RF TEST SETS MF-9F RF Test Set

ETS-Lindgren's MF-9F Series of RF Leak Detector/Attenuation Meter Kits are designed to simplify the performance evaluation of shielding enclosures.

ETS-Lindgren's MF-9F Series of RF Leak Detector/Attenuation Meter Kits are designed to simplify the performance evaluation of shielding enclosures. These kits offer the ability to make measurements for military and commercial standards. The receiver module can store up to 63 attenuation levels per frequency to be downloaded to a PC. Windows compatible software is included for viewing, processing, and printing data.

The Model MF-9F-LF is intended for testing at lower frequencies: 10 kHz, 156 kHz, 1 MHz, 10 MHz. The Model MF-9F-HF is intended for testing at higher frequencies: 8 MHz, 16 MHz, 32 MHz, 64 MHz. The Model MF-9F-VHF is intended for testing at a 128 MHz frequency.

All transmitters and receivers feature backlit LCD displays, easy-to-use keypads, and rechargeable NiMh batteries. The receiver's LCD display frequency, attenuation level and battery condition. The keypad can be used to select MIL-STD or EN testing, and to set an attenuation threshold level for activating an audio alarm. The receiver also has USB port to download data to a PC. The transmitter LCD displays frequency and battery condition.

For testing per NSA 65-6/IEEE STD- 299/EN 50147-1, the receiver is placed inside the enclosure, at a point opposite the transmitter located outside of the enclosure. Included spacers maintain correct distance of the receiver and transmitter and the shield barrier. The attenuation can now be read on the receiver's LCD and stored in memory for later downloading.

For testing per MIL-STD-285, the receiver is placed inside the enclosure, at a point opposite the transmitter located outside of the enclosure. Included spacers maintain correct distance of the receiver and transmitter and the shield barrier. Place the transmitter and receiver in vertical orientation to each other to attain the minimum attenuation value. The attenuation can be read on the receiver's LCD and stored in memory for later downloading.

Applications

- MIL-STD-285
- NSA 65-6
- IEEE STD-299
- EN 50147-1

Key Features

- Shielding Attenuation Measurements per:
    — MIL-STD-285
    — NSA 65-6
    — IEEE STD-299
    — EN 50147-1

- Stores/Downloads up to 63 Attenuation Levels per Frequency

- Includes Windows® Compatible Software

- Easy-to-Use, Portable

Specifications

Electrical	MF-9F	LF Antenna	HF Antenna	VHF Antenna
Frequency Range	N/A	10 KHz 156 KHz 1 MHz 10 MHz	8 MHz 16 MHz 32 MHz 64 MHz	128 MHz
Frequency Accuracy	5 ppm/10 Maximum	N/A	N/A	N/A
Dynamic Range: MIL-STD-285	N/A	120 dB	110 dB	130 dB
Dynamic Range: NSA 65-6	N/A	130 dB	120 dB	130 dB
Dynamic Range: IEEE STD-299	N/A	130 dB	120 dB	130 dB
Dynamic Range: EN 50147-1	N/A	130 dB	120 dB	130 dB
Attenuation Accuracy	± 2 dB	± 2 dB	± 2 dB	± 2 dB
Output Power	N/A	2 W Maximum	2 W Maximum	2 W Maximum
Antenna	N/A	2 Layer PCB Antenna	1 Layer PCB Antenna	External Connector: BNC 50 Ω

Display	128 x 64 LCD Matrix Display with Background Light	N/A	N/A	N/A
Memory	63 Memory Locations for Attenuation Values for Each Frequency	N/A	N/A	N/A
Preset Functions	Attenuation Limit in dB	Attenuation Limit in dB	Attenuation Limit in dB	Attenuation Limit in dB
Calibration	Auto Calibration	Auto Calibration	Auto Calibration	Auto Calibration
Power Supply (Both)	6 x 1.2 Volt NiMh Battery (1)	6 x 1.2 Volt NiMh Battery (1)	6 x 1.2 Volt NiMh Battery (1)	6 x 1.2 Volt NiMh Battery (1)
Battery Life: Transmitter	10 to 15 Hours	10 to 15 Hours	10 to 15 Hours	10 to 15 Hours
Battery Life: Receiver	15 to 20 Hours	15 to 20 Hours	15 to 20 Hours	15 to 20 Hours

Physical Specifications

Physical	MF-9F	LF Antenna	HF Antenna	VHF Antenna
Unity Length	53.0 cm 20.9 in	53.0 cm 20.9 in	53.0 cm 20.9 in	53.0 cm 20.9 in
Unit Width	19.0 cm 7.5 in	19.0 cm 7.5 in	19.0 cm 7.5 in	19.0 cm 7.5 in
Unit Height	40 cm 15.8 in	40 cm 15.8 in	40 cm 15.8 in	40 cm 15.8 in
Temperature Range	5° C to 40° C 41° F to 103° F	5° C to 40° C 41° F to 103° F	5° C to 40° C 41° F to 103° F	5° C to 40° C 41° F to 103° F
Storage Temperature	-5° C to 45° C 40° F to 113° F	-5° C to 45° C 40° F to 113° F	-5° C to 45° C 40° F to 113° F	-5° C to 45° C 40° F to 113° F

Other Specifications

- Receiver and Matching Transmitter
- Detachable Antenna Elements
- Battery Chargers
- USB Cable
- Windows® Compatible Software
- Carrying Case
- Manual