

Measure Tech EL-7520 Specifications

Measure Tech AC-DC current shunt (**Model number EL-7520**) is a high accuracy four terminal instrument for calibrating AC or DC currents from 0 to 20 amps and frequencies up to 5 kHz. This product is a non-inductive current shunt, which provides inexpensive but highly accurate methods to calibrate transconductance amplifiers and other current calibrators. The unique and versatile construction of this instrument makes it a valuable device used for a calibrating standard providing traceability to the National Institute of Science and technology (NIST).

The EL-7520 current shunt is supplied in a durable metal enclosure which is tested to the electromagnetic compatibility requirements of MIL-T-28800. In addition, the unit has a continuously operating ventilating fan which cools the shunt as a stabilizing aid. All products are provided with the actual value of resistance within 10 ppm of the value marked on the front panel. Special processing of the resistance materials developed by Measure Tech has made the device not only a highly reliable current shunt but also a reliable and stable resistance standard to be used for resistance calibration with a drift of less than 10 ppm per year.

AC-DC Current Shunt Specifications

Design & Performance Specifications

Nominal resistance	0.01 Ω \pm 1%
Maximum current	20 ADC or RMS DC: \pm 0.010%
Accuracy of calibration value	DC to 1kHz: \pm 0.025% 1 kHz to 5kHz: \pm 0.075%
Burden voltage	0.25 V at 20 A
Power coefficient	Less than 0.001% at 20 amps
Temperature coefficient	10°C to 18°C: 5 ppm/°C 18°C to 28°C: 2 ppm/°C 28°C to 40°C: 5 ppm/°C
Input power to operate fan	115 V \pm 10% (as specified in MIL-T-28800)

Mechanical Specifications

Dimensions	12.0" L \times 8.37" W \times 3.47" H
Mass	902 g

Standards

Design & Construction	MIL-T-28800, type III
Reliability	MIL-T-28800, type III
Maintainability	MIL-T-28800, type III
Environmental	MIL-T-28800, type III, class 5, style E