

# 2019 Automatic tuning mobile HF antenna



The Barrett 2019 is an automatic tuning mobile antenna, designed to interface with Barrett 2000 series transceivers.

Providing a frequency coverage of 2 to 30 MHz, the Barrett 2019 features rapid tuning (typically <math><1.5\text{ S}</math>) and low power consumption. High radiation efficiency and accurate tuning are assured by maximising antenna current (not minimising the VSWR) on every tune. The Barrett 2019 antenna incorporates a wideband amplifier that is activated in receive mode to enable channel scanning. Due to its rugged RF design, the Barrett 2019 antenna can also be used with high duty cycle applications such as the Barrett 923 or 2020 fax and data system and is compatible with ALE operation.

An optional GPS receiver can be fitted within the 2019 antenna casing and interfaces directly through the RF control cable to current production 2050 transceivers.

The active tuning elements of the antenna are housed in black waterproof, highly impact resistant technical plastic moulding. The housing incorporates a heavy duty anti-vibration mount at its base. Even with its rugged construction, the Barrett 2019 weighs only 3.6 kg.

The Barrett 2019 is supplied standard with a two piece fibreglass MIL-STD whip and a tapered spring. An optional NVIS extension is available in the form of two extra whip sections. The main antenna body has a MIL-STD control cable connector and a UHF RF connector. The 2019 is supplied with a 6 metre composite control and RF cable and connectors to connect it with the transceiver. A 10 metre control RF cable is available as an accessory.



[www.barrettcommunications.com.au](http://www.barrettcommunications.com.au)

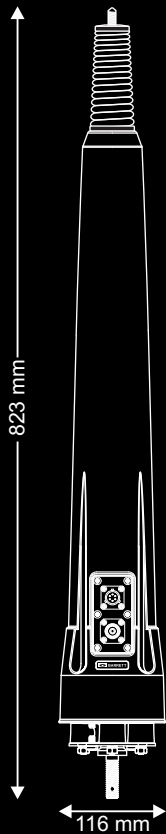
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## HF Radio Communications

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### Specifications

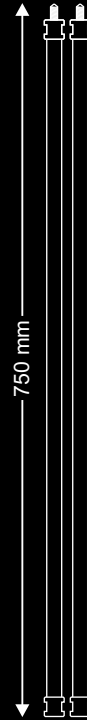
<b>Standards</b>	Complies with MIL Spec. 810 F for drop, dust, temperature, shock and vibration
<b>Frequency range</b>	1.6 MHz to 30 MHz (continuous)
<b>Power handling capability</b>	150 W PEP
<b>VSWR</b>	Better than 2:1 when tuned
<b>Tuning time</b>	Less than 1.5 seconds (typical)
<b>Operating temperature</b>	-30°C to +60°C
<b>Humidity</b>	95% relative, non-condensing
<b>Environmental</b>	IP68 immersion 1 m for 1 hr
<b>Supply voltage</b>	12.6 V DC (derived from transceiver)
<b>Antenna impedance</b>	50 ohms unbalanced
<b>Mounting</b>	M16 stud with provision for padlock
<b>Input current</b>	Average 80 mA @ +12.6 V input
<b>Shock</b>	MIL-STD-810D method 516.3 procedure VI
<b>Vibration</b>	MIL-STD-810D method 514.3



Main antenna body weight including heavy duty spring 3.2 kg



Standard 2 piece whip kit 0.387 kg



NVIS 2 piece extension whip kit 0.474 kg



Total antenna lengths with standard and NVIS whips



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