

Contact Current Measurement

MODEL 8870 CONTACT CURRENT METER

- Flat Frequency Response and Response Shaped to 1991 IEEE Standard and 1997 Canadian Draft Standard
- 0 to 1000 ma
- 3 kHz to 30 MHz
- Large-Character LCD



DESCRIPTION

The Model 8870 Contact Current Meter displays the amount of current induced into the body by contact with a “hot” metallic surface that is in the vicinity of a high level, low frequency emitter. The amount of current induced into the body is displayed on a large-character LCD. The 8870 features an insulated “probe” to contact the surface which eliminates the shock and burn hazard. The solid, stainless steel base and the unique internal circuits form the equivalent of a barefoot human with grasping contact. The 8870 operates from 3 kHz to 30 MHz and measures currents up to 1000 ma. In the “Percent of Standard” measurement mode, shaping circuitry is used to make the 8870’s sensitivity match the new 1991 IEEE standard.

Hundreds of readings can be made before the battery requires recharging. The 8870 is supplied with a high quality, foam lined case and a battery charger.

SPECIFICATIONS

PARAMETER		SPECIFICATION
Model		8870-XX ^a
Frequency		3 kHz to 30 MHz
Measurement Range		0 to 1000 ma 0 to 200% of Standard ^b
Accuracy		±1.5 dB plus 3% of full scale
Meter	Type Size Scales	3 ¹ / ₂ digit LCD 0.5" (1.3cm) character height 20 ma, 200 ma, 1000 ma 200% of Standard ^b
Measurement Modes		Maximum Signal Hold or Instantaneous ^c
Battery	Type Life Use-to-charge ratio	8.4 V Rechargeable ^d 30 hrs min 3:1
Recharger Voltage		115 V, 50-60 Hz or 230 V, 50-60 Hz
Size		10.0" x 9.0" x 4.5" (25.4 cm x 22.9 cm x 11.4 cm)
Weight		7.6 lb (3.5 kg)
Temp	Operating Non-operating	0°C to +55°C -40°C to +75°C
Humidity		0% to 95% non-condensing
Accessories Supplied		Battery, Operating Manual, Charger, Carrying Case ^e

^a Specify the appropriate charger and power cord option (see page 545).

^b IEEE C95.1-1991/ANSI C95.1-1992 (Controlled Environments)

^c The “instantaneous” readings are averaged over one second

^d See page 573 concerning Narda’s Rechargeable Battery Management Program

^e The carrying case is heavy duty and foam lined to protect the meter in transit and 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).

GRASPING CONTACT VERSUS POINT CONTACT

The 8870 simulates a **grasping contact** that is the basis for many standards. Narda’s optional Point Contact Simulator, P/N 21764400, converts the 8870 to **point contact** measurements. It attaches to the 8870’s “probe” and simulates the impedance of a finger over the entire frequency range of 3 kHz to 30 MHz.