

# Dual Line Digital Input Panel Meter

Red Lion PAX<sup>®</sup>2 Series



## ▶▶▶ PAX2D - Dual Line Digital Input Panel Meter

With its dual display and digital input, the PAX2D delivers an ideal solution for applications that require two parameters to be visualized at the same time.

Line one consists of a 0.7" high 6 digit LCD display that can be programmed to show Counters A, B, or C; Rate A, B, or C; or the Hi or Lo values. The color can be tied to the setpoints; providing the operator with a visual display of changing conditions in the application. A second display line can be programmed for any of the above parameters as well. The meter also offers a programmable custom unit indicator for both displays.

PAX2D provides the maximum in application flexibility; by accepting inputs from proximity sensors, magnetic sensors, photo eyes, length sensors, rotary pulse generators, transistors or a plain switch.

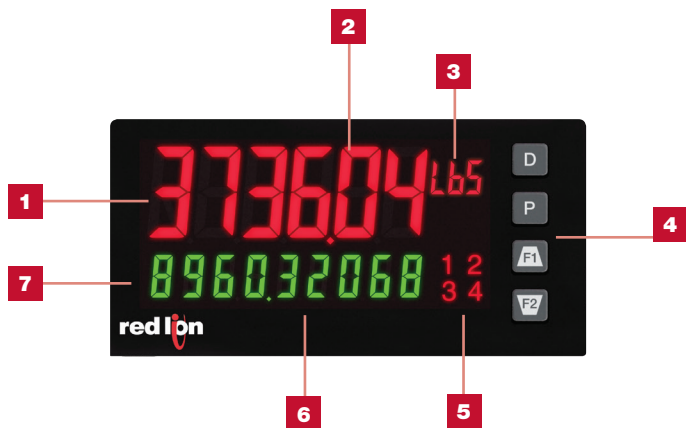


### PRODUCT HIGHLIGHTS

- > Count, Dual Count, Rate, and Dual Rate
- > Math Function Capability
- > Universal Power Supply: 50 to 250 VAC or 21.6 to 250 VDC
- > Built-in USB Programming/Virtual Comms Port
- > Setpoints: Dual or Quad Relay; Quad Sinking; Quad Sourcing/SSR Drive; and Dual Triac/Dual SSR Drive
- > Retransmitted Analog Output
- > Communications: Modbus Protocol; RS232, RS485, DeviceNet, and Profibus

### FEATURES & BENEFITS

- > Main display offers three programmable, easy-to-read colors: red, orange and green
- > The display color can be tied to the setpoints
- > Second display line is a 0.35" high 9 digit, green LCD
- > The 9-digit display accommodates totalizing applications that exceed the normal 6-digit displays
- > Stock one meter for multiple applications



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

# ▶▶▶ PAX2D - Dual Line Digital Input Panel Meter Specifications

## DISPLAY

Negative 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 CONNECTION

AC Power: 40 to 250 VAC, 50/60 Hz, 20 VA  
DC Power: 21.6 to 250 VDC, 8 W

## SENSOR POWER

+18 VDC,  $\pm 5\%$  @ 60 mA max., short circuit protected

## ANNUNCIATORS

Backlight color: Red  
1 - setpoint alarm 1  
2 - setpoint alarm 2  
3 - setpoint alarm 3  
4 - setpoint alarm 4  
Units Label: programmable units annunciators

## KEYPAD

2 programmable function keys, 4 keys total

## COUNTER DISPLAYS

6-digit (top line) or 9-digit (bottom line)  
*Top Line Display Range:* -199,999 to 999,999  
Bottom Line Display Range: -199,999,999 to 999,999,999  
Over Range Display: OUEr  
Under Range Display: UndEr  
Display Designators: CtA, Ctb, CtC (top line), A, b, C (bottom line)  
Maximum Count Rates: 50% duty cycle, count mode dependent  
If setpoints disabled: 35 KHz for all modes except Quadrature  
x4 (32 KHz)  
If setpoint(s) enabled: 20 KHz for any mode except Quadrature  
x1 (19 KHz), Quadrature x2 (17 KHz) and Quadrature x4 (10 KHz)

## RATE DISPLAYS

6-digit (top or bottom line)  
Rate A or Rate B Display Range: 0 to 999,999  
Rate C, Rate Max (High) or Min (Low) Display Range:  
-199,999 to 999,999  
Over Range Display: OUEr  
Under Range Display: UndEr  
Display Designators: RtA, RtB, RtC, Hi, Lo (top or bottom line)  
Maximum Frequency: 50 KHz  
Minimum Frequency: 0.001 Hz  
Display Update Time: 0.1 to 999.9 seconds  
Accuracy:  $\pm 0.01\%$

## INPUT CAPABILITIES

The inputs accept pulses from a variety of sources including switch contacts, TTL outputs, magnetic pickups and all standard RLC sensors. Inputs accept current sinking or current sourcing outputs and provide selectable input filtering for low frequency signals or switch contact debounce.

## MEMORY

Nonvolatile memory retains all programmable parameters and display values

## INPUTS

Three programmable user inputs

## ENVIRONMENTAL

Operating Temperature Range: 0 to 50 °C  
Storage Temperature Range: -40 to 60 °C  
Operating and Storage Humidity: 0 to 85% max.  
RH non-condensing  
Altitude: Up to 2000 meters

## CERTIFICATION & COMPLIANCE

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

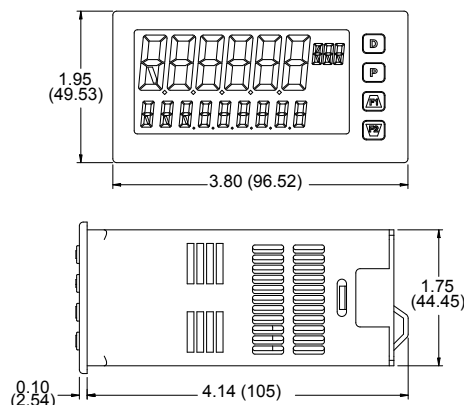
## CONNECTIONS

High compression cage-clamp terminal block

## MECHANICAL

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)

## DIMENSIONS In inches (mm)



## ORDERING INFORMATION

PART NUMBER	MODEL	DESCRIPTION
PAX2D000	PAX2D	Dual Line Digital Input Panel Meter
PAXCDS10	PAXCDS	Dual Setpoint Relay Output Card
PAXCDS20		Quad Setpoint Relay Output Card
PAXCDS30		Quad Setpoint Sinking Open Collector Output Card
PAXCDS40		Quad Setpoint Sourcing Open Collector Output Card
PAXCDS50		Dual Triac/Dual SSR Drive Digital Output Card
PAXCDS60		Quad Form C Relay Digital Output Card
PAXCDC10	PAXCDC	RS485 Serial Communications Card with Terminal Block
PAXCDC1C		Extended RS485 Serial Communications Card with Dual RJ11 Connector
PAXCDC20		RS232 Serial Communications Card with Terminal Block
PAXCDC2C		Extended RS232 Serial Communications Card with 9 Pin D Connector
PAXCDC30		DeviceNet Communications Card
PAXCDC50		Profibus-DP Communications Card
PAXCDL10	PAXCDL	Analog Output Card