

# GE Sensing

## Features

- Accuracy 0.075% standard
- Integral pressure/vacuum generation
- Standard ranges up to 300 psig (20 barg)
- Five digit LCD display, multiple scales
- Dual pressure and electrical readout
- Transmitter supply and measurement

The cost effective DPI 603, which extends the GE range of rugged portable battery powered pressure calibrators, has standard ranges of -15 psig to 15 psi, 30 psi, 150 psi or 300 psi (-1 to 1 barg, 2 bar, 10 bar or 20 bar) with an accuracy of 0.075%.

Designed for use in remote locations where AC power is not available, the DPI 603 enables pressure instrumentation to be serviced and calibrated.

The instrument features the capability to generate test pressures with an integral hand pump up to 300 psig (20 barg). A volume adjuster provides fine control of the desired test value and a venting valve enables pressure release without disconnection of the device under test.

An optional pressure/vacuum switching facility can also be provided, that enables the handpump to source vacuum down to -25 inHg (-850 mbar).

To facilitate pressure transmitter testing and calibration, an energizing voltage of 24 VDC is provided and the ability to monitor the loop current over the range 0 to 55 mA DC.

For loop verification, the DPI 603 can also output a single 12 mA test value, or provide a passive sink if required.

The clear LCD display allows readout of pressure, voltage and current parameters with the ability to show current or voltage simultaneously with pressure.

# DPI 603

## Druck Portable Pressure Calibrator

DPI 603 is a Druck product. Druck has joined other GE high-technology sensing businesses under a new name—GE Industrial, Sensing.



# DPI 603 Specifications

## Pressure Measurement

### Operating Pressure Ranges

Standard full scale ranges can be specified of -15 psi to 15 psi, 30 psi, 150 psi or 300 psi (-1 bar to 1 bar, 2 bar, 10 bar or 20 bar).

### Over Pressure

4 x full scale (FS) causing negligible calibration change to a maximum of 360 psig (25 barg).

### Pressure Media

Compatible with most common gases

### Accuracy

Combined non-linearity, hysteresis and repeatability  
0.075% FS  $\pm 1$  digit.

### Temperature Effects

Over 32°F to 104°F (0°C to 40°C), the averaged span temperature coefficient will not exceed 0.007% of reading/°F (0.0125% of reading/°C).

## Digital Indicator

### Readout and Display

99999 capability, 0.53 in (13.6 mm) LCD digits with additional 16 text characters.

### Pressure Scale Units

24 scale units plus special

### Display Overload

120% FS nominal

### Resolution

0.005% FS maximum

### Response

Three readings per second

### Zero Control

Pressure and electrical. Protected against accidental use.

### Calibration

Front panel key pad calibration

### Position effect

Negligible

## Electrical

### Electrical Inputs Voltage Measurement Range

Range  $\pm 50$  V

### Accuracy

0.15% of reading  $\pm 0.02\%$  FS

### Temperature Coefficient

0.006% reading/°F (0.01% reading/°C)

### Electrical Inputs Current Measurement Range

$\pm 55$  mA

### Accuracy

0.075% of reading  $\pm 0.005\%$  FS

### Temperature Coefficient

0.006% reading/°F (0.01% reading/°C)

## Electrical Outputs

### Voltage Output

24 V nominal, floating, 25 mA maximum

### Current Output

Loop check, fixed 12 mA nominal, source or sink

## Power Supply

Battery powered 4 X 1.5 V alkaline 'D' cells, 150 hours nominal continuous operation, with no load on output terminals. Battery low condition indicated by display symbol.

*Optional rechargeable batteries and external power adaptor/charger unit available.*

# DPI 603 Specifications

## Environmental

### Temperature

- Operating: 14°F to 122°F (-10°C to 50°C)
- Calibrated: 32°F to 104°F (0°C to 40°C)
- Storage: -4°F to 140°F (-20°C to 60°C)

### Sealing

Sealed to IP65

### Safety

- Electrical and mechanical safety EN61010
- EMC Emissions EN50081-1
- EMC Immunity EN50082-1
- CE Marked

## Physical

### Weight

8.8 lb (4 kg) nominal

### Dimensions

12.6 in to 7.7 in to 4.9 in  
(320 mm to 195 mm to 125 mm)

### Pressure Connection

1/8 in NPT female or G 1/8 female

## Options

### (A) Pressure/Vacuum Capability

A switch facility enables the integral hand pump to generate pressure in the down stroke to a maximum of 300 psig (20 barg), or vacuum on the reverse stroke to -25 inHg (-850 mbarg).

### (B) Rechargeable Batteries

Ni-Cad rechargeable cells can be supplied complete with an external charger unit.

### (B1) UK 240 VAC plug version

### (B2) USA 110 VAC plug version

### (B3) European 220 VAC plug version

### (B4) 110 VAC cable version

## Accessories

Carrying case, electrical test probes, calibration certificate and user handbook supplied with instrument.

## Ordering Information

Please state the following (where applicable):

- (1) Type number
- (2) Pressure range
- (3) Pressure connection
- (4) Options
- (5) Pressure media

## Related Products

GE manufactures a comprehensive range of pressure indicators, controllers, calibrators, transducers and transmitters. The range of portable calibrators also covers temperature and electrical parameters. Please refer to manufacturer for further information and data sheets.

## Calibration Standards

Instruments manufactured by GE are calibrated against precision pressure calibration equipment that is traceable to International Standards.

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