

PRECISION LOOP CALIBRATOR **VERY HIGH ACCURACY**

PCL120, shown
smaller than actual size.

PCL120



- ✓ **±0.015% Reading Accuracy**
- ✓ **0.001 mA Very High Resolution**
- ✓ **% Error Function— Eliminates Manual Error Calculation**
- ✓ **Extended Adjustment Range—Digital Knob and User-Selectable Decade Output Allow Large and Incremental (0.001 mA Step) Output Changes**
- ✓ **Reads 0 to 28 Vdc**
- ✓ **Built-In 250 Ω Resistor Facilitates Calibration of Hart® Devices**
- ✓ **Remote Calibration Through Automatic Step and Ramp Functions**
- ✓ **Loop Power Measurement Capability**
- ✓ **Simulates, Powers, and Measures 2-Wire Transmitters**
- ✓ **5-Preset Outputs (4, 8, 12, 16, 20 mA)**
- ✓ **Fuseless Input Protection Up to 250 Vac**
- ✓ **Protected by Full Rubber Boot**

With an accuracy of 0.015% of reading and 0.001 mA resolution, the PCL120 has the highest precision in its class. Other features that make the PCL120 stand out include a "% error" function, which eliminates manual error calculation and allows the display of actual versus ideal error at any calibration point. The PCL120 can simulate, power, and measure 2-wire transmitters. Its' automatic step and ramp functions enable remote calibration of 4 to 20 mA devices.

The PCL120 has many innovative, powerful features that make calibration easy. A few clearly marked keys give the user access to the full functionality of the unit. The STEP and RAMP output modes automate either a discrete 4-8-12-16-20-16-12-8-4 mA stair step output or 2 speeds of a linear 4-20-4 mA ramp output. Pressing the AUTO key (1) activates this time-saving function. To further aid remote calibration, the PCL120 features a minimum/maximum value recall function. In the measure mode, holding the AUTO(MAX) key (1) gives a direct readout of the maximum value, while holding the 25%/(MIN) key (4) gives a direct readout of the minimum value. Holding the % ERROR key (2) while turning the large knob provides instant feedback on the difference between the ideal and actual current values required for a given device response. This tells the user whether the device is within its accuracy range. No further calculations are necessary. A LOOP POWER key (3) provides instant 24 Vdc loop power output. The 25% (4) key provides instant outputs of 4, 8, 12, 16, and 20 mA loop current, with increments occurring each time the key is pushed.

SPECIFICATIONS (@ 25°C)

Input

Current Range: 0 to 24 mA; -25 to 125%
Voltage (Reading): 0 to 28 Vdc

Input Protection:

Fuseless up to 250 Vac

Output

Source/Simulate Range: 0 to 24 mA; -25 to 125%

Drive Capability:
Without Hart: 1200 Ω
With Hart: 950 Ω



Loop Supply Voltage: 24 Vdc

Range Select: Decade; incremental in 0.001 mA steps

Resolution: 1 μA

Accuracy: ±0.015% of reading ±2 μA

Environmental

Operating Temperature: -10 to 55°C (14 to 131°F)

Storage Temperature: -20 to 70°C (-4 to 158°F)

Power: 9 Vdc; battery included

Mechanical

Dimensions (Without Boot): 144.7 H x 80 W x 3.63 mm D (5.7 x 3.15 x 1.43")

Weight: 340 g (12 oz)

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



To Order

MODEL NO.	DESCRIPTION
PCL120	Precision loop calibrator
PCL-ACA	120 Vac, power adaptor, PCL422A-BATT required
PCL422A-BATT	9V NiCad battery

Comes complete with test leads, 9V battery, calibration certificate and operator's manual.

Ordering Examples: PCL120, precision loop calibrator.

OCW-1 OMEGACARE™ extends standard 1-year warranty to a total of 2 years.