

COILS 7605/7606 Coil Antenna/Shielded Coil

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ETS-Lindgren Models 7605 Radiating Loop and 7606 Sensing Loop are precision-built to the exact specifications as described in MIL-STD 461G for Method RS101. Both models are used as part of a system to verify the ability of an EUT to withstand radiating magnetic fields. The 7605 is a 20-turn coil of AWG-12 enamel-insulated copper wire and features a 5 cm spacing from the top of the loop to the center-point of the coils as per MIL-STD 462D. The model 7606 sensing loop is a 4 cm diameter, electrostatically-shielded loop antenna which has 51 turns of 7-strand AWG-41 Litz wire.

The model 7605 is now the recommended antenna for ISO 11452-8 "Road vehicles - Component test methods for electrical disturbances for narrowband radiated electromagnetic energy - Part 8: Immunity magnetic fields." It also produces a magnetic flux density of 9.5×10^7 pT/A, or 160dB(pT/A), on axis at a distance of 5 cm from its center.

The model 7606 is used together with the model 7605 to calibrate the model 7605 and the other instrumentation used in the test. A table containing the conversion factors for the model 7606 can be found in the manual.

Key Features

- 30 Hz to 100 kHz Frequency Range

Specifications

Electrical Specifications

Frequency Minimum: 30 Hz
Frequency Maximum: 100 kHz
Connectors: Two Banana Jacks (7605) and BNC (7606)
Impedance (Nominal): 50 Ω
Pattern Type: Omnidirectional
Polarization: Linear

Physical Specifications

Height: 5.9 cm (2.32 in)
Weight: 0.2 kg (0.44 lb)

