

Electrical:

Impedance Measurement:

Accuracy: $\pm 1\%$ of reading ± 1 digit (Notes 1 & 2)

Range: 0 to 199.9 milliohms

Measurement Technique: True rms conversion of sense voltage divided by true rms conversion of test current independent of phase. Voltage is sensed at the probe's measurement ends by internal probe sense lines or, if Model 109 probes are utilized, by precision Kelvin sensing.

Digital Current Measurement:

Accuracy: $\pm 1\%$ of reading ± 1 digit (Note 1)

Range: 2.5 to 100 Amps rms (Note 3)

Measurement Technique: True rms conversion of internal precision shunt resistor voltage.

Bar Graph Current Measurement:

Accuracy: $\pm 1.5\%$ of reading at transition points (every 2.5 Arms) (Note 1)

Range: 2.5 to 77.5 Amps rms (0 to 2.5 Arms implied) (Note 3)

Measurement Technique: True rms conversion of internal precision shunt resistor voltage.

Digital Timer:

Accuracy: $\pm 1\%$ plus +0, -1 seconds

Range: 1 second to 59 minutes, 59 seconds (Note 4)

Internal Reference: 32.768 KHz crystal controlled time base.

Audio Alert:

When enabled, sounds for any milliohm reading of 100 milliohms or higher.

Accuracy: Logically driven by the digital drive of the main readout. The accuracy therefore exactly matches the accuracy of the impedance measurement.

Operating Duty Cycle:

Continuous to test currents of 35 Amps.

Derate linearly to 50% duty cycle at 50 Amps.

Maximum Cycle Period: 35 to 50 Amps: 4 Minutes

Maximum allowed common mode voltage to ground: 50 Vrms, 71 Vpeak or dc

Maximum normal mode open circuit probe source voltage (at 132 Vrms line voltage): 8.6 Vrms, 12.1 Vpeak

Input Power Requirements:

90 to 132 Volts rms

48 to 66 Hertz sine wave

Maximum Power: 330 Watts (2.5 Arms at 132 Vrms)

Check Resistor:

Resistance: 100 milliohms \pm 1%

Maximum continuous current: 17.5 Amps

Verification Schedule:

There are no calibration adjustments, and thus no calibration is required or possible. Complete the formal performance verification procedure annually or following any repair service.

Safety Certification: ETL Listed to UL 1244 (Electrical and electronic measuring and testing equipment)

Environmental:

Operating Temperature Range: 5 to 40°C

Relative Humidity Range: 0 to 90% non-condensing

Physical:

Mass: 7.7 kilograms (Weight: 17 pounds) {Including two probes}

Overall Dimensions:

Height: 23.27 centimeters (9.16 inches)

Width: 19.89 centimeters (7.83 inches)

Depth: 22.56 centimeters (8.88 inches)

Probe Length, Each Side:

Standard: 1.5 Meters (4.9 feet)

Maximum: 51.0 Meters (167.2 feet) at 50 Amps, 85.0 Meters (278.7 feet) at 40 Amps