

**Digital
Differential
Pressure
Indicator
Model GT437**



- **Differential Pressure Indicator** The Gentran model GT437 digital differential pressure indicator is designed for use with any two four-arm, 350 ohm Wheatstone bridge pressure transducers of the same range. It can also display either upstream or downstream pressure.
- **Easy To Read LED Displays** The large 4½ digit, 1/3 inch high LED display is easy to read, even from a distance. 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. The last digit is a fixed zero.
- **Dual Alarm Setpoints** Two alarms can be selected for above or below setpoint control. Relays provide N.O. (normally open) and N.C. (normally closed) contacts for maximum flexibility. Adjustments are made through pots on the faceplate.
- **Versatility** The GT437 provides a choice of recorder outputs, damping constant, transducer sensitivities, input power, shunt-resistor calibrations, peak-hold, and reset 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 electronic module can be easily removed for option selection or service.

Ordering Information

TYPICAL PART NUMBER

GT437 D -10 AB 8 -10K												
Series GT437 Differential Pressure Indicator	Alarm Setpoints		Other Options		Recorder Outputs		Control Sequence		Shunt Calibration		Pressure Range *	
		None	No Alarm Setpoints	R	Relay Reset Button	0	0-20 mA	None	None	4	Gentran (200 Kohm)	5C
	D	Dual Alarm Setpoints	P	Peak Hold	1	0-1 VDC	AA	Control I above Control II above	7	Gentran (54.9 Kohm)	1K	0-1,000
			V	Valley Hold	2	0-2 VDC	AB	Control I above Control II below	8	Gentran (30.1 Kohm)	3K	0-3,000
					5	0-5 VDC	BA	Control I below Control II above	9	Dynisco (External)	5K	0-5,000
					6	4-20 mA	BB	Control I below Control II below			7.5K	0-7,500
					10	0-10 VDC					10K	0-10,000
											15K	0-15,000

*Other ranges available upon request.

The Gentran model GT437 digital differential pressure indicator is a combination transducer power supply, indicator, and signal conditioner. It is housed in a 1/4 DIN standard-size case of extruded aluminum, which results in superior electrical noise insulation, heat dissipation, and shock protection. The large 4½ digit, 1/3 inch high LED display is easy to read, even from a distance.

The GT437 is designed for use with two Gentran pressure transducers (of the same range) or any two compatible four-arm, 350 ohm Wheatstone bridge strain-gage transducer. The GT437 will display the pressure from either of the two transducers or their differential. A toggle switch calibration circuit allows quick zero and span adjustments for each transducer. Without disassembly, the electronics can be removed from the front for convenient service or option selection. Options on the GT437 include dual setpoints, voltage output signals, current output signals, peak hold function, and valley fold function.

The dual setpoint option can be used to give a preliminary warning before an actual shutdown sequence is initiated. The setpoint relays are wired to operate from the differential signal. The relay operation will function from the differential signal even if the display is in the upstream or downstream display mode, however, the relay function is locked out when the calibration switch is actuated in order to prevent accidental emergency shutdown.

Specifications: GT437

Performance Characteristics

Standard Ranges:

0-500 psig, 0-1,000 psig, 0-1,500 psig,
0-3,000 psig, 0-5,000 psig, 0-7,500 psig,
0-10,000 psig & 0-15,000 psig

Special Ranges:

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 or one digit

Physical Characteristics

Size:

1/4 DIN

Display:

4½ digit LED, 1/3 inch height, last digit
fixed zero and selectable decimal point.

Operating Temperature:

0-140°F

Weight:

2.5 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

Response Time (Damping):

0.3 seconds

Recorder Outputs:

Voltage Outputs: 0-1 VDC, 0-2 VDC,
0-5 VDC & 0-10 VDC
Minimum load 5000 ohms
Current Outputs: 4-20 mA, 0-20 mA
Maximum load 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

Control Characteristics (Cont.)

Set Point Range:

1-100% of full scale

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

Valley Hold:

Optional

