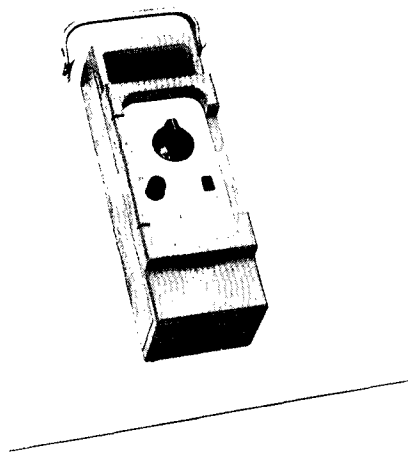


Radiation Safety Products

MODEL 8850 INDUCED CURRENT METER

- Flat Frequency Response and Response Shaped to 1991 IEEE Standard
- 0 to 1000 ma
- 3 kHz to 110 MHz
- Large-Character LCD
- Rechargeable Battery Operation



DESCRIPTION

The Model 8850 Induced Current Meter displays the amount of current induced into the whole body when an individual is standing in a field created by a high level, low frequency emitter. Operation is similar to standing on a scale. The current level is displayed on a large-character liquid crystal display (LCD). The 8850 operates from 3 kHz to 110 MHz which covers all the referenced standards and the entire FM radio band. The 8850 has a 1000 ma current range — five times most standards. Since major standards vary the allowable induced current as a function of frequency, the "Percent of Standard" measurement feature on the induced current meter simplifies operation. In this mode, shaping circuitry is used to make the 8850's sensitivity match the new 1991 IEEE standard.

The baseplate is a capacitor made from two stainless steel plates and a lexan core. The meter reads the current flowing through a resistor that is across the capacitor. The instrument's shape contributes to its accuracy. Its very low profile minimizes any errors that can be introduced by picking up the electric field from

the sides. The base plate size is kept small for the same reason. A standard chart recorder can be used with the 8850's linear output. A simple wire connection works well providing that wire is placed on the ground. This eliminates the need for expensive fiber optic links. Hundreds of readings can be made before the battery requires recharging. The 8850 is supplied with a high quality, foam-lined case and a battery charger.

SPECIFICATIONS

PARAMETER		SPECIFICATION
Model		8850-XX ^a
Frequency		3 kHz to 110 MHz
Measurement Range		0 to 1000 ma 0 to 200% of Standard ^b
Accuracy	Current Ranges % of Std. Range	±3% [Full Scale + Reading] ±3% [Full Scale + Reading] from 200 kHz to 110 MHz ±2 dB from 3 kHz to 200 kHz
Meter	Type Size Scales	3 ¹ / ₂ digit LCD 0.5" (1.3cm) character height 10 ma, 100 ma, 1000 ma 200% of Standard ^b
Measurement Modes		Maximum Signal Hold or Instantaneous ^c
Recorder Output		+100mVdc min into ≥ 10kΩ load
Battery	Type Life Use-to-charge ratio	8.4 V Rechargeable 14 hrs min. 2:1
Recharger Voltage		115 V, 50-60 Hz or 230 V, 50-60 Hz
Size		11.4" x 11.4" x 3.3" 29.0 cm x 29.0 cm 8.4 cm
Weight (approx.)		7 lb (3 kg)
Temp	Operating Non-operating	0°C to +50°C -40°C to +75°C
Humidity		0% to 95% non-condensing
Accessories Supplied		Battery, Operating Manual, Charger, Carrying Case ^d , Mating Connector for Recorder

^a Specify the appropriate charger and power cord option (see page 319).

^b IEEE C95.1-1991

^c The "instantaneous" readings are averaged over one second

^d The carrying is heavy duty and foam lined to protect the meter in transit and in storage. The meter, manual, charger, and power cord for the charger (230 V models only) are stored in the case. It is approximately 17.6 in x 12.6 in x 5.0 in (44.7 cm x 32.0 cm x 12.7 cm).