Dynisco

From lab to production,
providing a window into the process



Dynisco UPR900 Process Indicator

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



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.

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
- USB port options for access to cofiguration 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:	±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 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:	±0.1% of output span (mA @ <500Ω, V @ >500Ω)
Communications	
Type:	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:** **Low Voltage Version:**	 100 to 240Vac, 50/60Hz switching 20 to 48 Vac 50/60Hz 25VA or 22 to 65Vdc 12W
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-X (Includes Retransmission)

Relay/Alarms
0 = No Relays
2 = Dual Relays Independent Common
3 = 3 Single Relays
4 = 3 Relays (1 Single, 1 Dual – shared common)

2nd Strain Gauge Input/Setpoint w/2nd Retransmission
0 = Not Installed
1 = Installed*

Communications
0 = No Comms
1 = RS-485 ModBus
2 = Ethernet ModBus TCP

24 V Transmit Power Supply
0 = Not Installed
1 = Installed – Use with relay options 0, 2 or 4 only

Input Voltage
0 = 100 to 240Vac
1 = 24Vac/DC

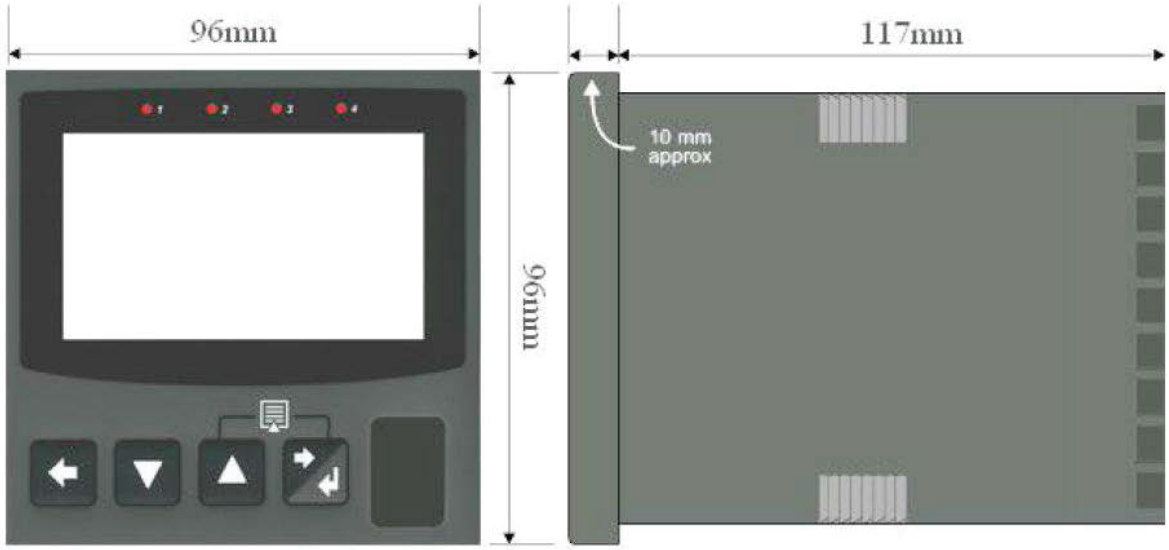
Data Logger, Real Time Clock and USB
0 = Not Installed
1 = Installed**

USB only with USB Memory Stick
0 = Not Installed
1 = Installed**

2nd Strain Gauge Retransmission Only
0 = Not Installed
1 = Installed*

* '2nd Strain Gauge Input / Setpoint w/ 2nd Retransmission' and '2nd strain gauge Retransmission only' cannot be ordered simultaneously
** 'USB only with USB Memory Stick' and 'Data Logger, Real Time Clock, and USB' cannot be ordered simultaneously

Dimensions



All dimensions are in inches (millimeters).
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Refer to www.dynisco.com for access to Operator Manual and other support documentation.
DSUPR900 REV A
ECO 53779

Dynisco

www.dynisco.com

Dynisco
38 Forge Parkway
Franklin, MA 02038
USA
Hotline 1-800-Dynisco
www.dynisco.com
Phone +1 508 541 9400
Fax +1 508 541 6206
Email infoinst@dynisco.com

Dynisco Europe, GmbH
Pfaffemstr. 21
74078 Hellbronn
Germany
Phone +49 7131 297 0
Fax +49 7131 297 166
Email dyniscoeurope@dynisco.com

Dynisco Shanghai
Building 7A, No. 568
Longpan Rd Malu
Jiading, 201801 China
Phone +86 21 34074072-819
Toll Free +86 400 728 9117
Fax +86 21 34074025