

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 ² | | | | | | |
| | | | | | | | | | | 700 KG | 0-700 Kg/cm ² | | | | | | |

**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/cm², 0-700 Kg/cm²

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

