

# Raytek GP Monitor



## Product Description

The GP™ monitor provides a compact, easy-to-use interface and display for process instruments. This low-cost 1/8 DIN digital panel meter comes standard with features which are optional on other panel meters in this price range. The GP monitor accepts inputs from any 0-5V sensor, 4-20mA sensor or thermocouple type J,K,E,N,R,S,T. In addition, the monitor can be used with many Raytek noncontact, infrared temperature sensors.

Along with its large 4-digit LED display, the monitor provides a user-defined 4-20mA or thermocouple output. Two adjustable setpoints/deadbands control 5V alarm outputs or optional 3A mechanical relays. The GP monitor accepts 110-220 VAC power and provides a 24 VDC/50 mA excitation voltage, capable of providing loop power to external sensors.

For signal processing requirements, the monitor provides Peak Hold, Valley Hold, and Averaging and a user adjustable offset. Best of all, there are no internal jumpers used for setup, as all monitor functions are configured via the front panel.

Versatile. Compact. Value-priced. All reasons to standardize on the GP monitor for your process monitoring requirements.

### Highlights:

- Accepts any 0-5 V or 4-20 mA sensor input
- Accepts type J,K,E,N,R,S,T thermocouple inputs
- Compact 1/8 DIN monitor
- Large 4-digit LED display
- Universal 110/220 VAC power
- Provides 24 VDC/50 mA excitation voltage
- User defined 4-20 mA or thermocouple output (J,K,E,N,R,S,T)
- Adjustable dual setpoints and deadband controlling alarm outputs
- Signal processing: Peak Hold, Valley Hold, Averaging
- User adjustable offset
- External reset input

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## Measurement Specifications

Resolution & Accuracy	0-5 V input resolution 1 mV, accuracy @ $\pm 2$ mV 4-20 mA input resolution 0.01 mA, accuracy @ $\pm 0.02$ mA J,K,E,N,T thermocouple input, $\pm 0.05\%$ or $\pm 2^\circ\text{C}$ , whichever is greater R,S thermocouple input, $\pm 0.5\%$ or $\pm 3^\circ\text{C}$ , whichever is greater 4-20 mA output resolution 0.014 mA, accuracy @ $\pm 0.02$ mA J,K,E,N,T thermocouple output, $\pm 0.05\%$ or $\pm 2^\circ\text{C}$ , whichever is greater R,S thermocouple output, $\pm 0.5\%$ or $\pm 4^\circ\text{C}$ , whichever is greater
System Repeatability	$\pm 0.5\%$ of measured value
Response Time (95%)	500 mSec
Warmup Time	5 seconds
Signal Processing	Peak Hold, Valley Hold (up to 998 sec, 999=infinite hold with external reset) Variable averaging filter (up to 60 seconds)

## Electrical Specifications

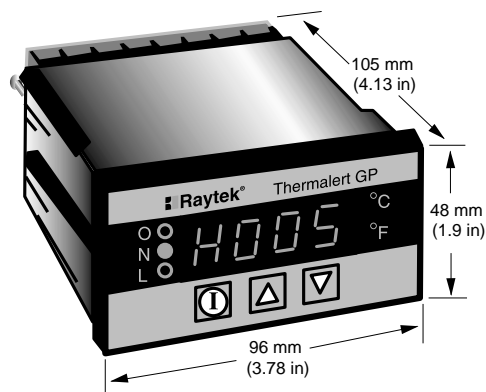
Inputs	User-configurable inputs for 0-5 V or 4-20 mA or J,K,E,N,R,S,T thermocouple External reset input to reset Peak/Valley Hold circuit
Outputs	4-digit, 7-segment LED display, $^\circ\text{C}/^\circ\text{F}$ selectable User-configurable 4-20 mA current or thermocouple output (J,K,E,N,R,S,T) Two adjustable setpoints with deadbands controlling +5 V alarm outputs or optional 3A mechanical relays 24 VDC/50 mA excitation voltage for powering external sensors
Power Supply	110/220 VAC, $\pm 20\%$ , 50-60 Hz

## General Specifications

Environmental Rating	GP Front Panel IP54 (IEC 529); NEMA-12
Ambient Temperature Range:	0 to $50^\circ\text{C}$ (32 to $120^\circ\text{F}$ )
Storage Temperature	$-30$ to $65^\circ\text{C}$ ( $-22$ to $150^\circ\text{F}$ )
GP Monitor Dimensions	1/8 DIN x 120 mm (1.75 x 3.63 x 4.75 in)
GP Monitor Weight	320 g (0.7 lbs)

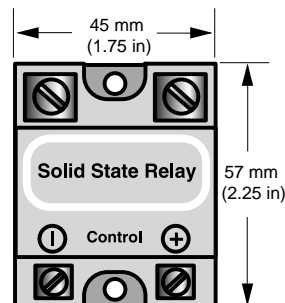
## General Dimensions

Panel cut-out: 92 mm x 44 mm (1.75 in x 3.63 in)



## Accessory—Solid State Relay

External isolated solid state relays for alarm outputs (10 Amp AC)



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