

From lab to production, providing a window into the process

# Dynisco UPR900 Process Indicator

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



### Description

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The Dynisco 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.

**Material Analysis** 

Sustainability

Profitability

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

### **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 options for access to configuration and log files
- Data logging option logs process values, sets points and alarms to .csv file for use with spreadsheets
- Modbud RS-485 and Modbus TCP Ethernet support
- 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

Performance Characteristics	
Instrument Type:	Digital, panel-mount PID closed loop indicator
Display:	160 x 80 Monochromatic Graphical LCD with backlight
Accuracy:	
Thermocouple:	$\pm 0.1\%$ of full range, $\pm 1$ LSD
	(±1°C for internal CJC if enabled)
DC Linear:	$\pm 0.1\%$ of full range, $\pm 1$ LSD
Sampling Time:	50mS, typical
Input	
Input:	Strain gauge, Thermocouple or linear (Vdc, mA)
Strain Gauge:	350 to 5000 $\Omega$ , 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:	$<10\Omega$ for linear current input
	$>165 k\Omega$ 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 shared common
Alarm Number:	3 standard
Alarm Update Time:	100mS, typical
Outputs	
Type (Retransmission):	0-5Vdc and 0-10Vdc, 0-20mA and 4-20mA
Resolution:	15 3/4 bit
Accuracy:	$\pm 0.1\%$ of output span (mA @ $<500\Omega$ , V @ $>500\Omega$ )
Communications	
Туре:	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 48 Vac 50/60Hz 25VA or 22 to 65Vdc 12W
Power Consumption:	15VA, max
Transmitter Power Supply:	24Vdc into $400\Omega$ min, 60mA drive for 2-or 4-wire
	mA transmitters

## **Ordering Guide**

#### Relay/Alarms Input Voltage 0 = No Relays0 = 100 to 240 Vac2 = Dual Relays Independent Common 1 = 24 Vac/DC3 = 3 Single Relays Data Logger, Real Time Clock and USB\* 4 = 3 Relays (1 Single, 1 Dual – shared common) 0 = Not Installed2nd Strain Gauge Input/Setpoint w/ 2nd Retransmission 1 = Installed 0 = Not Installed\*Includes USB 1 = InstalledUSB w/USB Memory Stick\* Communications 0 = Not Installed0 = No Comms1 = Installed1 = RS-485 ModBus \*Not required with Data logger 2 = Ethernet ModBus TCP 2nd Strain Gage Retransmission Only 24 V Transmit Power Supply 0 = Not Installed1 = Installed0 = Not Installed 1 =Installed – Use with relay options 0, 2 or 4 only

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

### **Dimensions**



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