

ANTENNAS MODEL 7605/7606B



MODEL 7605/7606B
■ 30 Hz to 100 kHz Frequency Range

ETS-Lindgren's Models 7605 Radiating Loop and 7606B Sensing Loops

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 7606B 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 7606B 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 7606B can be found in the manual.

Technical Specifications

| Electrical | |
|---------------------|--|
| Frequency Minimum | 30 Hz |
| Frequency Maximum | 100 kHz |
| Connectors | Two Banana Jacks (7605) and BNC (7606) |
| Impedance (Nominal) | 50 |
| Pattern Type | Omnidirectional |
| Polarization | Linear |
| Physical | |
| Height | 5.9 cm (2.32 in) |
| Weight | 0.2 kg (0.44 lb) |