

# Dual Line Display Meter

Model PAX2A



## PAX2A—the next generation in panel meters.

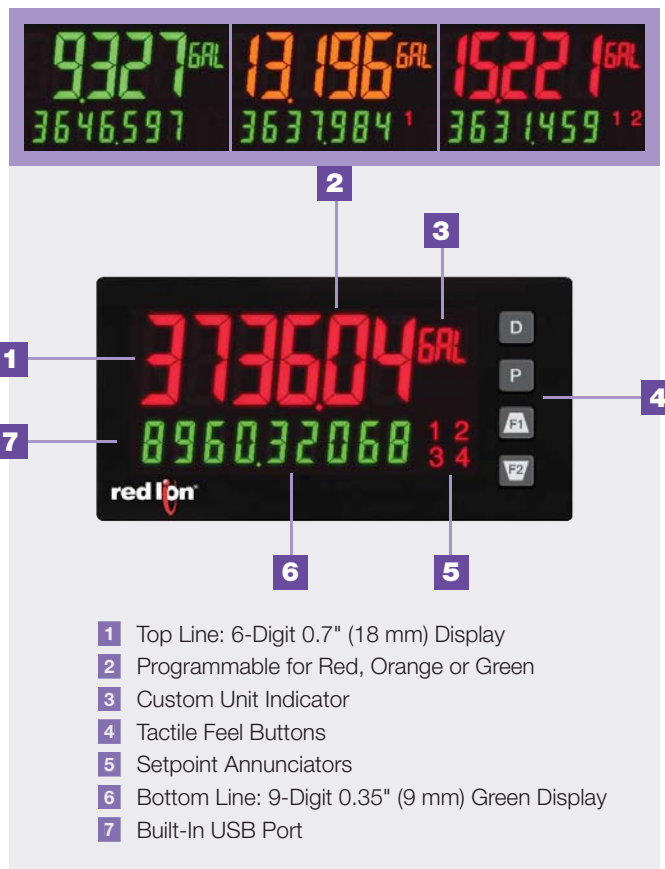
From its dual line display to its universal functionality, the PAX2A is packed full of features that set it apart from any other panel meter. The input, total, min., max. or setpoints can be displayed on the 0.7" high 6-digit main LCD display. The main display also offers three programmable, easy-to-read colors: red, orange and green. The color change can be tied to the setpoints, providing the operator with a visual display of changing conditions in the application. And that's not all! A second display line is a 0.35" high 9-digit, green LCD that can be programmed for any of the above parameters as well. The 9-digit display accommodates totaling applications that easily exceed the normal 6-digit displays. In addition to the dual displays, the meter also offers a 3-digit programmable custom unit indicator.

Beyond the display, the PAX2A provides the maximum in application flexibility, allowing users to stock just one meter for numerous applications. Featuring universal input, the same meter accepts DC current, DC voltage, process signal, and thermocouple and RTD temperature sensor inputs. Plus, the PAX2A features a universal power input. Whether it's 50 to 250 VAC or 21.6 to 250 VDC, just hook it up.

With its dual display and versatile functionality, the PAX2A delivers an ideal solution for applications that require two parameters to be visualized at the same time. For instance, the PAX2A can read a flow rate through a pipeline while simultaneously totaling the gallons, or indicate the temperature of an oven while also displaying the setpoint value.

Take the dual line display with color change capability and add the universal capability and other user-friendly features, and you will understand why the PAX2A represents the next generation of panel meters.

- Universal Process Inputs, DC Current, DC Voltage, Process Signals, Resistance, Thermocouples or RTDs
- Universal Power Supply: 50 to 250 VAC or 21.6 to 250 VDC
- Built-in USB Port
- Meter Update Rate up to 160/Second
- Built-in Modbus Communications
- Setpoints: Dual and Quad Relay; Quad Sinking and Sourcing
- Retransmitted Analog Output
- Communications: RS232, RS485, DeviceNet, and Profibus



- 1 Top Line: 6-Digit 0.7" (18 mm) Display
- 2 Programmable for Red, Orange or Green
- 3 Custom Unit Indicator
- 4 Tactile Feel Buttons
- 5 Setpoint Annunciators
- 6 Bottom Line: 9-Digit 0.35" (9 mm) Green Display
- 7 Built-In USB Port

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# Panel Meter Specifications



## DISPLAY: Positive image LCD

Top Line: 6-digit, 0.71" (18 mm) tri-color backlight (red, green or orange)

Display range: -199,999 to 999,999

Bottom Line: 9 digit, 0.35" (8.9 mm) green backlight

Display range: -199,999,999 to 999,999,999

## POWER:

AC Power: 50 to 250 VAC, 50/60 Hz, 14 VA

DC Power: 21.6 to 250 VDC, 8 W

## ANNUNCIATORS: Backlight color: Red

1 - setpoint alarm 1 is active

2 - setpoint alarm 2 is active

3 - setpoint alarm 3 is active

4 - setpoint alarm 4 is active

Units Label: programmable 3 digit units annunciator with tri-color backlight (red, green or orange)

## KEYPAD: 2 programmable function keys, 4 keys total

## A/D CONVERTER: 24 bit resolution

## UPDATE RATES:

A/D conversion rate: programmable 5 to 160 readings/sec.

## INPUT CAPABILITIES:

Current Input:  $\pm 250 \mu\text{ADC}$ ,  $\pm 2.5 \text{ mADC}$ ,  $\pm 25 \text{ mADC}$ ,  $\pm 250 \text{ mADC}$ , and  $\pm 2 \text{ ADC}$

Voltage Input:  $\pm 250 \text{ mVDC}$ ,  $\pm 2.0 \text{ VDC}$ ,  $\pm 10 \text{ VDC}$ ,  $\pm 25 \text{ VDC}$ ,  $\pm 100 \text{ ADC}$ , and  $\pm 200 \text{ VDC}$

Thermocouple Input: T, E, J, K, R, S, B, N, and C

RTD Input: 100 $\Omega$  Pt (Alpha 0.00385 and 0.00392 120 $\Omega$  Nickel (Alpha 0.00672) and 10 $\Omega$  Copper (Alpha 0.00427)

Resistance Input: 100 $\Omega$ , 1,000 $\Omega$ , and 10 K  $\Omega$

## EXCITATION POWER: Jumper selectable

Transmitter Power: +18VDC @ 50mA

Reference Voltage: +2VDC, +/- 2%

Reference Current: 1 mADC, +/- 2%

## TOTALIZER:

Time Base: second, minute, hour or day

Batch: Can accumulate (gate) input display from a user input

Time Accuracy: 0.01% typical

Decimal Point: 0 to 0.0000

Scale Factor: 0.001 to 65.000

Low Signal Cut-out: -19,999 to 99,999

Total: 9 digits, display alternates between high order and low order readouts

## CUSTOM LINEARIZATION:

Data Point Pairs: Selectable from 2 to 16

Display Range: -19,999 to 99,999

Decimal Point: 0 to 0.0000

Ice Point Compensation: user value (0.00 to 650.00  $\mu\text{V/C}$ )

**MEMORY:** Nonvolatile E2PROM memory retains all programmable parameters and display values

## USER INPUTS: Two programmable user inputs

## ENVIRONMENTAL CONDITIONS:

Operating Temperature Range: 0 to 50 °C

(0 to 45 °C with all three plug-in cards installed)

Storage Temperature Range: -40 to 60 °C

Operating and Storage Humidity: 0 to 85% max.

RH non-condensing

Altitude: Up to 2000 meters

## CERTIFICATIONS AND COMPLIANCES:

Refer to EMC Installation Guidelines section of the bulletin for additional information

## CONNECTIONS: High compression cage-clamp terminal block

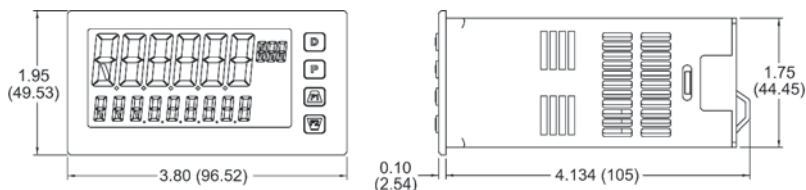
**CONSTRUCTION:** This unit is rated for NEMA 4X/IP65 indoor use; IP20 Touch safe; Installation Category II, Pollution Degree 2; One piece bezel/case; Flame resistant; Synthetic rubber keypad; Panel gasket and mounting clip included

**WEIGHT:** 8 oz. (226.8 g)

## ORDERING INFORMATION:

MODEL NO.	DESCRIPTION	PART NUMBER
PAX2A	Dual Line Display Process Meter	PAX2A000
PAXCDS	Dual Setpoint Relay Output Card	PAXCDS10
	Quad Setpoint Relay Output Card	PAXCDS20
	Quad Setpoint Sinking Open Collector Output Card	PAXCDS30
	Quad Setpoint Sourcing Open Collector Output Card	PAXCDS40
PAXCDC	RS485 Serial Communications Card with Terminal Block	PAXCDC10
	Extended RS485 Serial Communications Card with Dual RJ11 Connector	PAXCDC1C
	RS232 Serial Communications Card with Terminal Block	PAXCDC20
	Extended RS232 Serial Communications Card with 9 Pin D Connector	PAXCDC2C
	DeviceNet Communications Card	PAXCDC30
	Profibus-DP Communications Card	PAXCDC50
PAXCDL	Analog Output Card	PAXCDL10

## DIMENSIONS: In inches (mm)



## Red Lion Controls

[www.redlion.net](http://www.redlion.net)



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