

GE Sensing

Features

- Accuracy: ± 0.004 inHg (± 0.15 mbar) absolute
- Ranges to 103 inHg (3.5 bar) absolute
- Six digit resolution LCD display
- Multiple pressure scales and aeronautical units
- Alkaline or rechargeable batteries
- Lightweight hand-held rugged design
- RS232 output

The DPI 740 is a portable battery powered precision barometer, providing outstanding capabilities in a hand held package. The fundamental sensor technology employed within this instrument is the Druck resonant pressure transducer (RPT). This vibrating element sensor not only provides accuracies of ± 0.004 inHg (± 0.15 mbar) but equally important has a calibration stability of better than 100 ppm per year. The DPI 740 is widely used in laboratory and remote field applications for precision pressure reference.

DPI 740

Druck Portable Precision Barometer

DPI 740 is a Druck product. Druck has joined other GE high-technology sensing businesses under a new name—GE Industrial, Sensing.



DPI 740 Specifications

Pressure Measurement

Operating Ranges

- 22 to 34 inHg (750 to 1150 mbar) absolute
- 1 to 38 inHg (35 to 1300 mbar) absolute
- 1 to 77 inHg (35 to 2600 mbar) absolute
- 1 to 103 inHg (35 to 3500 mbar) absolute

Maximum Safe Working Pressure

118 inHg (4000 mbar) absolute

Pressure Media

- Compatible with non-corrosive gases
- Insensitive to media density

Readout and Display

999999 capability LCD digits 0.54 in (13.6 mm) high with additional 16 text characters.

Display Overload

Instrument capable of nominal 110% full scale (FS) for each range. Above this, error code will flash.

Resolution

0.0003 inHg (0.01 mbar)

Response

2 readings per second nominal on digital display

Operating Modes

- A) Local pressure (QFE)
- B) Sea level pressure (QFF) from user set height
- C) Altitude above user set datum

Process Features

Maximum/Minimum, tare and programmable filter available in all operating modes.

Pressure Units

24 pressure units plus altitude in feet (ft) or meters (m)

Performance

Accuracy

±0.02% FS

For all pressure ranges includes:

Combined non-linearity, hysteresis, repeatability, and temperature effects over 15°F to 120°F (-10°C to 50°C).

Optional enhanced barometric accuracy available (see Option A).

Stability

Better than 100 ppm per annum.

Temperature Range

- Operating: 15°F to 120°F (-10°C to 50°C)
- Storage: -40°F to 160°F (-40°C to 70°C)

Safety

- Electrical and mechanical safety: EN61010
- EMC emissions: EN50081-1
- EMC immunity: EN50082-1
- Certification: CE Marked

Position Effect

- Negligible

Power Supply

Three each 1.5 V alkaline AA batteries for 20 hours nominal continuous operation. Programmable power down prolongs battery life. Battery low indicated by display symbol. Optional rechargeable NiCad batteries and external power adapter/charger unit available (see Option B).

Communication Interface

- RS232 via six-way LEMO socket (see Option C)

Physical

Pressure Connection

Accepts 1/4 in OD / 5/32 in ID tubing (6 mm OD / 4 mm ID)

Weight

1.1 lb (0.5 kg) nominal

DPI 740 Specifications

Dimensions

7.5 in x 3.5 in x 1.4 in (190 mm x 90 mm x 36 mm)
nominal

Options

- (A) **Enhanced Barometric Accuracy Version**
An improved accuracy to ± 0.004 inHg (± 0.15 mbar) can be provided over 50°F to 86°F (10°C to 30°C).
- (B) **Rechargeable Batteries**
NiMh batteries and external universal recharger unit can be supplied to replace the standard alkaline batteries.
- (C) **Adapter Lead**
For RS232 output, an adapter lead connecting six-pin LEMO to standard nine-way D type socket is available.
- (D) **Rigid Transit Case**
For storage of instrument, accessories and options.

Supplied As Standard

Handbook, calibration certificate and fabric carrying case supplied.

Calibration Standards

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

Related Products

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

Ordering Information

Please state the following:
(1) Type number DPI 740
(2) Pressure range
(3) Options