

# UPR900 Process Indicator

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



## Features

- Graphical/text LCD Display with color change LED backlight on alarm (red/green)
- Graphical trend view of process, alarms & events as standard
- Easy to use Setup Wizard
- Display of differential pressure is available
- USB port option for access to configuration and log files
- Data logging option logs process values, set points and alarms to .csv file for use with spreadsheets
- Modbus RS-485 and Modbus TCP Ethernet supported
- BlueControl configuration and commissioning software option
- Display pressure, temperature, or even differential pressure
- Optional second input/output for cost-effective single instrument
- Analog retransmission of process variable allows signal to be sent to other devices
- Configure locally or remotely by optional Modbus RTU

## Description

The UPR900 is a compact 1/4 DIN process indicator. The UPR900 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 gauge to indicate differential pressure measurement. The UPR900 includes two standard assignable alarms with the option to add a 3rd. The LCD graphical display allows for easy reading of trending graphs with user selectable monochromatic configurations.

The UPR900 is easily field-configured, can be programmed remotely via optional Modbus RS-485 or can be programmed with BlueControl software.



## Specifications

### PERFORMANCE CHARACTERISTICS

**Instrument Type:** Digital, panel-mount PID closed loop controller  
**Display:** 160 x 80 Monochromatic Graphical LCD with backlight  
**Accuracy:**  
**Thermocouple :** ±0.1% of full range, ±1LSD (±1°C for internal CJC if enabled)  
**DC Linear :** ±0.1% of full range, ±1LSD  
**Sampling Time:** 50mS, typical

### INPUT

**Input:** Strain gauge, Thermocouple or linear (Vdc, mA)  
**Strain Gauge:** 350 to 5000Ω, 1.4 to 4mV/V, excitation 10V ±7%  
**Linear Input:** 0 to 5Vdc and 0 to 10Vdc, 0 to 20mA and 4 to 20mA  
**Input Signal:** -25 to 125% full scale (approximately -10mV to +50mV)  
**Input Impedance:** <10Ω for linear current input >165kΩ for linear voltage input  
**Shunt Calibration:** With or without resistor (40 to 100%)  
**Digital:** 4 programmable voltage-free contact closure

### ALARM OUTPUTS

**Alarm Type:** SPST 2A max @ 240Vac resistive load Dual relays have a shared common  
**Alarm Number:** 3 standard  
**Alarm Update Time:** 100mS, typical

### OUTPUTS

**Type (Retransmission):** 0-5Vdc and 0-10Vdc, 0-20mA and 4-20mA  
**Type (Control):** 0-5Vdc and 0-10Vdc (2% under/over drive) 0-20mA and 4-20mA  
**Resolution:** 15 3/4 bit  
**Accuracy:** ±0.1% of output span (mA @ <500Ω, V @ >500Ω)

### CONTROL FUNCTION

**Type:** Adaptive auto-tuning algorithm  
 Serial Communication Interface  
 Isolated RS-485  
**Protocol:** Modbus RTU

### MECHANICAL & PACKAGING CHARACTERISTICS

**Termination:** Screw terminals on rear  
**Front Panel:** IP65 with gasket (IP65 front USB connector)  
**Operating Temp:** 32 to 122°F (0 to 50°C)  
**Storage Temp:** -4 to 158°F (-20 to 70°C)  
**Humidity:** 85% relative humidity, non-condensing  
**Weight:** 1.43 lbs. (650g)

### APPROVALS & CERTIFICATIONS

**CE Mark:** Self-certified to applicable standards  
**Agency Approvals:** UL

### POWER SUPPLY (MAINS)

**Input Power**  
**Mains Version:** 100 to 240Vac, 50/60Hz switching  
**Low Voltage Version:** 20 to 48Vac 50/60Hz 15VA or 22 to 65Vdc 12W 24Vac/dc option available  
**Power Consumption:** 15VA, max  
**Transmitter Power Supply:** 24Vdc into 400Ω min, 60mA drive for 2-or 4-wire mA transmitters

## Ordering Guide

**UPR900 -X-X-X-X-X-X-X** (Includes Retransmission )

