

FM-140XL

Digital Conductivity Meter



Special Features

The *Centurion NDT* Model FM-140XL conductivity meter makes conductivity testing simple and worry free...for most non-ferrous metal testing. Portable, yet ruggedly designed, it instantly generates readings with a bright, direct digital display, in percent IACS (International Annealed Copper Standard). To prolong battery life, readings only display when probe and testing surfaces meet.

The FM-140XL delivers precision accuracy to +/- .5% of the readings at 20° C. Included is a RS-232 port which allows the user to download information to computers, micro-controllers or other peripherals. The FM-140XL is housed in a compact, lightweight and shock resistant case for long life and durability. Placing the probe against the testing surface generates a direct conductivity reading in large brilliant LED digits. The front panel features a sorting gate, go/no-go, red or green LED display.

Applications

The FM-140XL meter is useful for sorting a wide variety of non-ferrous metals and allows, as well as for measuring changes in physical properties affecting conductivity. Such changes include hardening, annealing, variations in alloy, heat treating, corrosion and/or aging.

Its rechargeable Ni-Cad batteries provide up to ten hours of continuous operation from one charge. A lift-off compensation circuit easily handles rough surfaces, and compensates for probe wobble. Two test samples are mounted atop of the unit for easy set up.

Specifications

Accuracy: +/- 0.5% at 20°C.

RS-232: Downloads data into the user's computer, micro-controller or other peripheral.

Resolution: 0.1/IACS for any reading.

Readout: 4.0 digits, 0.43" (1.09 cm) seven segment LED display with fixed decimal point. Display automatically shuts off when probe is lifted from the part being tested.

Lift-off: Automatic lift-off compensation circuit compensates for moderately rough surfaces and minor probe wobble.

Calibration: Two case mounted set-up samples. Separate front panel control for each sample.

Batteries: Two rechargeable, self-contained Ni-Cad battery packs are standard. Approximately 10 hours continuous operation on a single charge.

Line Operation: May be operated on 115V 50/60 Hz line or converted to 230V 50/60 Hz.

Weight: 5.0 lbs. (2.27 kg).

Dimensions: 2.75" high x 8.5" wide x 9" deep (7 cm x 21.6 cm x 22.9 cm).

Probe: 7/16" diameter, shielded. Probe replacement requires recalibration at factory.

Handle: Multi-adjustable handle enables operator to lock unit into position for easiest viewing angle.

Selective Specifications

	Range	Accuracy	Oscillator Frequency	Probe
FM-140XL Part No. 220220A	10% to 110% IACS	± 0.5% of reading ± 1 digit @ 20° C	60 KHz	.437" (1.1cm) dia. Part No. 220245



NIST Traceable Conductivity Standards



Optional Carrying Case
Part No. 519739