

# "Big Digit" Vacuum Gauges, Diaphragm and Pirani Style



Super bright red LED displays are 1.8 in. high & readable from more than 100 ft. NEMA-12 (IEC 529) splashproof enclosure is standard.

Choose a Big Digit Vacuum Gauge from these ranges:

- Pirani 1 to 2,000 mTorr ±1 mTorr
- Pirani .01 to 20.00 Torr ±.01 Torr
- Diaphragm 1 to 1500 Torr ±1 Torr
- Diaphragm 30 Inches Hg to 150 PSI Gauge

Indicators have 3 1/2 digit display & optional linear analog output. Controllers have, in addition, 2 adjustable set points with SPDT relays. Relay contacts are unpowered and rated at 3A@115 or 220 VAC, 18 inch pigtail with mating connector is provided. Sensors or gauge tubes can be up to 500 feet from the display without affecting calibration and can tolerate 300 PSI overpressure. The Splashproof enclosure is 9 in. x 4 1/2 in. x 3 in. F to B (229 x 115 x 75 mm), net weight 3.8 lbs (1.7 kg).

## 1 to 1500 Torr or 30 In. Hg to 150 PSI

**Pressure Ranges:** 1 to 1500 Torr; ± 1 Torr (± 0.1 Torr optional), or 30 Inches Hg to 150 PSI Gauge.

**Calibration:** Any gas, liquid or vacuum compatible with sensor materials.

**Accuracy:** 1% of reading or 2 Torr.

**Response Time:** Less than 400 msec. for response to a step change.

**Linearity:** ± 0.15% Full Scale. Sensitivity: ±1 Torr.

**Analog Output (Optional):** 0 to 1.500 V into 2000 Ohm load or higher. 18" Pigtail with mating connector included. 4 to 20 mA and 0 to 10 VDC also available at extra cost.

**Transducer:** See "ordering Information" below.

**Materials:** All parts in contact with process are 316 or 304 SS, or silicon.

**Set Point Range:** Full Scale, 1 to 1500 Torr or 30 Inches Hg to 150 PSI Gauge. Repeatability: ± 2 Torr.

**Sensor Internal Volume:** 1.25 ml for SS; 0.5 ml for Silicon.

**Line Regulation:** ± 20% change in line voltage produces less than 1% change in reading.

**Line Power:** 115 VAC, 50/60 Hz; 230 VAC optional at no additional cost. 65 in. (170 cm) power line cord.

**Wattage:** Less than 1 Watt for indicator; 2 Watt for controller.

**Temperature Effects:** When changes occur in ambient temperature between 0 °C and 50 °C, reading will change no more than ±0.02% per °C.

### Ordering Information

## Pirani Gauge; 1 to 2000 mT

**Pressure Range:** 1 to 2000 milliTorr

**Calibration:** Air or Nitrogen.

**Accuracy:** Better than 5% of value or ± 3 mTorr, whichever is larger.

**Response Time:** 0.3 second time constant.

**Analog Output (Optional):** 0 to 2.000 V into 2000 Ohm load or higher. Pigtail with mating connector included. 4 to 20 mA and 0 to 10 VDC also available at extra cost.

**Gauge Tube:** Standard gauge tubes have a 1/8 NPT male thread or fit into quick connects sized for 1/8 inch pipe (0.405" dia.) NW, VCR and Mini Conflat® available.

**Set Point Range:** Full Scale, 1 to 2000 mTorr; Repeatability: ± 2 mTorr.

**Line Power:** 115 VAC, 50/60 Hz; 230 VAC optional at no additional cost. 65 in. (170 cm) power line cord.

**Line Regulation:** ±20% change in line voltage produces less than 1% change in reading.

**Wattage:** Less than 1 Watt for indicator, 2 Watts for controller.

**Temperature Effects:** Changes in ambient temperature between 0 °C and 50 °C change the reading less than 0.2 mT per °C at 50 mT; less than 4 mT per °C at 900 mT.

### Ordering Information

## Pirani Gauge; .01 to 20 Torr

**Pressure Range:** 0.01 to 20 Torr.

**Calibration:** Air or Nitrogen.

**Accuracy:** Better than 5% of value or ± 0.03 Torr, whichever is larger.

**Response Time:** 0.3 second time constant.

**Analog Output (Optional):** 0 to 2.000 V into 2000 Ohm load or higher. Pigtail with mating connector included. 4 to 20 mA and 0 to 10 VDC also available at extra cost.

**Gauge Tube:** Standard gauge tubes have 1/8 NPT male thread or fit into quick connects sized for 1/8 inch pipe (0.405" dia.) NW, VCR and Mini Conflat® available.

**Set Point Range:** Full Scale, 0.01 to 20 Torr. Repeatability: ±0.02 Torr.

**Line Power:** 115 VAC, 50/60 Hz; 230 VAC optional at no additional cost. 65 in. (170 cm) power line cord.

**Line Regulation:** ± 20% change in line voltage produces less than 1% change in reading.

**Wattage:** Less than 1 Watt for indicator, 2 Watts for controller.

**Temperature Effects:** Changes in ambient temperature between 0 °C and 50 °C change the reading less than 0.01 Torr per °C.

### Ordering Information

**Buy Now! Go to [www.vacuumresearch.com](http://www.vacuumresearch.com) to order online**

**Dual Set Point Controller With Digital Display** in standard NEMA 12 enclosure. Transducer not included. 1 to 1500 Torr P/N: 902019-BD . . . \$900.

**Digital Indicator only** in standard NEMA 12 enclosure. Transducer not included. 1 to 1500 Torr P/N: 902020-BD . . . \$704.

Select a transducer on page 13 with diaphragm material and flange style of your choice.

**Linear Analog Output** complete with 18 inch long pigtail and mating connector, 0 to 1.500 VDC. P/N: 805124 . . . \$43.

**Carry Handle** installed directly to the top of the NEMA 12 enclosure. P/N: V805005 . . . \$17.

**Calibrator** for 1500 T instruments, . . . see page 37.

**Analog Output** 4-20 mA and 0 to 10 VDC. P/N: V801082 . . . add \$220.

**Dual Set Point Controller With Digital Display** standard NEMA 12 enclosure. Gauge tube not included. P/N: 902001-BD . . . \$900.

**Digital Indicator only** in standard NEMA 12 enclosure. Gauge tube not included. P/N: 902002-BD . . . \$704.

Select a gauge tube with your choice of flange style from the list on page 19.

**Linear Analog Output** with 18 inch pigtail & mating connector, 0 to 2.000 VDC. P/N: 805124 . . . \$43.

**Carry Handle** installed directly to the top of the NEMA 12 enclosure. P/N: V805005 . . \$16.

**Calibrator** for 2000 mT instruments, pg 37.

**Analog Output** 4-20 mA and 0 to 10 VDC. P/N: V801082 . . . add \$220.

**Dual Set Point Controller With Digital Display** standard NEMA 12 enclosure. Gauge tube not included. P/N: 902015-BD . . . \$949.

**Digital Indicator only** in standard NEMA 12 enclosure. Gauge tube not included. P/N: 902016-BD . . . \$752.

Select a gauge tube with your choice of flange style from the list on page 20.

**Linear Analog Output** with 18 inch pigtail and mating connector, 0 to 2.000 VDC. P/N: 805124 . . . \$43.

**Carry Handle** installed directly to the top of the NEMA 12 enclosure. P/N: V805005 . \$16.

**Calibrator** for 20 Torr instruments, pg 37.

**Analog Output** 4-20 mA and 0 to 10 VDC. P/N: V801082 . . . add \$220.