

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.

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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 +/-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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 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)

1/16 DIN Indicator with Alarm

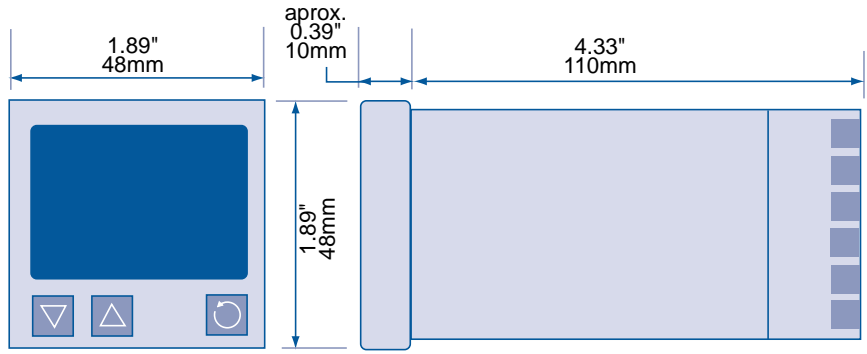
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MODELS

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	☐	☐	☐	☐	☐ ☐
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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