

# MILLIAMP LOOP CALIBRATOR

CL531  
\$599



Standard

- ✓ Sources and Reads 0 to 24 mA
- ✓ Large, High-Contrast Display with Bar Graph
- ✓ Powers and Reads 2-Wire Transmitters
- ✓ One-Handed Operation with Step Feature
- ✓ Displays mA or %
- ✓ 0.05% Rdg Accuracy

OMEGA's CL531 milliamp calibrator can check, calibrate, and troubleshoot 4 to 20 mA process control loops. It features a 4-digit display and bar graph. The high-contrast graphic display is viewable in most lighting conditions and angles. Output is easily adjusted with the EZ-Dial knob.

## SPECIFICATIONS

**Accuracy:**  $\pm 0.05\% + 0.01 \text{ mA}$

**Resolution:** 0.01 mA, 0.1%

**Temperature Effect:**  $\pm 50 \text{ ppm}/^\circ\text{C}$

**Operating Temperature Range:**  $-20 \text{ to } 60^\circ\text{C}$  ( $-5 \text{ to } 140^\circ\text{F}$ )

**Storage Temperature Range:**  $-30 \text{ to } 60^\circ\text{C}$  ( $-22 \text{ to } 140^\circ\text{F}$ )

**Relative Humidity Range:**  $10\% \leq \text{RH} \leq 90\%$  [ $0 \text{ to } 35^\circ\text{C}$  ( $95^\circ\text{F}$ )], non-condensing;  $10\% \leq \text{RH} \leq 70\%$  [ $35 \text{ to } 60^\circ\text{C}$  ( $95 \text{ to } 140^\circ\text{F}$ )], non-condensing

**Overvoltage Protection:** 120 Vrms for 30 seconds

**Overload Protection:** 25 mA nominal

**Batteries:** 2 "AA" alkaline (included)

**Battery Life:**

**Source Mode:**  $\geq 10$  hours at 12 mA (Hart<sup>®</sup> disabled)

**Power/Measure:** 10 hours

**Read:**  $> 40$  hours

**Loop Drive Ability:** 1200  $\Omega$  at 20 mA for life of battery

**Loop Burden:**  $< 1\text{V}$  at 20 mA

CL531, \$599, shown actual size. Comes with test leads with alligator clips attached and 2 "AA" batteries.



## Loop Supply Limits

(2 W Limit Sim.): 2 to 42 Vdc

**Connection:** Alligator test leads attached, 610 mm (24") long

## Dimensions:

121 H x 64 W x 19 mm D

(4.75 x 2.5 x 0.75")

**Weight:** 213 g (7.5 oz)

**Source Current:** Source 0 to 24 mA or -25 to 125% into  $\leq 1200 \Omega$ ; a flashing HIGH  $\Omega$  indicator appears if improperly connected.

## 2-Wire Transmitter Simulate:

Adjust loop current from 0 to 24 mA or -25 to 125% when powered by an external supply; LOW SUPPLY flashes to indicate a misconnection

**Power Measure:** Power the loop and read 0 to 24 mA or -25 to 125%. CURRENT LIMITED flashes at  $> 24 \text{ mA}$ , protecting devices in the loop

**Read Current:** Read 0 to 24 mA or -25 to 125%; CURRENT LIMITED flashes at  $> 24 \text{ mA}$ , protecting devices in the loop

**E-Z Check Switch:** Gives instant access to 4 and 20 mA preset settings

**E-Z Dial Knob:** Adjusts output by 0.01 mA (0.1%); push and turn for 10x faster adjustment—by 0.10 mA (1.00%)



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

**AVAILABLE FOR FAST DELIVERY!**

## To Order (Specify Model Number)

MODEL NO.	PRICE	DESCRIPTION
CL531	\$599	Milliamp loop calibrator

## ACCESSORY

MODEL NO.	PRICE	DESCRIPTION
SC-531	\$60	Soft carrying case

Comes complete with test leads, operator's manual, 2 "AA" alkaline batteries and NIST calibration certificate.

**Ordering Example:** CL531, milliamp loop calibrator, \$599. OCW-2, OMEGACARE<sup>SM</sup> extends standard 3-year warranty to a total of 5 years, (\$107), \$599 + 107 = \$706.

Recommended Reference Book: Systems and Control, PE-1412, \$135  
See Section Y For Additional Books





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