

Features

- Ranges up to 50 psia (3.5 bar)
- Precision 0.01% full scale (FS)
- Long term stability 0.01% FS/yr
- Altitude display in feet and meters
- Programmable analog output (optional)
- RS232 and IEEE-488 communications

The DPI 142 is a high-accuracy barometric indicator with digital communications suitable for integration into any data logging or integrated information system. It provides highly accurate readings using the resonant pressure sensor to better than 0.01% FS over 50°F to 104°F (10°C to 40°C), with excellent long term stability. It can be used as a transfer calibration standard in laboratories or as a company reference standard.

The DPI 142 features easy-to-use software menus accessed via the front panel push buttons. The instrument also includes functional screens to measure barometric pressure, display a barograph (one, two or five day trend), read altitude (feet/meters) and leak test pressure or altitude.

Digital communications allow easy data transfer of instrument readings and the analog output option enables the user to set a selectable output to be proportional to readings of pressure or altitude.

DPI 142

Druck Precision Barometric Indicator

DPI 142 is a Druck product. Druck has joined other GE high-technology sensing businesses under a new name—GE Industrial, Sensing.



DPI 142 Specifications

General

Standard Pressure Ranges

- 10.9 to 16.7 psia (750 to 1150 mbar), barometric only
- 0.5 to 19 psia (35 to 1310 mbar)
- 0.5 to 38 psia (35 to 2620 mbar)
- 0.5 to 50 psia (35 to 3500 mbar)

Over Range

1.1 x FS pressure range

Maximum Working Pressure

58 psia (4000 mbar)

Pressure Media

Non-corrosive dry gases only

Display

Panel

High contrast, back-lit LCD.

Readout

±9999999 maximum, updated two times per second

Pressure Units

24 units plus two user-defined and altitude in feet (ft) or meters (m)

Languages

English, Chinese, French, German, Italian, Japanese, Portuguese, Spanish

Process Features

Hold, Maximum/minimum value, Tare and programmable filter

Performance

Precision

Precision 0.01% FS includes non-linearity, hysteresis, repeatability and temperature effects over 50°F to 104°F (10°C to 40°C).

Measurement Stability

Better than 100 ppm (0.01% FS) per year

Electrical

Communications

- RS232 serial interface supplied as standard
- IEEE-488 optional
- SCPI protocol
- DPI 141 emulation mode

Power Supply

11 V to 26 VAC or VDC, 10 VA, via 0.083 in (2.1 mm) jack, supplied with AC/DC power adaptor 90 to 264 VAC, 45 to 65 Hz.

Environmental

Temperature

- Operating: 41°F to 122°F (5°C to 50°C)
- Calibrated: 73.4°F (23°C)
- Storage: -4°F to 140°F (-20°C to 60°C)

Humidity

Compliant with Def Stan. 66-31 8.6 Cat. 3

Vibration

Compliant with Def Stan. 66-31 8.4 Cat. 3

Shock

Mechanical shock conforms to EN61010

Conformity

- Electrical and mechanical safety: EN61010
- EMC Emission: EN61326-1
- EMC Immunity: EN61326-1
- Certification: CE marked

DPI 142 Specifications

Physical

Weight

2.2 lb (1 Kg) nominal

Dimensions (w x d x h)

7.3 in x 7.7 in x 3 in (185 mm x 195 mm x 75 mm)

Pressure Connection

1/8 NPT female or G 1/8 BSP female

Options

(A) Analog Output

0 to 10V, 0 to 5V, -5V to 5V, 0/4 to 20 mA outputs selectable. Accuracy 0.05% FS, update rate 2 readings per second. Programmable between minimum and FS pressure for proportional output against pressure.

(B) IEEE-488 Digital Communications

Full computer control is available via a databus using the SCPI protocol. IEEE parallel D connector is provided on the rear panel.

(C) Panel Mounting Kit

Two-sided plates and front panel cutout enable easy mounting to racks and panels.

Supplied as Standard

User handbook, calibration certificate and AC/DC power adaptor

Calibration Standards

Instruments are calibrated against precision pressure calibration equipment, which is traceable to International Standards.

Related Products

We manufacture a wide range of pressure sensors, indicators, calibrators, controllers, Air Data Test Systems and deadweight testers. The range of portable calibrators also covers temperature and electrical parameters.

Please refer to gesensing.com for further information.

Ordering Information

Please state the following:

- (1) DPI 142
- (2) Pressure range, absolute
- (3) Options required