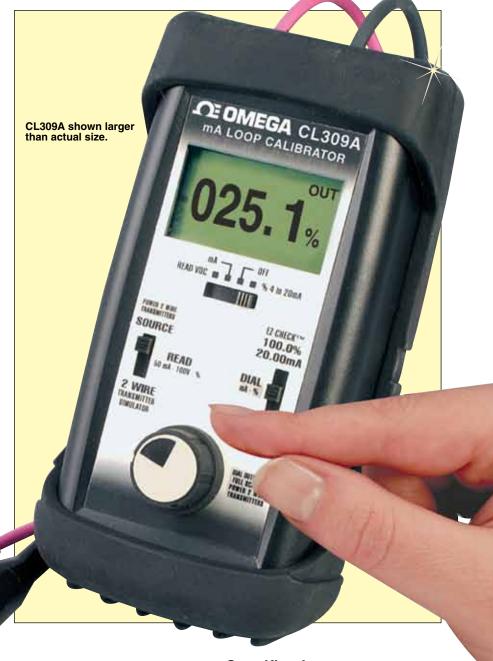
Milliamp Loop Calibrators





- All 4 to 20 mA Loop Functions
- Accuracy to Better Than 0.025%
- ✓ Large High Contrast Graphic Display
- ✓ Battery Life
 Up to 70 Hours
- Rechargeable Battery Optional
- 3 Position Slide Switch
- Unit Displays Either Milliamp or Percent
- Compact, Lightweight and Rugged
- Overload Protected

The CL309A is a state of the art, highly reliable, rugged and easy-to-use milliamp calibrator. It has the functions necessary to perform all the required maintenance and calibration tasks of virtually any 4 to 20 mA loop. It provides source and read milliamp functions along with power, measure, and 2-wire transmitter simulations. In addition, it can measure DC Voltage for troubleshooting power supplies.



General Specifications

(Unless otherwise indicated, all specifications are rated from a nominal 23°C, 70% RH for 1 year from calibration)

Operating Temperature Range: -20 to 60°C (-5 to 140°F)

Storage Temperature Range: -30 to 60°C (-22 to 140°F)

Relative Humidity Range: $10\% \le RH \le 90\%$ (0 to $35^{\circ}C$), non-condensing $10\% \le RH \le 70\%$ (35 to $60^{\circ}C$), non-condensing

Size: 14.30 x 7.62 x 4.06 cm (5.63 x 3.00 x 1.60")

Weight: 12.1 ounces

Batteries: 4 "AA" alkaline (included) 1.5V (Duracell MN1500 or equivalent); optional 120 Vac 50/60 Hz AC adaptor available; NiMh rechargeable battery kit available

Miscellaneous:

Low battery indication with nominal 1 hour of operation left; over-voltage protection to 135 vrms (rated for 30 seconds) or 240 vrms (rated for 15 seconds); high contrast graphic liquid crystal display with 10.5 mm (0.413") high digits

Specifications

Source/power and measure 2-wire transmitters/simulate 2-wire transmitters

Ranges and Resolution: 0.00 to 24.00 mA full span or -25.0 to 125.0% of 4 to 20 mA

Accuracy: EZ check(s) at 4 and 20 mA(*) ±0.025% at 4.00 mA and 20.00 mA (±0.005 mA) 0.0 to 24.00 mA ±0.05% of 24.00 mA (±0.01 mA)

Noise: ± 0.005 mA of reading

Temperature Effect: ± 0.005%/°C of FS (*) These are internal calibrated cardinal reference points and source/power and measure 2-wire transmitter

Loop Compliance Voltage:

24 Vdc @ 20.00 mA

Loop Drive Capability:

1200 Ω at 20 mA for 15 hours nominal

Battery Life: Source and power measure mode ±30 hrs at 12 mA nominal

Read mA Specifications:

Ranges: 0.00 to 52.00 mA full span OR -25.0 to 300.0% of 4 to 20 mA

Accuracy:

Below 24.01 mV: ±0.05% of 24.00 mA (±0.01 mA) Above 24.00 mV: ±0.05% of 52.00 mA (± 0.02 mA) Voltage Burden: 2V at 50 mA Overload/Current Limit Protection:

24 mA nominal

Battery Life: Typical 125 hours

nominal

2-Wire Transmitter Simulation Specifications

Voltage Burden: 2V at 20 mA Overload/Current Limit Protection:

24 mA nominal

Loop Voltage Limits: 2 to 100 Vdc (fuse-less protected from reverse

polarity connections)

Battery Life: 125 hours nominal

Voltage Read Specifications

Range and Resolution:

-99.99 to 99.99 Vdc full span (FS)

Accuracy: ± 0.05% of FS

Temperature Effect: ±100 ppm/°C of FS

Input Resistance: >2 M Ω

Battery Life: >125 hours nominal



To Order	
Model No.	Description
CL309A	Milliamp loop calibrator

Comes complete with test leads, operator's manual, 4 "AA" batteries and NIST calibration certificate. **Ordering Example: CL309A,** milliamp loop calibrator.

Accessories

Model No.	Description
CL530-ADAPTOR	110 Vac adaptor
CL530-ADAPTOR-230	220 Vac adaptor
SC-530	Soft carrying case
CL307A-RBK	Rechargeable battery



OMEGACARE™ extended warranty program is available for models shown on this page. Ask your sales respresentative for full details when placing an order. OMEGACARE™ covers parts, labor and equivalent loaners.