



Precision Shunts - 0.1 to 10 Amp

- HIGH ACCURACY
- 0.1 A TO 10 AMPS
- LOW TEMPERATURE COEFFICIENTS
- LOW POWER COEFFICIENT
- IMMUNE FROM CONNECTION ERRORS
- DC AND AC USE
- RUGGED

The CS series precision current shunts are designed for the most demanding measurement applications. These shunts provide excellent long term stability and very low temperature and power coefficients. Designed for laboratory use, they are rugged enough to be installed in environments subject to wide variations in temperature and to vibration or shock.



Every shunt is provided with accredited calibration through full rated current.

The CS-0.1 to CS-10 shunts exhibit close AC conformance to DC values. AC/DC difference is estimated to be less than 0.01 % to 1 kHz.

The temperature coefficient of resistance is less than 5 ppm / °C, which minimizes the change in resistance due to self heating under power.

Connection errors, common in many shunts, are minimized by the internal bus structure. Connections are via gold plated binding posts, which accept bare wire, banana plugs and spades.

Standard models are listed, but other Amp/Volt combinations are available.

For the highest precision applications, a 100 ohm RTD can be bonded to the shunt element, and full current / temperature characterization can be provided. Please see the [Temperature Option](#) for an example of this characterization. Type T or thermistor sensors are also available.

Specifications

Model Number	Rated Amps	Nominal Resistance	Voltage at Rated Current	Rated Power	Accuracy*	Physical
CS-0.1	0.1	10 Ohms	1V	0.1 Watt	<0.005%	
CS-1	1	1	1	1	<0.005%	13x16.5x6 cm, 1 kg
CS-5	5	0.2	1	5	<0.01 %	5x6.5x2.25 in, 2 lbs
CS-10	10	0.1	1	10	<0.01%	

Special Values available on request – use the following format

Specify CS-X-Y X = Rated Amps Y = Rated Volts CS-3-1 = 3 A, 1 V, 0.333 Ohm

Notes

- *Stated accuracy at time of manufacture
- Accuracy is through full current range, 18-30 °C, 12 months

SHARE

Related Products

- [20 to 50 Amp](#)
- [100 to 300 Amp](#)
- [Multiple Current Shunt](#)
- [500 A & 1000 A](#)

Additional Resources

- [0.1 to 10 Amp Product Sheet](#)
- [CS Instruction Manual](#)
- [Temperature Option](#)
- [Sample Cal Report](#)
- [Sample Temperature Option Calibration Report](#)
- [CS Manual](#)
- [Technical Information](#)
- [Calibrating Current Shunts - Techniques and Uncertainties](#)