The DSI R-1150-10A Portable Antenna Kit includes eight antennas to support electronic field strength measurements from 100 MHz to 1 GHz and magnetic field strength measurements from 100 Hz to 20 MHz. The antennas are suitable for shielded enclosure or general field use. The Antenna Kit is packaged in a luggage-type fitted transit case.

The Antenna Kit includes one passive bi-conical and one passive log periodic antenna. There are also six active antennas. The active antennas consist of four H-field antennas and one 41" E-Field Whip Antenna with a 50" conversion capability, all of which connect to a Base Unit containing pre-amplified filter and control devices.

A Control Unit supplies power to the Base Unit and permits selection of the filters. Rechargeable batteries in the Control Unit permit up to 10 hours of operation away from an AC power source.

Detailed antenna factors and sensitivity charts are supplied with the Antenna Kit.

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R-1150-10A PORTABLE ANTENNA
KIT CONTENTS

Antenna Base Unit: Contains the active networks used in electric and magnetic field measurements between 100 Hz and 30 MHz.

Antenna Control Unit: Contains rechargeable batteries and charger circuit.

Bi-conical Antenna, Collapsible: One antenna for electronic field measurements from 20 MHz to 200 MHz.

Log Periodic Antenna, Folding: One antenna for electric field measurements from 200 MHz to 1 GHz.

E-Field Whip Antenna Set: One 41” whip antenna and parts for conversion to a 50” whip antenna with top-loading disc designed for E-field measurements from 100 Hz to 30 MHz (see active antenna specifications).

H-Field Antennas: Four ferrite rod antennas designed for H-field measurements from 100 Hz to 30 MHz (see active antenna specifications).

Calibration Adaptors: Used for E-field and H-field calibration prior to measurements.

Accessory Package: Interconnecting cable for all antennas.

Filtered Transit Case Dimensions: 21” high x 31” wide x 11” deep.

Weight: 79 pounds.

Documentation: Instruction Manual.

ACTIVE ANTENNA
SPECIFICATIONS

41” Whip and 50” Top Loaded Whip Antennas Mounted on Antennas Base Unit:

Frequency Range: 100 Hz to 30 MHz with two selectable high pass filters (10 kHz and 3 MHz).

Polarization: Vertical.

Output Impedance: 50 Ohms.

Preampifier Gain: 0 dB when terminated in 50 Ohms.

Directivity: Omni-directional.

Overload: For the 41” whip antenna, an incident field strength of 3.2 volts per meter will produce a 1 dB gain compression. For the 50” top-loaded whip antenna, an incident field of 1.6 volts per meter will produce a 1 dB gain compression.

H-Field (Ferrite Rod) Antennas Mounted on Antenna Base Unit:

Frequency Range: 100 Hz to 50 kHz; 50 kHz to 1.5 MHz; 1.5 MHz to 10 MHz; 10 MHz to 30 MHz.

Output Impedance: 50 Ohms.

Preampifier Gain: 5 dB when terminated in 50 Ohms.

Directivity: Bi-directional in H-plane.

Overload: 0.4 volts of preamplifier input induced voltage will produce a 1 dB gain compression.