

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+ may 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 appearance 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.

PARTLOW™ brand

1610+™

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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 or Green, 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 $\pm 0.25\%$ (mA into 250 ohm
 load, V into 2k ohm load); degrading linearity
 to $\pm 0.5\%$ 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: $\pm 0.1\%$ 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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 features only unless otherwise noted. Specifications
 subject to change without notice in accordance with
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Partlow Brand 1610+ Data Sheet (7/05)

PARTLOW™ brand

1610+™

Indicators

1/16 DIN Indicator with Alarm

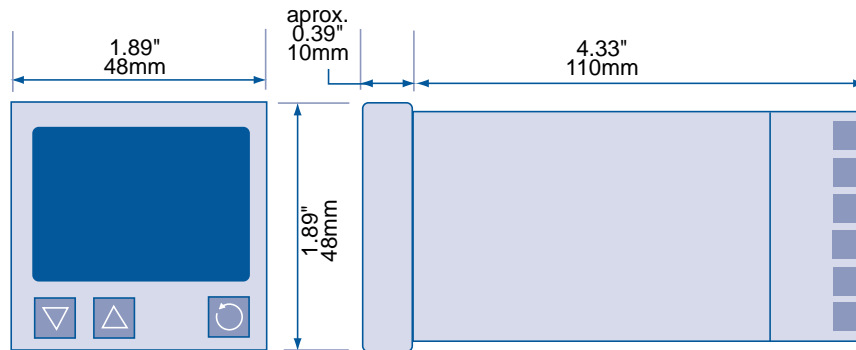
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MODELS

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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
1/16 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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Partlow Brand 1610+ Data Sheet (7/05)

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company with
offices in 30
countries around
the world.

More Available. With factories around the world, global sales and applications support, and an expansive network of distributors, we stay close to our customers - shortening lead times and fostering responsiveness. Three-day lead time is standard, with same-day shipments available on many of our products.

More Selection. We have a broad selection of controllers to meet application requirements in a variety of industries. User-configurable, accurate and flexible, with low, mid, or high level performance ranges, our controller products meet your system and budgetary requirements.

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.

For additional information or a full-line catalog, contact DICG Customer Service or visit our web site.

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