

# Miniature EMC Antenna

CTS011

**Miniature calibrated antenna for RF emission and screening measurements.**

- 30MHz to 2GHz frequency range.
- High sensitivity at all frequencies.
- Perfect for screening tests in small enclosures.
- Calibrated for EMC radiated emission measurements, antenna factor comparable to standard log-periodic, even at low frequencies.
- Ideal for analysing field patterns around EMC test sites/chambers and transmitter installations.



The CTS011 is a miniature (9.5 x 7.5 x 2cm) dipole antenna fully calibrated over the range 30MHz – 2GHz. It features a built-in head amplifier and an all moulded case design which makes this antenna ideal for EMC measurements in confined spaces. Applications include radiated emission tests in small compact chambers and screening effectiveness measurements in small enclosures. It also acts as an ideal antenna

**Active antenna** A low noise head amplifier is built-in inside the antenna to provide high sensitivity and 'large antenna' performance. Phantom power is provided up the antenna output cable from a battery powered interface unit.

**Integrated** The CTS011 is shipped complete with all cables, interface unit and battery charger. The interface unit includes a 0dB and 20dB gain channels.

**Calibration** The CTS011 is supplied complete with antenna factor calibration which includes separate data for both the 0dB and 20dB gain interface unit channels.

**Compact** The exceptionally small size and high sensitivity is ideal for mobile applications such as site surveys and test site evaluations. The moulded casing also makes the antenna drop proof!

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**Specification**

**Antenna**

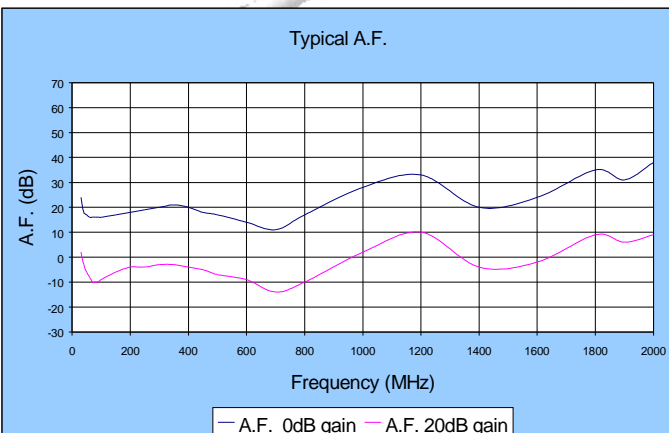
Freq. Range	30MHz – 2GHz
Antenna factor	See chart below.
Dimensions	9.5 x 7.5 x 2cm
Connector	SMA
Power	Phantom

**Interface module**

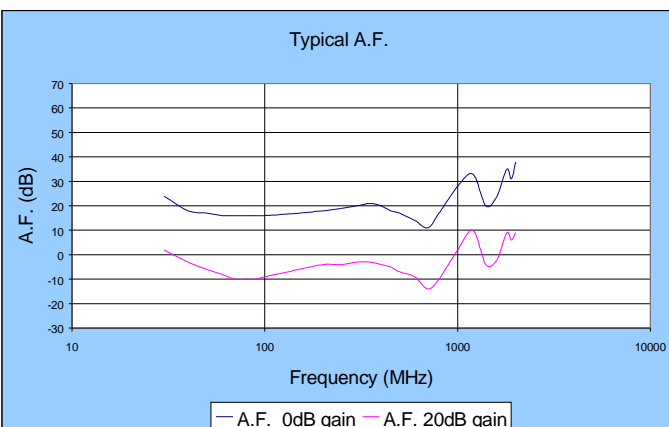
Channels	2 (0dB and 20dB gain)
Battery	NiCad
Operating time	8 hours typical.
Phantom power	5V dc regulated
Dimensions	10.5 x 8.6 x 3.6cm
Charge voltage	12V dc, 300mA

**Antenna Factor**

**Linear Frequency scale**



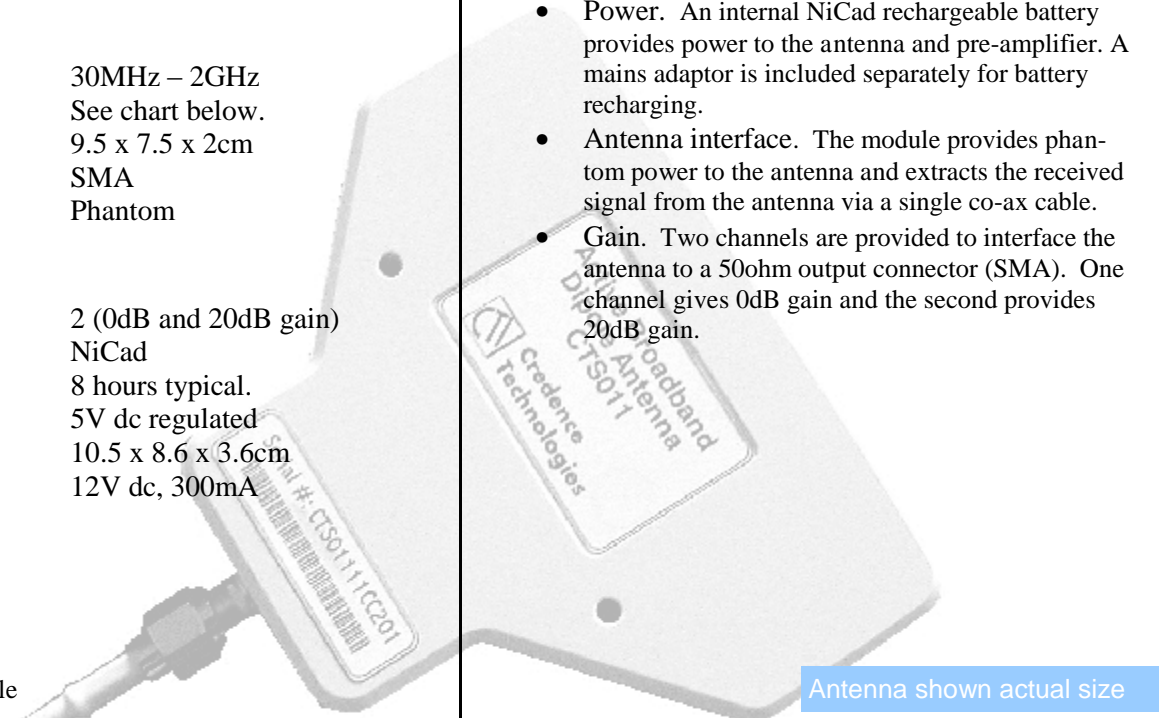
**Log Frequency Scale**



**Interface Module**

This module provides several functions:

- **Power.** An internal NiCad rechargeable battery provides power to the antenna and pre-amplifier. A mains adaptor is included separately for battery recharging.
- **Antenna interface.** The module provides phantom power to the antenna and extracts the received signal from the antenna via a single co-ax cable.
- **Gain.** Two channels are provided to interface the antenna to a 50ohm output connector (SMA). One channel gives 0dB gain and the second provides 20dB gain.



**Ordering information**

Order code..... CTS011

**Items included:**

- Antenna
- Interface unit
- 1.8m Antenna-interface cable (SMA-SMA)
- 0.8m Interface output cable (SMA – BNC)
- AC/DC charger adaptor
- User manual.
- Characterisation data (Antenna Factor)
- Padded carry case

**Available from**

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