

# UPR800 Process Indicator

1/4 DIN Panel Display of Pressure and/or Temperature or Differential Pressure



## Features

- Display pressure, temperature, or even differential pressure
- Optional second input/output for cost-effective single instrument
- View display information locally or remotely by optional Modbus RTU
- Bar graph display for quick-glance scaled value
- Two alarm relay output, third alarm optional
- Analog retransmission of process variable allows signal to be sent to other devices
- Configure locally or remotely by optional Modbus RTU
- Digital security code prevents unauthorized use
- IP65/NEMA 4X rated for harsh environments

## Description

The UPR800 is a compact 1/4 DIN process indicator. The UPR800 can display your choice of engineering units related to a selectable range of input types. Add an optional secondary input for an all-in-one display of polymer melt pressure and temperature. The secondary input can be strain gage to indicate differential pressure measurement. The UPR includes two standard assignable alarms and the option to add a third. The bright 5-digit LED display value is accompanied by a helpful 35-segment bar graph that illustrates the value in the configured range. Other useful display information includes alarm set points, peak values, and engineering unit beacons. The UPR800 is easily field-configured or can be programmed remotely via optional Modbus RS-485 without complicated mechanical jumpers. An optional 24Vdc input supply is available.



## Specifications

### PERFORMANCE CHARACTERISTICS

<b>Instrument Type:</b>	Digital panel indicator
<b>Display:</b>	5 red LED digits 0.52" (13.2mm) high 5 green LED digits 0.44" (11.3mm) high 35-segment bar graph scaled to value
<b>Accuracy:</b>	±0.1% full scale
<b>Sampling Time:</b>	50mS or better

### INPUT

<b>Input:</b>	Select strain gage or linear (Vdc, mA) Second input optionally available
<b>Strain Gage:</b>	350 to 5000Ω, 1 to 4mV/V, excitation 10V ±7%
<b>Thermocouple:</b>	Types J, K, L, N, T, E
<b>RTD:</b>	Type Pt100, Pt500
<b>Linear Input:</b>	0 to 5Vdc and 0 to 10Vdc, 0 to 20mA and 4 to 20mA
<b>Input Signal:</b>	-25 to 125% full scale
<b>Input Impedance:</b>	<10- Ω for linear current input >165kΩ for linear voltage input >1MΩ for thermocouple input (optional)
<b>Shunt Calibration:</b>	With or without resistor (40 to 100%)

### ALARM OUTPUTS

<b>Alarm Type:</b>	SPDT 2A max @ 240Vac resistive load
<b>Alarm Number:</b>	2 standard, 3 <sup>rd</sup> optional
<b>Alarm Update Time:</b>	50mS

### OUTPUTS

<b>Type:</b>	0 to 5Vdc and 0 to 10Vdc, 0 to 20mA and 4 to 20mA
<b>Resolution:</b>	±0.1% of output span
<b>Accuracy:</b>	±0.1% of output span

### SERIAL COMMUNICATION INTERFACE

<b>Type:</b>	Isolated RS-485
<b>Protocol:</b>	Modbus RTU/Jbus selectable

### MECHANICAL & PACKAGING CHARACTERISTICS

<b>Termination:</b>	Screw terminals on rear with safety covers
<b>Front Panel:</b>	IP65/NEMA 4X with gasket
<b>Operating Temp:</b>	32 to 122°F (0 to 50°C)
<b>Storage Temp:</b>	-4 to 158°F (-20 to 70°C)
<b>Humidity:</b>	85% relative humidity, non-condensing
<b>Weight:</b>	1.43 lbs. (650g)

### APPROVALS & CERTIFICATIONS

<b>CE Mark:</b>	Self-certified to applicable standards
<b>Agency Approvals:</b>	UL, cUL

### POWER SUPPLY (MAINS)

<b>Input Power:</b>	100 to 240Vac, 50/60Hz switching 24Vac/dc option available (pending)
<b>Power Consumption:</b>	15VA, max
<b>Transmitter Supply:</b>	24Vdc for 2-or 4-wire mA transmitters

## Ordering Guide

UPR800-X-X-X (Pressure Indicator, 2 Alarms, Analog Retransmission)

#### Input:

- 0 = No Second Input
- 1 = Second Input (TC, RTD, mA/V, or Strain Gage)

#### Options:

- 0 = No Options Present
- 2 = 24Vdc Auxiliary Transmitter Supply + 2<sup>nd</sup> Analog Retransmission
- 3 = 24Vdc Auxiliary Transmitter Supply + 2<sup>nd</sup> Analog Retransmission + RS-485

#### Power Supply:

- 3 = 100 to 240Vac, Switching
- 5 = 24Vac/dc, Switching (availability pending)

To include the 3<sup>rd</sup> alarm, add "A3" to the end of the model code.

