



GE Druck

DPI 142

Precision Barometric Indicator

- Ranges up to 3.5 bar absolute
- Precision 0.01% FS
- Long term stability 0.01% FS/annum
- Altimetry display in feet and metres
- Programmable analogue output
- RS232 and IEEE 488



DPI 142

Precision Barometric Indicator

The Druck DPI 142 is a high accuracy barometric indicator with digital communications suitable for integration into any datalogging or integrated information system. It provides accurate readings using the Druck resonant pressure sensor to 0.01% FS over 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 barometric pressure indicator has easy to drive software menus via the front panel push buttons. The instrument includes functional screens to measure barometric pressure, display a barograph (1 day, 2 day or 5 day trend), read altitude in feet or metres and leak test pressure or altitude.

Digital communications allows easy data transfer of instrument readings while the analogue output option enables the user to set a selectable output to be proportional to readings of pressure or altitude.

STANDARD SPECIFICATIONS

Standard Pressure Ranges

750 - 1150mbar absolute (barometric only)
35 - 1310mbar absolute
35 - 2620mbar absolute
35 - 3500mbar absolute

Over Range

1.1 x FS pressure range.

Maximum Working Pressure

4000mbar absolute.

Pressure Media

Non-corrosive dry gases only.

DISPLAY

Panel

High contrast, back-lit LCD.

Readout

±9999999 maximum, updated 2 times per second.

Pressure Units

24 units plus two user-defined and altitude in feet (ft) or metres (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 10° to 40°C.

Measurement Stability

Better than 100 ppm (0.01% FS) per annum.

ELECTRICAL

Communications

RS232 serial interface standard (SCPI Protocol).

Power supply

11V to 26V ac or dc, 10VA, via 2.1mm Jack, supplied with ac/dc power adaptor 90 to 264 Vac, 45 to 65Hz.

ENVIRONMENTAL

Temperature

Operating: 5° to 50°C
Calibrated: 23°C
Storage: -20° 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.

PHYSICAL

Weight

1kg nominal.

Dimensions

185mm (wide) x 195mm (depth) x 75mm (high)

Pressure Connection

G $\frac{1}{8}$ BSP or $\frac{1}{8}$ NPT female

OPTIONS

(A) Analogue Output

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

(B) IEEE 488 digital communications

Full computer control is available via a databus using the SCPI protocol. IEEEparallel 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

Handbook, calibration certificate and ac/dc power adaptor.

CALIBRATION STANDARDS

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

RELATED PRODUCTS

Druck 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 Druck for further information and datasheets.

ORDERING INFORMATION

Please state the following:-

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

Continuing development sometimes necessitates specification changes without notice.