

COAXIAL AC SHUNTS

- UP TO 100 A AT 100 KHZ
- TRUE COAXIAL CONSTRUCTION
- ACCREDITED CALIBRATION

Ohm-Labs' CSA series of coaxial ac current shunts are designed as standards for precision ac current measurement up to high frequencies.

CSA shunts are optimized for 1 volt output. Standard models provide overlapping ranges in steps of 1-2-5.

Up to 2 A, specially constructed metal foil elements provide low inductance and flat frequency response.

Above 2 A, unlike 'cage' construction shunts, Ohm-Labs uses a true coaxial concentric cylinder foil design.

Careful heat treatment and processing of the foil resistance alloy produces a low temperature coefficient and minimal change with applied power.

Because of the variability of heat treatment and physical connection in the construction of ac shunts using sheets of resistance alloy, the dc resistance may vary from nominal. The DC resistance of these models will be change <0.05 % from 10-100 % current. As with any precision shunt, the user is recommended to use the calibrated values.

All models have type N male connectors for potential. Current connection to models from 0.1 to 10 A are type N female. 20, 50 and 100 A models use LC female current connectors.

All shunts include ISO 17025 Accredited Calibration through full current dc, and ac-dc difference data up to 100 kHz.

Coaxial Tee series connectors are available for inter-comparison.

The CSA shunts are offered individually or as a set of 10 shunts from 0.1 to 100 A, with Tee connectors, adapters and transit cases.

Non-standard values are available by special order. All Ohm-Labs shunts are warranted for two years.



CSA-SERIES COAXIAL AC SHUNTS

| Specifications, 18-30 °C | | | | |
|---|------------------|---------|---------------|---------------|
| Model | Nominal Ω | DC | 10 kHz | 100 kHz |
| CSA-0.1 | 10 Ω | <0.01 % | <20 μ A/A | <50 μ A/A |
| CSA-0.2 | 5 | <0.01 | <20 | <50 |
| CSA-0.5 | 2 | <0.01 | <20 | <50 |
| CSA-1 | 1 | <0.02 | <20 | <50 |
| CSA-2 | 0.5 | <0.02 | <20 | <50 |
| CSA-5 | 0.2 | <0.02 | <20 | <50 |
| CSA-10 | 0.1 | <0.02 | <20 | <150 |
| CSA-20 | 0.05 | <0.02 | <50 | <200 |
| CSA-50 | 0.02 | <0.05 | <100 | <300 |
| CSA-100 | 0.01 | <0.05 | <200 | <400 |
| CSA-T100 Coaxial Series Tee, to 100 A, LC male connectors | | | | |
| CSA-T Coaxial Series Tee, to 10 A, type N male connectors | | | | |
| CSA-Set Set of 10 shunts, Tee's, adapters and transit cases | | | | |

Physical:

CSA-0.1m to CSA-2: 3x3x6 cm (1.5x1.5x3 in), 500 g (1 lb)
 CSA-5: 5x5x20 cm (2x2x7 in), 1 kg (2 lbs)
 CSA-10: 8x8x20 cm (3x3x8 in), 2 kg (4 lbs)
 CSA-20: 10x10x28 cm (4x4x11 in), 3 kg (5 lbs)
 CSA-50: 10x10x45 cm (4x4x18 in), 4 kg (8 lbs)
 CSA-100: 15x15x32 cm (6x6x13 in), 6 kg (12 lbs)

Environmental:

Use: 18-30 °C, 15-70 %RH
 Storage: 5-60 °C, 5-95 %RH



ISO 17025 accredited calibration included.

