



## **Model 9311A**

**Multiple Value  
DC Current Shunt**

*9 Current Ranges*

*0.1mA to 300A*

*Accuracy's to <0.01%*

*Improved TC < 3 ppm/°C*

*Rack or Bench top Use*

### **General Description:**

The Model 9311A Multiple Value DC Current Shunt is the latest development from Measurements International's series of DC resistors and shunts. After many years of research in low value resistance materials, the Model 9311A insures that you get the best performance on the market today. Combined with MI's experience in automated measurements at high current levels, accuracies approaching <0.01% can be achieved at full power.

The process selected in treating the element insures the best performance without introducing self-heating errors with improved temperature coefficients. The elements are supported on an insulating base for mechanical stability and covered with perforated metal to allow for proper cooling.

Special consideration has been given to the process of curing the elements and reducing the overall temperature coefficient. Optimum surface area dissipates the maximum specified power. The Model 9311A maybe used as a current shunt or as a set of standard resistors. The Model 9311A is used in an air environment.

# Model 9311A

## Specifications:

Selected Resistance	Max Current	Nominal Current	Accuracy
10,000 $\Omega$	0.003 Amps	0.00001 Amps	$\pm 0.001\%$
1,000 $\Omega$	0.010 Amps	0.0001 Amps	$\pm 0.001\%$
100 $\Omega$	0.030 Amps	0.001 Amps	$\pm 0.001\%$
10 $\Omega$	0.100 Amps	0.01 Amps	$\pm 0.001\%$
1 $\Omega$	0.300 Amps	0.1 Amps	$\pm 0.001\%$
0.1 $\Omega$	1.500 Amps	1.0 Amps	$\pm 0.001\%$
0.01 $\Omega$	15.00 Amps	10 Amps	$\pm 0.005\%$
0.001 $\Omega$	140.0 Amps	100 Amps	$\pm 0.020\%$
0.000333 $\Omega$	420.0 Amps	300 Amps	$\pm 0.040\%$
Accuracy:	Calibrated at 23°C - Traceable to NRC and NIST		
Stability:	1 Year - 10 ppm		
Temp Coefficient:	< 3ppm/°C		
Power Coefficient:	< 4ppm/watt in Air		
Operating	18 to 34°C, 10 to 80% RH		
Warranty	1 Year Parts & Labor		

## Dimensions:

480 x 220 x 300 mm

## Weight:

9 kg

## Shipping Weight:

11.5 kg

## Accessories:

## Operating Power:

N/A

## Distributed By:

## How to Order:

Model 9311A

Multiple Value DC Current Shunt

Data Subject to Change

Printed in Canada



## Measurements International

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