



# MODEL PAXLCL - PAX LITE CURRENT LOOP METER



- DUAL RANGE, 4 to 20 mA or 10 to 50 mA \*
- 3 1/2-DIGIT, 0.56" (14.2 mm) HIGH LED READOUT
- 24 VDC EXCITATION SUPPLY
- WIDE SPAN & OFFSET SCALING RANGE
- OVER-RANGE INDICATION
- SELECTABLE DECIMAL POINTS
- NEMA 4X/IP65 SEALED FRONT BEZEL
- OPTIONAL CUSTOM UNITS OVERLAY W/BACKLIGHT

\* Also adapts to 0 to 50, 0 to 20, 0 to 10, 1 to 5 mA ranges as well as bi-polar inputs.



## GENERAL DESCRIPTION

The premium features of the PAX Lite Series can now be applied to measurement of process variables. With its high sensitivity and programmability, the PAX Lite Current Loop Meter can be set up for a wide variety of applications. In most plants the PAXLCL can be used for 90 to 95% of current loop meter needs for readout of pressure, flow, temperature, level and other variables. The meter has been specifically designed for harsh industrial environments. With NEMA 4X/IP65 sealed bezel and extensive testing of noise effects to CE requirements, the meter provides a tough yet reliable application solution. This allows the PAXLCL to be used in dirty, hostile environments and in wash-down areas. The 3 1/2-digit bi-polar display (minus sign displayed when current or voltage is negative) features 0.56" (14.2 mm) high, 7-segment LEDs for easy reading.

## SAFETY SUMMARY

All safety related regulations, local codes and instructions that appear in the literature or on equipment must be observed to ensure personal safety and to prevent damage to either the instrument or equipment connected to it. If equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.



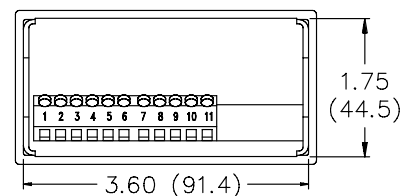
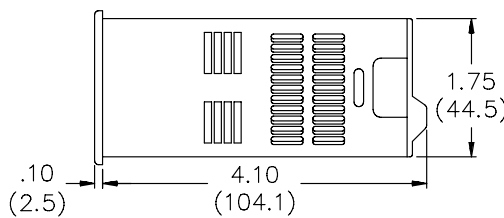
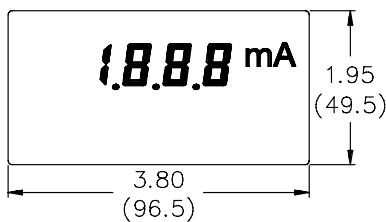
CAUTION: Read complete instructions prior to installation and operation of the unit.



CAUTION: Risk of electric shock.

## DIMENSIONS In inches (mm)

Note: Recommended minimum clearance (behind the panel) for mounting clip installation is 2.1" (53.4) H x 5.0" (127) W.



# ORDERING INFORMATION

## Meter Part Numbers

PAXL	CL	0	0
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CL - Current Loop Meter

## Accessories Part Numbers

TYPE	MODEL NO.	DESCRIPTION	PART NUMBERS
Accessories	PAXLBK	Units Label Kit Accessory	PAXLBK30

# GENERAL METER SPECIFICATIONS

- DISPLAY:** 3 1/2-digit, 0.56" (14.2 mm) high, 7-segment LED, (-) minus sign displayed when current or voltage is negative. Decimal points inserted before 1st, 2nd, or 3rd least significant digits by DIP switch selection.
- OVER-RANGE INDICATION:** Indicated by blanking 3 least significant digits.
- POWER:**
  - AC Power:** 85 to 250 VAC, 50/60 HZ, 6 VA
  - Isolation:** 2300 Vrms for 1 min. between input and supply (300 V working voltage).
- INPUT SENSITIVITY:** (Numerical Readout Change/mA)
  - 260 units/mA @ 4 to 20 mA input
  - 105 units/mA @ 10 to 50 mA input
  - (max. allowable input current, 170 mA)
- COMPLIANCE:** Voltage drop across input at max. signal current, less than 600 mV for both 4 to 20 and 10 to 50 mA ranges.
- INPUT RESISTANCE:**
  - 4 to 20 mA** - 29.2  $\Omega$
  - 10 to 50 mA** - 11.8  $\Omega$
- SCALING RANGE:**
  - SPAN:** 32 coarse steps (binary progression with 5 DIP switches) Each step providing approx. 8.125 numerical units/mA/step sensitivity for 4 to 20 mA input and 3.25 units/mA/step for 10 to 50 mA input.
  - OFFSET:** 16 coarse steps (binary progression with 4 DIP switches) with  $\pm$  switch to add or subtract offset. Each step adds or subtracts approximately 175 from the numerical display for a total offset range of  $\pm 2700$ .
- LINEARITY:**  $\pm(0.05\% \pm 1 \text{ digit})$
- READING RATE:** 2.5 updated readings/second, nominal.
- RESPONSE TIME:** 1 second to settle for step change.
- LOW FREQUENCY NOISE REJECTION:**
  - Normal Mode Rejection:** 63 dB @ 50/60 Hz
  - Common Mode Rejection:** 100 dB, DC to 50/60 Hz
- ENVIRONMENTAL CONDITIONS:**
  - Operating Temperature:** 0° to 60°C
  - Storage Temperature:** -40° to 80°C
  - Operating and Storage Humidity:** 85% max. relative humidity (non-condensing)
  - Span Temperature Coeff.:** 100 PPM/°C
  - Offset Temperature Coeff.:** 100 PPM/°C
  - Vibration According to IEC 68-2-6:** Operational 5 to 150 Hz, in X, Y, Z direction for 1.5 hours, 2g's.
  - Shock According to IEC 68-2-27:** Operational 30g's (10g relay), 11 msec in 3 directions.
  - Altitude:** Up to 2000 meters
- CERTIFICATIONS AND COMPLIANCES:**
  - SAFETY**
  - UL Recognized Component, File # E179259, UL61010A-1, CSA C22.2 No. 61010-1 Recognized to U.S. and Canadian requirements under the Component Recognition Program of Underwriters Laboratories, Inc.
  - UL Listed, File # E137808, UL508, CSA C22.2 No. 14-M95
  - LISTED by Und. Lab. Inc. to U.S. and Canadian safety standards
  - Type 4X Enclosure rating (Face only), UL50

IECEE CB Scheme Test Certificate # US/8843A/UL  
CB Scheme Test Report # 04ME11209-20041018  
Issued by Underwriters Laboratories, Inc.  
IEC 61010-1, EN 61010-1: Safety requirements for electrical equipment for measurement, control, and laboratory use, Part 1.

IP65 Enclosure rating (Face only), IEC 529  
IP20 Enclosure rating (Rear of unit), IEC 529

## ELECTROMAGNETIC COMPATIBILITY

Emissions and Immunity to EN 61326: Electrical Equipment for Measurement, Control and Laboratory use.

### Immunity:

Electrostatic discharge	EN 61000-4-2	Criterion A 4 kV contact discharge 8 kV air discharge
Electromagnetic RF fields	EN 61000-4-3	Criterion B 10 V/m
Fast transients (burst)	EN 61000-4-4	Criterion A 2 kV power 2 kV signal
Surge	EN 61000-4-5	Criterion A 1 kV L-L, 2 kV L&N-E power 1 kV signal
RF conducted interference	EN 61000-4-6	Criterion A 3 V/rms
Power frequency magnetic fields	EN 61000-4-8	Criterion A 30 A/m
Voltage dip/interruptions	EN 61000-4-11	Criterion A 0.5 cycle

### Emissions:

Emissions EN 55011 Class B

### Notes:

1. *Criterion A: Normal operation within specified limits.*

2. *Criterion B: Temporary loss of performance from which the unit self-recovers.*

- EXCITATION SUPPLY:** 24 VDC @ 50 mA max. Regulated and isolated.
- CONNECTIONS:** High compression cage-clamp terminal block
  - Wire Strip Length: 0.3" (7.5 mm)
  - Wire Gauge: 30-14 AWG copper wire
  - Torque: 4.5 inch-lbs (0.51 N-m) max.
- CONSTRUCTION:** This unit is rated for NEMA 4X/IP65 use. IP20 Touch safe. Installation Category II, Pollution Degree 2. One piece bezel/case. Flame resistant. Panel gasket and mounting clip included.
- WEIGHT:** 0.65 lbs (0.24 kg)