

Milliamp Loop Calibrators

CL309A



- ✓ 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.

CL309A shown larger than actual size.



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% ≤RH ≤90% (0 to 35°C), non-condensing
10% ≤RH ≤70% (35 to 60°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 MΩ**Battery Life:** >125 hours nominal

CL309A.

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



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