data)
Polarisation	Horizontal
Radiation Pattern	Omni-Directional in horizontal and vertical planes
VSWR	Better than 2:1 when tuned
Tuning time	Less than 1.5 seconds (typical) From memory, less than 100ms
Supply voltage	12-13.8 V DC (derived from transceiver)
Antenna impedance	50 ohm unbalanced
Input current	Average 80 mA @ +12.6 V input

### Mechanical

Mounting height	Recommended 6m - 10m
Element length	Each element 1.5m, 3m assembled
Assembled length	5.7m tip to tip
Assembled width	2.2m tip to tip
Assembled height	220mm from top of mounting hub flange to element tips
Weight	8.2 kg
Case construction	Molded glass-filled Nylon-66 with powder-coated stainless-steel base
Colour	Black

### Environmental

Wind	160kph/hr
Operating temperature	-30°C to +70°C
Humidity	95% relative, non-condensing
Ingress protection	IP67
Standards	Designed to meet or exceed: - MIL-STD 810G for drop, dust, temperature, shock and vibration - CE



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BCB40470/1

ISO 9001  
BUREAU VERITAS  
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