

BetaGauge 321/311

Dual sensor
Triple display
Pressure calibrator



BETAGAUGE 311



BETAGAUGE 321

The new standard of custody transfer applications

Whichever you choose, the single sensor **BetaGauge 311**, or the dual sensor **BetaGauge 321**, you'll have everything you need for calibrating pressure anywhere.

Gas custody transfer is the ideal application for the accuracy and capabilities of the BetaGauge 321.

Select from two standard configurations: 15 psi/1500 psi, or 30 psi/3000 psi, or create custom configuration by selecting between any two ranges. The BetaGauge 311 can be configured by selecting from any range from 0.3, 1, 5, 15, 30, 50, 100, 150, 300, 500, 1000, 1500, 3000, 5000, or 10000 psi.

Both are supplied with:

- Soft case
- AA batteries
- Manual
- Traceable certificate
- Test leads.

Both are available in kits including:

- The Pressure Calibrator
- Pt100 RTD Probe
- AA batteries
- Manual
- Traceable certificate
- Test leads
- Hard-sided carrying case.

General Features

- Two isolated, stainless steel, pressure sensors with 0.025% F.S. accuracy (one on 311)
- 27 available pressure ranges
- Temperature-compensation ensures accuracy in the field applications
- External pressure module connection supports all BETA Port-P pressure modules (29 ranges) for even more measurement capability
- Pt100 RTD input for temperature measurement, accurate 0.1°C
- Measure 4-20 mA input
- Internal 24 V Loop Power Supply can power a transmitter under test
- Measure up to 30VDC
- Large graphic style LCD with backlight 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
- Pressure displayed in the user's choice of 19 engineering units
- Switch test on Pressure 1, Pressure 2, or external pressure module
- Operating mode layers support simple measurements to complex applications
- Up to five frequently used setups can be stored; last setup automatically recalled on power-up
- % Error and damping functions
- Small, rugged compact design operates on four (4) standard AA batteries
- Can be supplied with a UKAS calibration certificate from our laboratory

BetaGauge 321/311

www.chamois.net

Specifications (18°C to 29°C, unless otherwise noted)

| RANGES | | |
|------------------------------|---|--|
| Pressure | PSIG: | 0.3*, 1*, 5, 15, 30, 50, 100, 150, 300, 500, 1000, 1500, 3000, 5000, 10000, -15 to 15*, -15 to 30* |
| | PSIA: | 15, 30, 100, 150, 300 |
| | PSI Differential: | 1*, 5*, 30*, 50*, 100* |
| mA | | 0 to 24.000 mA |
| Volts | | 0 to 30.000 VDC |
| RTD | | -40 °C to 105 °C |
| Engineering Units | | psi, bar, mbar, kPa, kgcm2, cmH2O@4°C, cmH2O@20°C, mH2O@4°C, mH2O@20°C, inH2O@4°C, inH2O@20°C, inH2O@60°F, mmHg@0°C, inHg@0°C, ftH2O@4°C, ftH2O@20°C, ftH2O@60°F |
| ACCURACY | | |
| Pressure | 0.3 psi | ±0.1% FS |
| | 1.0 psi | ±0.05% FS |
| | 15 to 3000 psi | ±0.025% FS |
| | 5000, 10000 psi | ±0.035% FS |
| mA | | ±0.015% of reading ±0.002 mA |
| Volts | | ±0.015% of reading ±0.002 V |
| RTD Input Range (Pt 100-385) | | -40 °C to 105 °C |
| Temperature Effect | | No effect on accuracy on all functions from 15 °C to 35 °C Add ±0.002% F.S./°C for temperatures outside 15 °C to 35 °C |
| GENERAL | | |
| Instrument Setup Recall | 5: Last used on power-up | |
| Environmental | | |
| Operating Temperature | -10 °C to +50 °C | |
| Storage Temperature | -20 °C to +60 °C | |
| Power Requirements | 6.0 VDC | |
| Battery | Four (4) standard AA cells | |
| Battery Life | >35hours, typical usage | |
| Physical | | |
| Dimensions | 21.1 H x 10.0 W x 4.6 D cm | |
| Weight | 0.567kg | |
| Connectors/Ports | Pressure | BetaPort-P pressure module |
| | RTD | |
| Included Accessories | soft case, batteries, manual, traceable certificate, and test leads | |



BETAGAUGE 321



BETAGAUGE 311



BPPA-100

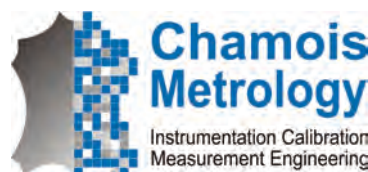
Ordering information

| ORDER NO. | Description and Range |
|---|--|
| PSI Ranges: | 0.3*, 1*, 5, 15, 30, 50, 100, 150, 300, 500, 1000, 1500, 3000, 5000, 10000, -15 to 15*, -15 to 30* |
| PSIA: | 15, 30, 100, 150, 300 |
| Differential: | 1*, 5*, 30*, 50*, 100* |
| <i>Isolated stainless steel pressure ports except those noted with an (*) above</i> | |
| BG311-C | BetaGauge311, range in "C" psi |
| BG311-CK | BetaGauge311 Kit, range in "C" psi |
| BG321-15 | BetaGauge321, 15/1500 psi ranges |
| BG321-30 | BetaGauge321, 30/3000 psi ranges |
| BG321-C/D | BetaGauge321, custom C psi/D psi internal pressure ranges |
| BG321-15K | BetaGauge321 Kit, 15/1500 psi ranges |
| BG321-30K | BetaGauge321 Kit, 30/3000 psi ranges |
| BG321-C/DK | BetaGauge321 Kit, with custom C psi/D psi ranges |
| LTP-100 | Pt100 RTD Probe Assembly |
| BPPA-100 | BetaPort-P Pressure Module Adapter |



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All instruments can be supplied with a UKAS accredited calibration certificate from our laboratory.



Chamois Metrology Limited

Unit 8 The Centre, Holywell Business Park, Northfield Road, Southam, Warwickshire CV47 0FP
Tel +44 (0)1926 812066 Fax +44 (0)1926 813569 e: info@chamois.net www.chamois.net