

## Digital Pressure & Temperature Indicator

### Model GT439



- Universal Pressure Indicator** The Gentran GT439 digital pressure/temperature indicator and power supply is designed for use with any four-arm, 350 ohm Wheatstone bridge pressure transducer. Zero and span can be easily adjusted without removing the module, Shunt calibration is a standard feature.
- Universal Temperature Indicator** The GT439 also incorporates a digital temperature display for maximum panel efficiency. The temperature display works with Gentran's combination melt pressure/temperature transducer or any J or K type thermocouple.
- Easy To Read LED Displays** The large 1/3-inch high, 4-1/2 digit pressure and 3 digit temperature LED displays are easy to read. Custom face plates are not required for specific scales because every unit can be set for 12 different ranges. Other markings can be easily added for engineering units.
- Dual Alarm Setpoints** Each alarm can be individually configured for above or below setpoint control and manual or automatic reset. Relays provide N.O. and N.C. (normally open and normally closed) contacts for maximum flexibility. Adjustments are made through pots on the faceplate.
- Versatility** The GT439 provides a choice of recorder outputs, damping constants, transducer sensitivities, input powers, shunt-resistor calibrations and peak-hold options.
- Easy Installation** The easy-to-mount aluminum housing fits a 1/4 DIN cutout. Slide-type metal brackets hold the case firmly in place and can be installed quickly. The electronics assembly can be easily removed for option selection or service.

# Ordering Information

## TYPICAL PART NUMBER

GT439 D P -10 AB 8 -10K -F J

Series GT439 Pressure/ Temperature Indicator	Alarm Setpoints		Peak Hold		Recorder Outputs		Control Sequence		Shunt Calibration		Pressure Range**		Temperature Range		Thermocouple Type		
	None	No Alarm Setpoints	None	No Peak Hold	1	0-1 VDC	None	None	4	Gentran (200 Kohm)	5C	0-500*	F	0-999°F	J	"J" Type	
	D	Dual Alarm Setpoints	P	Peak Hold	2	0-2 VDC	AA	Control I above	7	Gentran (54.9 Kohm)	1K	0-1,000*	C	0-999°C	K	"K" Type	
					5	0-5 VDC		Control II above			1.5K	0-1,500					
					6	4-20 mA	AB	Control I above	8	Gentran (30.1 Kohm)	3K	0-3,000					
					10	0-10 VDC		Control II below			5K	0-5,000					
							BA	Control I below	9	Dynisco (External)	7.5K	0-7,500					
							Control II above				10K	0-10,000					
							BB	Control I below				15K	0-15,000				
							Control II below				20K	0-20,000*					
											350 BAR	0-350 BAR					
											700 BAR	0-700 BAR					
										1400 BAR	0-1400 BAR						
										500 KG	0-500 Kg/cm <sup>2</sup>						
										700 KG	0-700 Kg/cm <sup>2</sup>						

\*\*Other ranges available upon request.  
\*Special range.

- The GT439 digital pressure/temperature indicator is a combination transducer power supply and signal conditioner.
- Housed in a 1/4 DIN case of extruded aluminum that protects against EMI and RFI, the GT439 also provides superior heat dissipation and shock protection.
- A calibration toggle switch allows for quick adjustment of either zero or span.
- Standard features include a choice of recorder outputs and response time, input sensitivity, external or internal shunt calibration, and a manual or automatic alarm reset.
- The unit can be powered by either 120 or 240 VAC.
- The dual alarm setpoints can be used to give a preliminary warning before an actual shutdown sequence is initiated. Setpoints can be programmed in any of the following configurations: HI/HI, HI/LO, LO/HI, LO/LO.

# Specifications: GT439

## Performance Characteristics

### Standard Pressure Ranges:

0-1,500 psig, 0-3,000 psig,  
0-5,000 psig, 0-7,500 psig,  
0-10,000 psig, 0-15,000 psig,  
0-350 BAR, 0-700 BAR, 0-1,400 BAR,  
0-500 Kg/cm<sup>2</sup>, 0-700 Kg/cm<sup>2</sup>

### Special Ranges:

0-500 psig, 0-1,000 psig, 0-20,000 psig  
Other ranges available upon request.

### Accuracy:

±0.1% of full scale or one digit

### Recorder Output:

Accuracy: ±0.1% of full scale  
Repeatability: ±0.1% of full scale  
Linearity: ±0.1% of full scale  
Stability: ±0.1% of full scale

## Physical Characteristics

### Size:

1/4 DIN

### Display Pressure:

4-1/2 digit LED, 0.28 inch height, last digit fixed zero, and selectable decimal point.

### Display Temperature:

3 digit LED, 0.28 inch height

### Operating Temperature:

0-140°F

### Weight:

2.6 lbs.

## Electrical Characteristics

### Power:

106-125 or 200-250 VAC, 50/60 Hz,  
1/8 Amp maximum

### Zero Adjustment:

±35% with panel pot

### Sensitivity Adjustment (Span):

1-2.5 mV/V or 2.5-5.0 mV/V, Switch selectable and fully adjustable.

### Shunt Resistance Calibration:

Gentran 30.1 KOhm standard

### Response Time (Damping):

Selectable at 0.3 or 5.0 seconds

### Recorder Outputs (Pressure Only):

Standard: 0-1 VDC, 0-2 VDC, 0-5 VDC & 0-10 VDC  
Optional: 4-20 mA, Load from 15-600 ohms

### Transducer Power Supply:

8.0 VDC ±5.0%

## Control Characteristics

### Dual Relays:

2 SPDT (Single Pole Double Throw)

### Relay Rating:

8 Amp @ 125/250 VAC  
5 Amp @ 30 VDC

### Set Point Range:

1-100% of full scale

## Control Characteristics (Cont.)

### Accuracy:

±0.3% of full scale

### Hysteresis:

±0.5% of full scale

### Indication:

Front panel LED

### Mode:

Above or below set point

### Reset:

Automatic or manual

### Peak Hold:

Optional

## Temperature Characteristics

### Thermocouple Type:

ISA Type J (Iron Constantan)  
ISA Type K (Chromel-Alumel)

### Range:

0-999°F or °C

### Calibration:

120-999°F or °C

### Accuracy:

±0.5°F or °C

