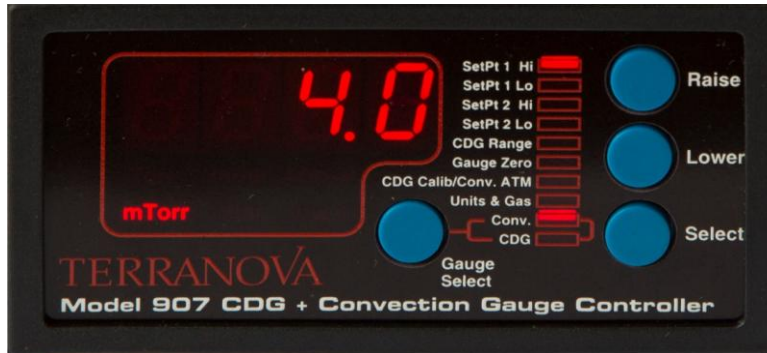




# Terranova<sup>®</sup> Model 907

## Dual - Hybrid Vacuum Gauge Controller

### Diaphragm + Convection Gauges

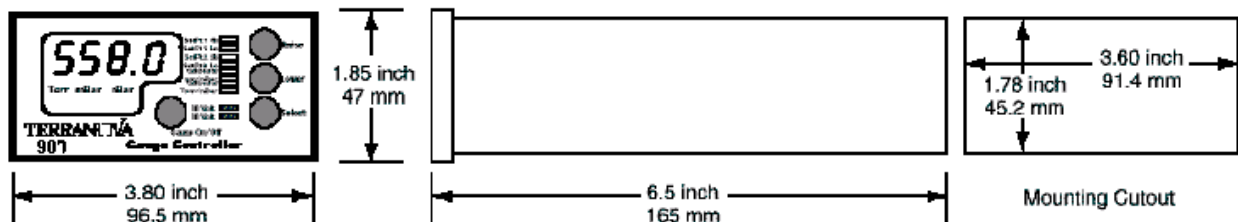


The Terranova Model 907 Dual - Hybrid Vacuum Controller displays vacuum pressure as measured from both a Capacitance Diaphragm gauge (CDG) and a Convection Enhanced Pirani (CEP) gauge. The 907 is housed in a 1/8 DIN enclosure and is simple to operate.

For the CDG, the 907 supplies  $\pm 15$  volts at up to 0.75 amp; this is sufficient to operate most heated capacitance diaphragm gauges. The 907 precisely measures the 0 to 10 volt signal from the CDG to determine pressure, displaying the results in units of Torr/mTorr, mBar/microBar or Pascal/kPascal, user selectable. The Model 907 controller covers full scale CDG ranges from 20 mTorr to 10,000 Torr, user selectable.

For the Convection gauge, the 907 displays vacuum pressure as measured from a Duniway ConvecTech Convection Enhanced Pirani gauge tube or a Granville-Phillips CONVECTRON<sup>®</sup> gauge tube, user selectable. It displays vacuum measurements based on thermal conductivity of air/nitrogen or argon, user selectable. The 907 controller covers the range from 0.1 mTorr to 995 Torr, 0.1  $\mu$ Bar to 995 mBar or 0.01 Pascal to 130 kPascal, userselectable. Major features include:

- low cost
- small 1/8 DIN size
- 0.75 amp output to power heated gauges
- torr/mtorr, mbar/microbar, pascal/kpascal units
- interfaces to diaphragm and convection gauges
- CE/UL listed
- universal power input
- RS-232 input/output
- calibrated logarithmic analog output
- two process control set points with 2 amp relays



**Model 907 (1/8 DIN) External Dimensions**

## Specifications

<b>Useful Measuring Range</b>	<b>CDG:</b> 4 decades; full scale of 20 mTorr to 10,000 Torr; maximum range selection is entered on the front panel by the user. Pressures higher than 130% of sensor full scale displays <b>HI</b> <b>CEP:</b> 0.1 mTorr to 995 Torr for air
<b>Input to the 907 Controller</b>	<b>CDG:</b> 0 to 10 volts for full scale of the gauge <b>CEP:</b> Pressure is calculated from the gauge output using the gauge suppliers algorithm.
<b>Units of Display</b>	<b>CDG and CEP:</b> Torr/mTorr or mBar/microbar or Pascal/kPascal, user selectable
<b>Vacuum Gauges</b>	<b>CDG:</b> One diaphragm manometers which require up to 0.75 amp total from + / -15 volt supplies <b>CEP:</b> One GP Convectron® or equivalent or One HPS/MKS 317 Convection Enhanced Pirani
<b>Pressure Display</b>	4-digit 7-segment bright red LED, 10 mm high
<b>Full Scale Adjust</b>	<b>CDG:</b> 20, 50, 100 mTorr; 1, 2, 10, 20, 100, 1,000, 5,000, 10,000 Torr; user selectable <b>CEP:</b> 995 Torr
<b>Calibration Adjustments</b>	<b>CDG:</b> CALIBRATE: allows user to multiply response by 0.500X to 2.000X; CDG RANGE, ZERO, UNITS <b>CEP:</b> GAUGE ZERO, UNITS, ATM, GAS (Air/Argon)
<b>Process Control Set Points</b>	two, with independent High and Low set points for each relay, for flexible control of hysteresis two relays, 2 amp/240 VAC/30 VDC contacts
<b>Analog Output</b>	Logarithmic, 0.5 volts per decade
<b>Output Power</b>	<b>CDG:</b> +15 and -15 volts, at 0.75 amp total; sufficient to operate temperature-controlled gauges
<b>Serial Input/Output Interface</b>	RS-232 is standard
<b>Operating Voltage</b>	universal input, 100-240 VAC, 47-63 HZ; 30 VA
<b>Operating Temperature Range</b>	36°F to 122°F (+2°C to +50°C)
<b>Weight</b>	1 lb. / 0.5 kg
<b>Size</b>	Standard 1/8 DIN enclosure 3.80 inches (95 mm) wide 1.85 inches (47 mm) high 7.0 inches (175 mm) deep
<b>Mounting</b>	brackets are provided for panel mounting
<b>Compliance Listing</b>	CE/UL marked