PARTLOW™ brand

Data Sheet

Indicators

NEW



1610+™

Affordable, High Contrast, Compact and Easy to Use

1/16 DIN Indicator with Alarm

DESCRIPTION

The Partlow 1610+ is a new digital panel indicator providing a high contrast, high visibility display, designed for optimal ease of use in a wide variety of temperature and related process applications.

The 1610+ is fast, accurate and easy to read with a jumperless configuration, plug in output boards and an improved PC configurator for quick and simple setup. The new generation 1610+ my be specified with either red or green LED displays.

In addition, plug-in modules allow PV retransmission or transmitter power supply and up to 4 alarm relays (latching or non-latching).

The 1610+ indicator is affordable, full featured, easy to use and compact with performance features characteristic of the + Series product line that work for you making temperature and process display simple.

The 1610+ is an easy to use low cost solution for temperature and process display applications - providing excellent visibility and high accuracy all within an affordable and ultra compact housing.

APPLICATIONS:

The Partlow 1610+ digital indicator is an easy-to-use, low cost solution for indication and display within industrial temperature and process measurement applications – providing high visibility and excellent accuracy in a compact size.

INDUSTRIES

- Industrial and lab ovens/furnaces
- Plastics and thermal forming
- Packaging applications
- And any other display of temperature or other process measurement especially where an out-of-range alarm condition is a requirement

FEATURES/BENEFITS

- 10V SSR driver output allows drive of up to 3 typical SSR/SCR inputs
- Plug-in Output Modules for SSR driver, Triac, Relay and linear outputs – easily field changeable
- Common HMI and styling with other Partlow + Series products promoting uniform system appearence and operation
- Latching Alarms - Included as standard.
- PC Configurator with easy to use “wizard” suits both novice and experienced users
- Jumperless configuration with self-recognition of optionboards – promotes simple, error free set-up
- Multi-point Scaling and Tare features included as standard.

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SPECIFICATIONS*

STANDARD FEATURES

- 4 per second input sample rate
- Universal input
- Improved HMI, 3 button operation, 4 digit 11mm high red, green, indicators for 5 alarms
- Plug-in output modules – install just the function needed
- Multipoint scaling & Tare functions
- Jumperless input configuration
- Auto-detection of installed output modules
- Improved PC configuration software
- Process alarms (NEW standard latching alarm)
- Rugged ABS Plastic housing

ENVIRONMENTAL CHARACTERISTICS

Operating Temp: 32° to 131°F (0° to 55°C)
Storage Temp: -4° to 176°F (-20° to 80°C)
Humidity: 20% to 95% non-condensing RH

ELECTRICAL

Supply Voltage: 100-240V, 50/60Hz, Optional 20-48VAC 50/60Hz / 22-65VDC
Power Consumption: 5W / 7.5 VA Maximum

DISPLAY

Type: Red orGreen, 7 segment LED, 4 digit
Height: 10mm (0.39")
Annunciators: LED indicators for output and status

INPUTS

T/C's: J, T, K, L, N, B, R, S, C; Pt Rh20% vs. Pt 40% Rh
RTD: 3-wire, PT100
DC Linear (Scalable –1999 to +9999)
Volts: 0-5V, 1-5V, 0-10V, 2-10V
DC milliamps: 0-20mA or 4-20mA
DC millivolts: 0-50mV, 10-50mV

OUTPUTS

All outputs are user-selectable and customized based on desired application; choose from the following output types
Max # of Outputs: 4 for alarm, 24 VDC transmitter power supply or retransmit of process value
Single Alarm Relay: Optional SPDT; 240VAC 2A resistive; Lifetime >500,000 operations at rated voltage/current
Dual Alarm Relays: Optional, Two x SPST contacts with shared common. 2 Amp resistive at 240V AC, >200,000 operations. Latching or non-latching
SSR Drive: Optional drive capability: >10 VDC nominal into 500 ohm minimum
DC Linear: Optional 0-20mA, 4-20mA into 500 ohm max; 0-10V, 1-5V, 2-10V, 0-5V into 500 ohm min; Outputs have 2% over/under drive applied; Accuracy +-0.25% (mA into 250 ohm load, V into 2k ohm load); degrading linearity to +-0.5% for increasing burden to specified limits
Triac: Optional 0.01 to 1A AC, 20 to 280Vrms, 47-63 Hz (Limit 2)
Transmitter Power Supply: Optional 24 VDC (Limit 1)

OUTPUT FUNCTIONS

Process Alarm: (reverse or direct)
Alarm Modes (Alarm 1 through 5): High/Low, Band, Deviation, logical OR/AND
Retransmit: Process value

ELECTRICAL PERFORMANCE

Accuracy: ± 0.1% of input range ±1 LSD (T/C CJC better than 1 degree C)
Input sample rate: 4 per second, 14 bit resolution
Impedance: >10M ohm for the thermocouple and mV ranges, 47k ohm for V ranges and 5 ohm for mA ranges
Sensor Break Detection: <2 seconds (except zero based DC ranges), high alarms activate for T/C, RTD and mV ranges, low alarms activate for mA or V ranges

COMMUNICATIONS INTERFACE

User-selectable: 2-wire, RS-485 serial communications option with choice of Modbus RTU or West ASCII protocol; 1200 to 19200 baud
PC Configuration: Offline configuration from serial port to dedicated configuration socket (comms option not required)

RATINGS/AGENCY APPROVALS

Conformance: CE, UR, cUR UL File # 67237
Safety: EN61010
EMC: EN61326

PROTECTION

IEC IP66 (NEMA 4X) front panel
IEC IP20 (behind the panel protection)

PHYSICAL DIMENSIONS

Panel Cutout: 1.77" x 1.77" (45mm x 45mm)
Width: 1.89" (48mm)
Height: 1.89" (48mm)
Depth: 4.33" (110mm)
Weight: 0.46 lbs (0.21 kg)
Mounting: Plug in panel with fixing strap

OPTIONS/ACCESSORIES

Digital Input 1: Selects volt-free or TTL input
RS-485 serial communication: speeds and user-selectable (Modbus/RTU or West ASCII) option
Transmitter Power: 24VDC transmitter power supply option
Choice of Led colors: red or Green
Drive output: 10VDC SSR

WARRANTY

3 Years

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Partlow Brand 1610+ Data Sheet (7/05)

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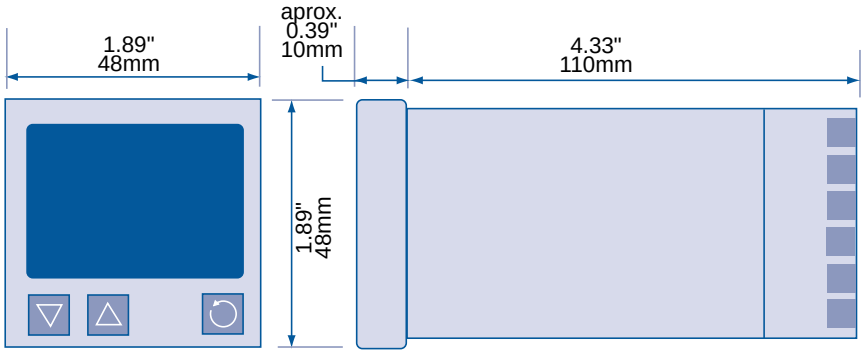
Affordable, High Contrast, Compact and Easy to Use

MODELS

Code 1: Model #	Code 2: Option Slot 1	Code 3: Option Slot 2	Code 4: Option Slot 3	Code 5: Option Slot A	Code 6: Power Supply
P1610	☐	☐	☐	☐	☐ ☐
I/16 DIN Indicator with Alarm Function	**0** Not Fitted **1** Relay **2** DC for SSR **3** Linear **8** Triac*	**0** Not fitted **1** Relay **2** DC Driver for SSR **3** Linear **8** Triac* **9** Dual Relay	**0** Not fitted **1** Relay **2** DC Driver for SSR **3** Linear **4** Transmitter Power Supply **8** Triac*	**0** Not fitted **1** RS-485 Serial Communication **2** Digital Input **3** Green Display **4** RS-485 & Green Display **5** Digital Input & Green Display	**00** 100-240 AC **02** 24-48 AC or DC

* Maximum of two Triac outputs per unit

DIMENSIONS - 1/16 DIN



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Process Automation Worldwide Brands:

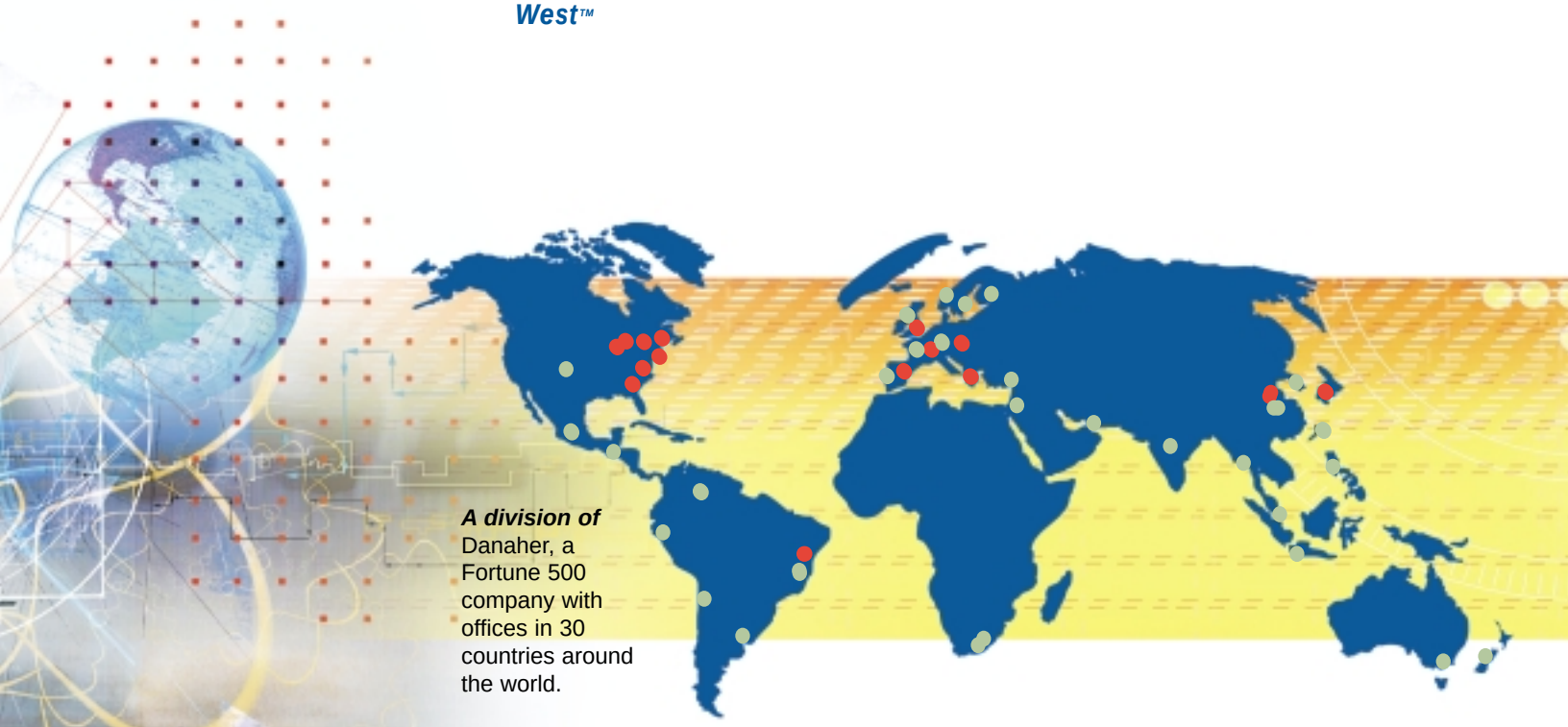
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Rustrak™

West™



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More Reliable. Our experience with more than 25,000 customers has taught us to design controllers that are reliable and durable, with quality standards that meet six sigma requirements.

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