



- **1.5 - 30 MHz Tuning Range**
- **Compact Size**
- **150 W**
- **Mil-STD 810G**
- **Memory Tune**
- **Suits Barrett 2050 HF SSB transceivers and OEM HF transceivers**

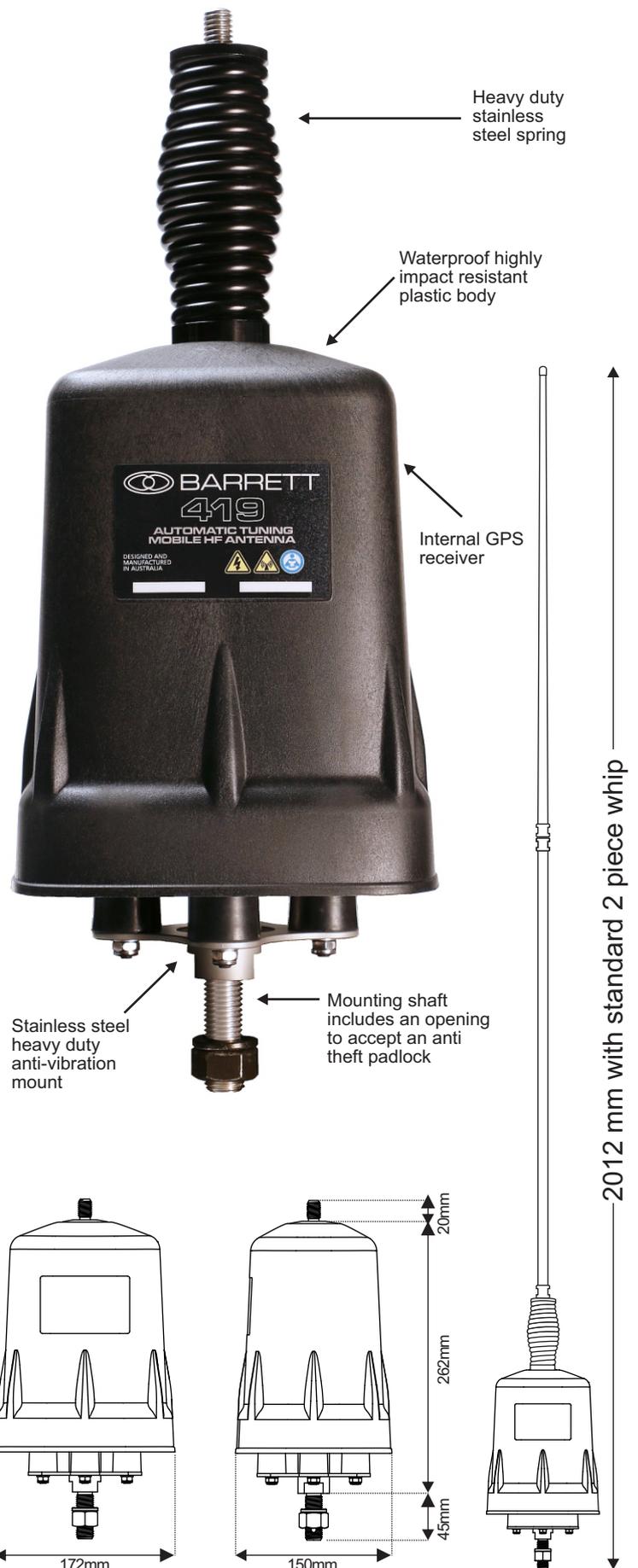
The Barrett 419 Automatic Tuning Mobile HF Antenna (P/N BC41901) is specifically designed to interface with Barrett 2000/4000 series HF transceivers and OEM HF transceivers.

Providing a frequency coverage of 1.5 to 30 MHz, the Barrett 419 features rapid tuning (typically less than 1.5 s, less than 200ms from memory), low power consumption capabilities and an in-built gps receiver (compatible with Barrett 2000 and 4000 series transceivers).

The active tuning elements of the antenna are housed in a waterproof, high-impact resistant moulding. This housing incorporates a heavy duty anti-vibration mount at its base. Even with its rugged construction, the Barrett 419 weighs only 3.65kg.

The Barrett 419 is supplied with a two piece fibreglass MIL-STD whip and spring. An optional NVIS Kit (P/N 2019-01-10) is available in the form a single flexible whip section of 3.5 metres (see over).

The main antenna body has RF and control connectors. The 419 is supplied as standard with a Mil-Std connector (P/N CN-50069) for control and DC connection to an OEM HF transceiver. If the 419 is to be used with a Barrett 2050 HF SSB transceiver, a Control Cable to 2050 Transceiver adapter (P/N BCA201915) and a Barrett Coaxial/Control cable will be required. Three versions of the Coaxial/Control cable are available, 6 metre P/N 4019-00-02, 10metre P/N: 4019-00-05 and 30metre P/N 4019-00-07.



419 Automatic tuning HF antenna - General Specifications

Frequency range	1.5 - 30 MHz (continuous) with whip 3.2 m or longer / Barrett NVIS antenna 2 - 30 MHz (continuous) with Barrett 2 piece whip antenna
Power	150 W PEP (digital, voice and data)
VSWR	Better than 2:1 when tuned
Tuning time	Less than 1.5 seconds (typical) Less than 200ms (from memory)
Operating temperature	-30°C to +70°C
Humidity	95% relative, non-con-densing
Environmental	IP67
Supply voltage	12-13.8 V DC (derived from transceiver)
Antenna impedance	50 ohm unbalanced
Mounting	M16 stud with provision for padlock
Weight	3.90 kg
Case construction	Moulded Nylon-66 glass-filled with powder-coated stainless-steel base
Colour	Black



NVIS Kit for 419 antenna - P/N BCA201910

The Barrett Near Vertical Incidence Skywave (NVIS) antenna whip is designed to enhance the short range communications efficiency of the Barrett 419 Automatic Tuning Mobile HF Antenna. The increased whip length combined with its horizontal orientation (once installed) provides a significantly higher take off angle and radiation efficiency.

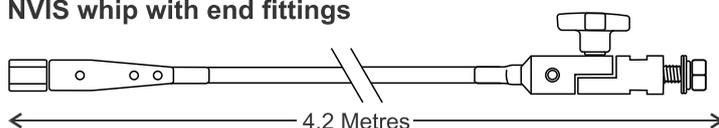
Communications paths over the range 0 - 1000 kms, particularly in hilly and mountainous terrain, can be greatly improved through the use of the NVIS kit.

The NVIS kit comprises of a single flexible whip section of 4 metres in length. It attaches at one end to the 419 antenna and the other end to the supplied Gutter Mount Bracket (P/N BCA201912). An optional NVIS Kit Magnetic Mounting Base (P/N BCA201911) is also available and detailed below. The whip can also be secured to the vehicle by using a custom made bracket with a 13mm hole (sourced by end user). This option may be preferable if the vehicle is fitted with a roof rack for example.

Specifications NVIS whip antenna

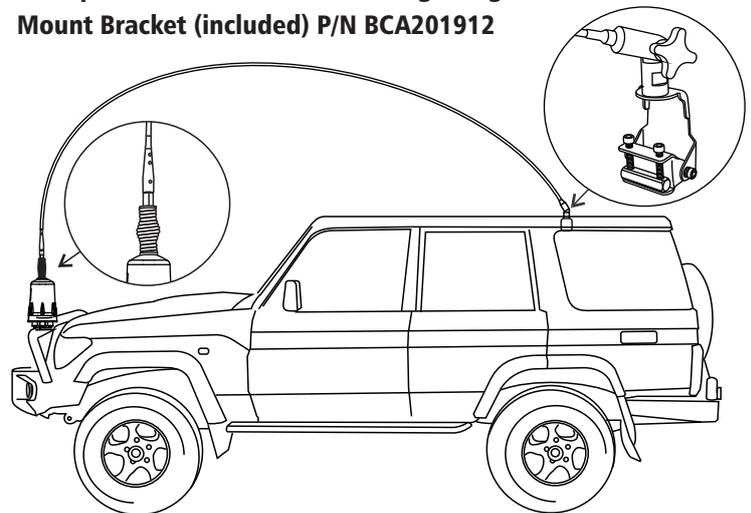
Antenna Length	4.2 metres (including fixings)
Antenna Weight	2.8 Kg
Colour	Matte Black UV stabilized
Packed Size	L75 x W75 x H7.5 cm
Packed Weight	3.0 Kg

NVIS whip with end fittings



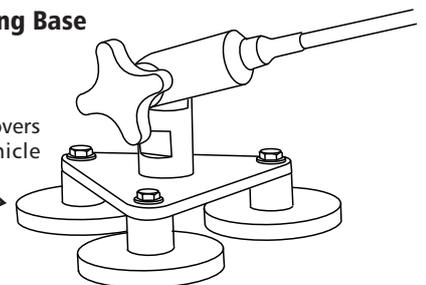
Specifications are typical. Equipment descriptions and specifications are subject to change without notice or obligation.

Example of front antenna mounting using Gutter Mount Bracket (included) P/N BCA201912



NVIS Kit Magnetic Mounting Base (optional) P/N BCA201911

Magnetic feet have rubber covers to prevent damage to vehicle paintwork



Head Office:
Barrett Communications Pty Ltd
47 Discovery Drive, Bibra Lake,
WA, 6163 AUSTRALIA
Tel: +61 8 9434 1700
information@barrettcomms.com

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