

Model 906 Convection Gauge Controller

for use with Granville-Phillips CONVECTRON® gauges
*1/8 DIN Vacuum Gauge Controller
Measures from 0.1 mtorr to 1000 torr*



- *low cost*
- *highest performance available at any price*
- *measures to 0.1 mtorr*
- *1/8 DIN - smallest controller for CONVECTRON® gauges*
- *two process control set points with 2 amp relays*
- *RS-232 input/output*
- *calibrated logarithmic analog output*

The Granville-Phillips CONVECTRON® gauge is the most popular convection-Pirani gauge tube in use. Terranova's Model 906 Gauge Controllers offer significant advances in performance and cost savings over other gauge controllers that are compatible with CONVECTRON® gauges.

Our Model 906 is the most advanced controller for CONVECTRON® gauges available. Through use of highly integrated electronics and sophisticated software algorithms, we were able to reduce the size and cost of the controller, and at the same time dramatically improve performance. The 906 is housed in a 1/8 DIN enclosure — half the size of 1/4 DIN enclosures, the industry norm. This size reduction allows the user greater latitude in system design.

The Model 906 measures to lower pressure than other controllers — to 0.1 mtorr. A precise logarithmic analog output makes data collection easy; other CONVECTRON® gauge controllers have highly non-linear outputs requiring a cumbersome look-up table.

An easy-to-use RS-232 serial port is provided for digital data accumulation; also included are two heavy-duty process-control relays for control of small motors and actuators. All of these are standard features, provided at no additional cost.

The Terranova 906 is the best controller you can get for any CONVECTRON® gauge application — and at a cost that's about the same as a basic analog controller.

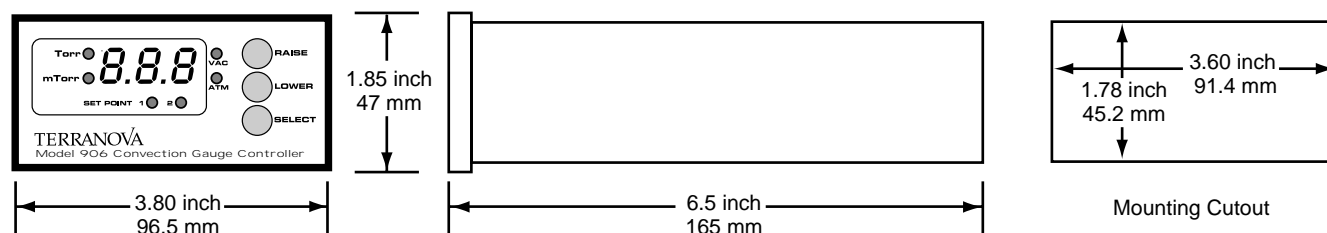
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Specifications

Dimensions – standard 1/8 DIN enclosure



Measuring Range

0.1 mtorr to 995 torr, for air or nitrogen; (10^{-4} torr to 10^3 torr); pressure range selection is automatic

Display Range

-29 mtorr to 995 torr; pressures lower than -29 mtorr display **LD**; pressures higher than 995 torr display **HI**; if cable is not plugged in display shows **OFF**

Accuracy of Gauge Interface

Pressure calculation algorithm is accurate to $\pm 1\%$ of published Granville-Phillips data for the CONVECTRON® gauge (this is for the 906 controller only, and does not include uncertainty of the CONVECTRON® gauge).

Units of Display

torr or mbar; specify at time of ordering

Vacuum Gauge Sensor

uses Granville-Phillips CONVECTRON® gauge; uses standard cable connections

Operating Temperature Range

+2 to +50 deg Celsius

Pressure Display

3-digit bright red LED, 10 mm high

Display Indicators

bright red LED for UNITS, VAC, ATM, SET PT 1, SET PT 2

Display Resolution

varies; from 0.1 mtorr below 10 mtorr, 5 torr above 100 torr

VAC and ATM Adjust

set by front panel pushbuttons

Process Control Set Points

two, set by front panel pushbuttons

Process Control Relays

two relays, contacts rated 2 amp/240 VAC, 30 VDC; +5 volts is provided for TTL applications; D15 accessory connector

Nonvolatile Memory

for VAC, ATM and SET POINTS

Analog Output

calibrated logarithmic, 0.50 volts/decade:
1 mtorr or less = 0 volts; 10 mtorr = 0.50 volts;
100 mtorr = 1.00 volts; 1 torr = 1.50 volts, etc.;
D15 accessory connector

RS-232 Input/Output

9600 baud, 8-N-1; D15 accessory connector; e.g. send "p" (ASCII value 112), pressure is returned; e.g. 54e-3 for 54 mtorr

Operating Voltage

universal input, 85 - 265 VAC, 30 VA; industry standard IEC 320 instrument power input receptacle on rear panel

Weight

1 lb. / 0.5 kg

Mounting

Side clips are provided for panel mounting in standard 1/8 DIN cutout (see above).

Environmental Considerations

not for use with explosive or corrosive gases

Warranty

Terranova products are warranted to be free from defects in material and workmanship for one year from the date of shipment. Warranty details available on request.

Shipping

F.O.B. Auburn, California; other terms quoted on request.

Ordering Information

Model 906 Convection Gauge Controller for Granville-Phillips CONVECTRON® Gauges

Model 906 Gauge Controller; specify:
units of measure: torr or mbar

includes: AC power cable, 7 feet / 2.0 meters
CONVECTRON® gauge cable, 10 feet / 3.0 meters; panel mounting brackets, accessory D15 connector

Specifications subject to change without notice.

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