

# Advanced Pressure Calibrator

## BetaGauge 321

### NEW! BetaGauge 321 Advance Pressure Calibrator

Introducing the BetaGauge 321 Dual Sensor Pressure Calibrator

The BetaGauge 321 Dual Sensor Pressure Calibrator provides unmatched pressure measurement flexibility over any competitive unit. The BetaGauge 321 supports up to three simultaneous measurements in any combination, including three pressure measurements, 4-20 mA loop (with 24 loop power supplied), RTD, and DC volts.

Five often-used setups can be stored, with instant recall, as well as automatic last setup recall on power-up. Wide range temperature compensation preserves a best-in-class  $\pm 0.025\%$  FS accuracy.

The BetaGauge 321 is available in convenient kit form, with configurations for your most often-used applications.

#### Features:

- Two isolated, stainless steel, pressure sensors with 0.025% F.S. accuracy
- Temperature-compensation ensures accuracy in field applications
- PT100 RTD input for temperature measurement, accurate to 0.1°C (0.2°F)
- Measure 4-20 mA input
- Internal 24 V Loop Power Supply can power a transmitter under test
- Measure up to 30 V DC
- Large graphic style LCD with backlight
- User's choice of engineering units configurable independently for each channel: PSI, inH<sub>2</sub>O (4°C, 20°C, 60°F), cmH<sub>2</sub>O, Bar, mBar, kPa, Mpa, inHg, mmHg, kg/cm<sup>2</sup>



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### More features:

- External pressure module connection supports all BETA Port-P pressure modules for even more measurement capability
- Display can be configured to display up to 3 inputs simultaneously (i.e. pressure 1, pressure 2, and RTD or any combination of inputs)
- Ideal for gas flow calibration (custody transfer) applications
- Switch test on Pressure 1, Pressure 2, or external pressure module
- Operating mode layers support simple measurements to complex applications
- Up to 5 frequently used setups may be stored; the last setup is recalled on power-up
- % Error and damping functions
- Rugged compact design operates on 4 standard AA batteries, ~35 hours continuous life

### Specifications:

#### Ranges:

- Available Pressure (select any two): 5 psi, 15, psi, 30, psi, 100 psi, 300 psi, 500 psi, 1000 psi, 3000 psi, 5000 psi, 10,000 psi
- mA: 0 to 24.000 mA\*
- Volts: 0 to 30.000 VDC\*
- RTD: -40°C to 105°C (-40°F to 220°F)\*  
\*measure only

#### Accuracy:

- Pressure:  $\pm 0.025\%$  F.S. for all ranges 15 to 3000 psi,  $\pm 0.035\%$  F.S. for 5 psi, 5000 psi, 10,000 psi
- mA:  $\pm 0.015\%$  of reading  $\pm 0.002$  mA
- Volts:  $\pm 0.015\%$  of reading  $\pm 0.002$  V
- RTD (ohms):  $\pm 0.015\%$  of reading  $\pm 0.02$  ohms or  $\pm 0.1^\circ\text{C}$  @  $0^\circ\text{C}$  for PT100 RTD,  $\alpha = .385$
- Ambient Temperature Effect:  
No effect on accuracy on all functions from  $15^\circ\text{C}$  to  $35^\circ\text{C}$  Add  $\pm 0.002\%$  F.S./ $^\circ\text{C}$  for temps outside of  $15^\circ\text{C}$  to  $35^\circ\text{C}$

