

EM-7535 | Radio Noise Meter**Description**

The Electro-Metrics EM-7535 Radio Noise Meter is used to measure impulsive noise in the AM broadcast band at a single fixed frequency. The EM-7535 conforms to ANSI C63.2, ANSI C63.4, and performs the test of NEMA Pub. NO. 107 plus other associated tests which are performed on high voltage electrical generation equipment.

The standard frequencies of 834 kHz and 1.0 MHz are chosen since there are virtually no AM broadcast transmitters operating at these frequencies in the United States. Frequencies at which there is no broadcast activity are chosen because they permit high accuracy surveys to be made due to the low ambient noise present. In addition to the stated standard frequencies, optional fixed frequencies between 550 kHz and 1.5 MHz are also available on request (factory installation only) for special applications.

The receiver features 120 dB measurement range, attenuation range of 60 dB, voltage accuracy of ± 2 dB, plus broadband/narrowband sensitivities of $0.1 \mu V$ and $0.07 \mu V/kHz$

Specifications**Electrical****Center Frequency:**

Standard: 1.0 MHz
834 kHz

Optional: 550 kHz - 1.5 MHz

(Center frequency factory selectable only)

6dB Bandwidth: 5 kHz ± 0.5 kHz

6dB Shape Factor: 3.5 maximum, 6 - 60 dB

Detector: Quasi-Peak
(conforms to ANSIC 63.2)

Rise Time 1 ms

Discharge Time: 600 ms

Sensitivity (typical 3 dB above noise):

CW: $< 0.1 \mu V$ (-20 dB (μV))

BB: $< 0.07 \mu V/kHz$ (37 dB ($\mu V/MHz$))

Input Impedance: 50 Ohms, nominal

VSWR: $< 1.2:1$

Measurement Range:

120 dB (0.1 μV to 0.1V)

(60 dB meter, 60 dB attenuation)

Measurement Accuracy: ± 2.0 dB

Indicating Meter: 127 mm scale (5")

Logged Scale: 0 - 60 dB, 1 dB increment

Linear Scale: 1 - 1000 μV

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Ref: 100501

Specifications subject to change without notice
Unless otherwise specified, product is manufactured in
Johnstown, NY USA



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respectively. A quasi-peak detection circuit, with charge/discharge rates of 1 ms/600 ms, is used to detect the amplitude level of the emissions emanating from the power distribution systems and equipment.

A front panel 5-inch (127 mm) analog meter is used to display the detected signal using either a log or linear scale. Graphic recordings can be made using a recorder connected to the front panel RECORDER Connector. A built-in speaker is available for audio monitoring of a detected AM modulated signal.

The EM-7535 can be used to make direct measurements of conducted interference via a current probe or direct connection to interference source and for radiated interference measurements using a calibrated antenna.

Specifications

Electrical

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Oscillator Radiation: <-76 dBm

IF Rejection: >90 dB, standard frequencies

Image Rejection: >90 dB, standard frequencies

IF Frequency: 455 kHz

Shielding Effectiveness: <0.3 μ V indication
10 V/m field

AM demodulator with built-in speaker and level control

Recorder Output: 0 - 1.0 mA full scale,
1500 ohm load

Power requirements: 90 - 250 VAC, 48 - 63 Hz
5 Watts, nominal

Mechanical

Dimensions:

Height: 133 mm (5.25")

Width: 305 mm (12")

Length: 337 mm (13.25")