

Test Equipment

RF Leak Detector / Attenuation Meter

Model MF-130D

Features:

- Makes 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

**Description**

The ETS Model MF-130D-LF and Model MF-130D-HF RF Leak Detector kits are designed to simplify the performance evaluation of shielded enclosures. Both kits offer the ability to make measurements for military and commercial standards. The receiver module can store up to 63 attenuation levels per frequency for downloading to a PC via an RS-232 serial port. Familiar Windows® compatible software is included for viewing, processing, and printing data.

The Model MF-130D-LF is intended for testing at low frequencies: 10 kHz, 156 kHz, 1 MHz, 10 MHz. The Model MF130-HF is intended for testing at higher frequencies: 8 MHz, 16 MHz, 32 MHz, 64 MHz. Each kit contains a receiver and matching transmitter, detachable antenna elements, spacers, battery chargers, manual, PC software and a carrying case.

Both transmitters and receivers feature backlit LCD displays, easy to use keypads, and rechargeable NiCd batteries. The receiver's LCD displays 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 an RS-232 port for downloading data to a PC. The transmitter LCD displays frequency and battery condition.

Applications

Testing per NSA 65-6/IEEE STD-299/EN 50147-1:

The receiver is placed inside the enclosure, at a point opposite the transmitter outside of the enclosure. Included spacers maintain correct distance from 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.

Testing per MIL-STD-285:

The receiver is placed inside the enclosure, at a point opposite the transmitter outside of the enclosure. Included spacers maintain correct distance from 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 now be read on the receiver's LCD and stored in memory for later downloading.



NSA 65-6 / IEEE STD-299 / EN 50147-1

MIL-STD-285



Standard Configuration

Both kits:

- Transmitter
- Receiver
- Detachable antenna elements
- Battery chargers
- RS-232 cable
- Windows® 3.X and NT compatible software
- Manual
- Carrying case

Options

- Additional antenna elements

Electrical specifications	MF-130D	LF-antenna	HF-antenna
This device is in compliance with the following standards	EN 50081-1 (1992) EN 50082-1 (1992)	EN 50081-1 (1992) EN 50082-1 (1992)	EN 50081-1 (1992) EN 50082-1 (1992)
Frequency ranges	N / A	10 kHz 156 kHz 1 MHz 10 MHz	8 MHz 16 MHz 32 MHz 64 MHz
Frequency accuracy	max. (5 ppm / 10 Hz)	N / A	N / A
Dynamic range MIL-STD-285 NSA 65-6 IEEE STD-299 EN 50147-1	130 dB 130 dB 130 dB 130 dB	120 dB 130 dB 130 dB 130 dB	110 dB 120 dB 120 dB 120 dB
Attenuation accuracy	± 2 dB	N / A	N / A
Output power	N / A	2 W max.	2 W max.
Antenna	N / A	1 layer PCB antenna	1 layer PCB antenna
Display	128 x 64 LCD matrix display with background light		
Memory	63 memory locations for attenuation value for each frequency		
Preset functions	Attenuation limit in dB		
Calibration	Auto calibration		
Power supply, both	6 x 1.2 Volt NiCd battery (D)		
Battery life	Transmitter 5 to 7 hours Receiver 10 to 12 hours		
Physical specifications			
Case dimensions	530 mm x 190 mm x 400 mm (L x W x H)		
Temperature range	+5° C to +40° C (41° F to 103° F)		
Storage temperature	-5° C to +45° C (23° F to 113° F)		
Warranty	1 year		

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