

MULTI-TAP, 300A PRECISION DC CURRENT SHUNT

A HIGH STABILITY MULTIPLE VALUE PRECISION DC CURRENT SHUNT



9211A FEATURES

- ◆ Accuracy to $\pm 0.01\%$
- ◆ For Rack or Bench Mounting
- ◆ DC Current Measurement from 10 microamperes to 300 amperes Full Scale
- ◆ Compact Design
- ◆ Temperature Coefficient $< 10\text{ppm}/^{\circ}\text{C}$

GUILDLINE INSTRUMENTS 9211A DC PRECISION CURRENT SHUNT is a four-terminal bench top or rack mount instrument designed for convenient measurement of current in nine ranges from 10 microamperes to 300 amperes. Voltage output at full rated current on all ranges is 0.1 volt. Accuracy is calibrated at 23°C , and referred to the unit of resistance as maintained by the National Research Council of Canada or the National Institute of Standards and Technology. A report of calibration giving the measured values is furnished.

All connections and adjustments are accessible on the front panel. Separate current and potential terminals are provided. Range selection is made by means of two brass plugs inserted in pairs of ports on the panel. A sturdy Formica case for bench mounting is supplied with the standard configuration. Alternately, the 9211A can be supplied with rack mounting brackets. The rack mounted configuration occupies 222 mm (8.7 in) of vertical space.

The shunt resistors are mounted in air for minimum size and weight while minimizing self-heating effects.

The 9211A is a Convenient and Excellent Solution for High Accuracy DC Current Calibration up to 300 Amps.

The range resistors up to 10A are made of selected zenerin wire and are non-inductively wound up to the 1A range. These elements may be subjected to 140% of rated current without damage.

The 100A and 300A resistors are made of manganin plate and may be subjected to 110% of rated current without damage.



For High Precision Single Value DC Applications, Look at Guildline's 9230A Series of High precision DC Shunts to 3000Amps!

MODEL 9211A PRECISION DC CURRENT SHUNT

9211A SPECIFICATIONS

Resistance (Ohms)	Rated Current (Amperes)	1 Year Accuracy ^{1,2}	Temperature Coefficient (ppm/°C)	Power Dissipation at Rated Current (mW)
10,000	0.00001	± 0.01%	5	0.001
1,000	0.0001	± 0.01%	5	0.01
100	0.001	± 0.01%	5	0.1
10	0.01	± 0.01%	5	1
1	0.1	± 0.01%	5	10
0.1	1	± 0.01%	10	100
0.01	10	± 0.01%	10	1000
0.001	100	± 0.05%	30	10 W
0.00033333	300	± 0.1%	30	30 W

Note 1: Calibrated in air at 23 ± 1°C referred to the unit of resistance as maintained by the National Research Council of Canada or the National Institute of Standards and Technology, and expressed as a deviation from nominal with a total uncertainty and coverage factor of k = 2.

Note 2: A traceable report of calibration stating the measured values and uncertainty is provided with each unit at test currents of 1/10 of rated current and full rated current to a maximum of 100A and a minimum of 0.1 mA,

GENERAL SPECIFICATIONS				
Environmental	Temperature		Humidity	
Operating	5 °C to 38 °C	41 °F to 100°F	<70% RH non-condensing	
Storage	-20 °C to 55 °C	-4 °F to 131°F	<90% RH non-condensing	
Exterior Dimension (Bench)	222 mm (H)	513 mm (W)	254 mm (D)	13.6 kg
	8.7" (H)	20.2" (W)	10" (D)	30 lbs
Exterior Dimension (Rack Mount)	222 mm (H)	482 mm (W)	183 mm (D)	13.6 kg
	8.7" (H)	19" (W)	7.2" (D)	30 lbs

Warranty

50 Years of Guildline innovation in engineering and design, solutions that satisfy real measurement issues, and outstanding craftsmanship. How can we improve? Simple! We offer an industry leading **2-Year Warranty** to show you our confidence.

Guildline is pleased to announce that our calibration facility is **ISO 17025 Accredited**. We have the widest range of resistance accredited, from **1 μΩ all the way to 10 PΩ**. Whether you own a Guildline product and have other manufacturer's standards, **call today** and see what we can do for you.

ORDERING INFORMATION	
9211A	DC Current Shunt Bench Style
9211A/R	DC Current Shunt, Rack Mount
/TM9211A	Technical Manual (Included)
/RC	Report of Calibration Included
/CC	Calibration Certificate Included
9211A SERIES OPTIONS	
92301	20A, 1m Lead Set
92302	100A, 1m Lead Set
92303	300A, 1m Lead Set
SCW/18-30	30 Meters Shielded, Copper, Low Thermal Wire 18 Gauge
Many other leads and accessories to include system integration and IEEE are available.	

GUILDLINE IS DISTRIBUTED BY:

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