

- Simulates 600 calibrated levels from -299 to +299 mmHg.
- Accurate within 0.5% of setting ± 0.5 mmHg.
- Cables are available to connect the Transducer Simulator to most pressure monitors, amplifiers, and recording systems.
- Certificate of Conformance traceable to NIST is available.



The BP-600 Pressure Transducer Simulator provides the capability to accurately select 600 stable pressure levels from -299 to +299 in increments of 1 mmHg, and is used to trouble shoot and test the performance of pressure monitors. When substituted for a pressure transducer and a manometer, it provides stable and accurate levels for setup and calibration of the monitor. It can be used to quickly determine whether measurement problems are caused by the transducer or the monitor.

The stability of the BP-600 is significantly better than techniques that produce an electrical output by using a transducer to measure the pressure of a fixed volume of air. Under these conditions, the pressure applied to the transducer is also affected by temperature as defined by the Ideal Gas Law. The BP-600 is designed to minimize thermal instability and thus provides an output that is more stable than pressure transducer systems in common use.

Simulated pressure levels appropriate for every range of most monitors can be quickly and accurately selected. Whether the monitor is used for arterial, venous, right heart, pulmonary, cranial, urological, uterine or esophageal pressures, the BP-600 provides stable values for testing, performance verification, and demonstration.

The BP-600 contains a precision, thermally stable, bridge that simulates the electrical characteristics of pressure transducers used with patient monitors and provides 600 pressure levels from -299 to +299 mmHg. The range and resolution of the BP-600 makes it particularly useful for checking pressure alarm settings and

trend displays. Testing alarms is simplified because a simulated pressure can be selected that is equal to or within 1 mmHg of any alarm setting. Pressure trend displays can be verified for minimum and maximum values as well as intermediate points with a resolution of 1 mmHg.

Fogg System Company provides Cables for connecting the BP-600 to over 500 models of pressure monitors, amplifiers, and recording systems.

Technical Information

- Bridge Resistance:** 350 Ω , $\pm 2\%$.
- Excitation Voltage:** Up to 12 Volts, ac or dc, supplied by pressure monitor.
- Operating Temperature range:** 10 to 50°C.
- Output Sensitivity factor:** 5 $\mu\text{V}/\text{V}/\text{mmHg}$.
- Polarity:** ZERO, POS (+) and NEG(-), switch selectable.
- Simulated Pressures:** 600 levels from -299 to +299 in increments of 1 mmHg.
- Simulated Pressure Accuracy:** $\pm 0.5\%$ of setting ± 0.5 mmHg, at 25°C.
- Output Offset at ZERO:** Less than ± 0.5 mmHg, or ± 2.5 $\mu\text{V}/\text{V}$.
- Thermal Sensitivity Shift:** Less than ± 0.1 mmHg/°F.
- Thermal ZERO Shift:** Less than ± 0.05 mmHg/°F.
- Output Connector:** MS3102A-14S-6P (Mates with MS3106A-14S-6S).
- Power Requirements:** Excitation for Transducer Simulator is supplied by pressure monitor.
- Size:** 3.6"W x 5.75"H x 1.8"D, including knob.
- Weight:** 8 Ounces net (0.22Kg), 1.5 pound shipping (0.68Kg).

ORDERING INFORMATION

A test system consists of the BP-600 Pressure Transducer Simulator and a Cable that connects it to the Pressure measuring instrument. Each Simulator is supplied with a User Manual that includes Schematics and Parts Lists. A Certificate of Conformance traceable to NIST is available.