



**GE Druck**

## **DPI 800/802**

### Pressure Indicator/Loop Calibrator

The **DPI 800** Series is a complete range of advanced, robust and simple to use hand-held instruments. Highly cost effective, these tools are ideal for test/calibration of many popular process parameters. Advanced features and technical innovations address more applications in less time and deliver results you can rely on.

- Ranges from 70 mbar to 200 bar
- Single or dual range configuration
- Pressure test and maintenance
- Transmitter calibration
- Loop set-up and diagnostics
- Switch verification

*IDOS pressure sensors provide 0.05% FS all-inclusive accuracy*

*mA measure, switch test and 24V loop power*

*Large backlit display, menu driven interface*

*HART® loop resistor*

*Robust and weatherproof*

*Compact, simple to use, easy to carry*

*Convenient, one-handed operation*

*Secure grip, impact resistant, elastomer protected*



*Plug/play connector for IDOS Universal Measurement Modules*

# DPI 800/802

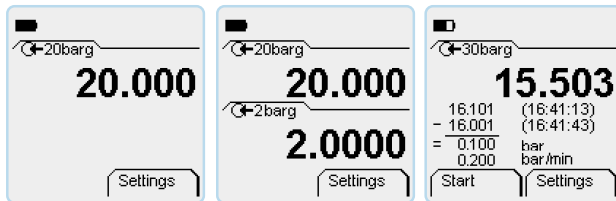
## Pressure Indicator/Loop Calibrator

Features	Pressure		Temperature				
	DPI 800	DPI 802	RTD		T/C		
			DPI 811	DPI 812	DPI 820	DPI 821	DPI 822
Indicator (measure)	✓	✓					
Calibrator (measure or source)			✓	✓	✓	✓	✓
Thermometer (dual input and differential)				✓	✓	✓	✓
mA measure with 24V loop power		✓		✓			✓
Switch test				✓			✓
HART® resistor		✓		✓			✓
IDOS Universal Measurement Modules	①✓	①✓	①✓	①✓	①✓	①✓	①✓
Programmable step and ramp output			✓	✓	✓	✓	✓
Hold, Max/Min/Avg, Filter, Alarm, Tare	✓	✓	✓	✓	✓	✓	✓
25 pressure units plus 5 user, Leaktest	✓	✓	②✓	②✓	②✓	②✓	②✓
1000 point data memory, RS 232						✓	
<b>Applications</b>							
Measurement & monitoring	✓	✓	✓	✓	✓	✓	✓
Indicator, controller & recorder testing	✓	✓	✓	✓	✓	✓	✓
Transmitter maintenance and calibration		✓		✓			✓
Process loop set-up and maintenance		✓		✓			✓
Switch, trip and safety system testing		✓		✓			✓

① Optional please refer to IDOS datasheet. ② With IDOS pressure module connected.

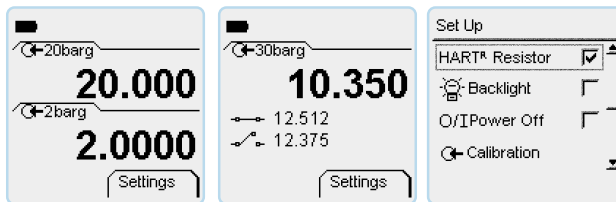
### Pressure test and measurement

**DPI 800 Pressure Indicator** is the ideal pressure measurement tool. **Pressure ranges from 70 mbar to 200 bar** including vacuum options. **All-inclusive accuracy** can be relied on from one year to the next, even in tough environmental conditions (see common specifications below). **Dual sensor configuration** for extended measurement range and simultaneous two channel reading. **Stainless steel sensor construction** is available for compatibility with a wide range of fluids and gases. **Programmable leak test** reports the pressure drop and leak rate. **Advanced features** such as Hold, Maximum/Minimum/Average, Alarm and Tare facilitate troubleshooting.



### Pressure instrumentation and loop maintenance

**DPI 802 Pressure Loop Calibrator** additionally provides simultaneous pressure and mA measurement for transmitter and loop maintenance. **24V loop power supply** energises transmitters and control loops. **Automatic switch test** captures open/closed trip values providing a fast and highly accurate "safety system" check. **HART® resistor** can be switched into the loop when required for a HART® digital communicator.



### IDOS flexibility

**IDOS** (Intelligent Digital Output Sensor) Universal Pressure Modules are available from 70 mbar to 200 bar.

**Total flexibility** means IDOS modules can be used with any compatible instrument, for example, a DPI 812 RTD loop calibrator can become a fully featured pressure calibrator.

**Plug and Play** modules are interchangeable between instruments requiring no set-up or instrument calibration.

**Range expansion** is simply achieved by adding modules. Please refer to IDOS Universal Pressure Module datasheet.

### DPI 800 and 802 specification

Pressure Range	G/D	G	A	Media + -	Over-pressure	*Accuracy %FS	
						S	P
+/(70, 200, 350, 750) mbar	✓			② ③	2 x FS	0.075	0.03
350 mbar			✓	②	2 x FS	0.1	N/A
-1 to (1 or 2) bar		✓		② ③	2 x FS	0.05	0.01
2 bar			✓	②	2 x FS	0.075	N/A
-1 to (3.5, 7, 10 or 20 bar)		✓		①	2 x FS	0.05	0.01
7, 20 bar			✓	①	2 x FS	0.075	N/A
35, 70, 100, 135, 200 bar		✓		①	2 x FS	0.05	0.01

G=Gauge, A=Absolute, G/D=gauge/differential (calibrated referenced to atmosphere max line pressure 2 bar). ①Stainless steel compatibility ②Non-corrosive gas/fluid. ③Non-corrosive gas. (N/A=Not available). Accuracy assumes regular zero correction.

**\*Standard Accuracy:** Total accuracy 0 to 50°C and 1 year stability.

Ranges 20 bar and below include negative calibration

**\*Premier Accuracy:** Accuracy 18 to 28°C. Stability 0.01% rdg/year.

**Single or dual range:** One or two internal sensors can be selected. For dual range instruments, G/D ranges will be configured as G (gauge).

Only one of the two sensors can be 100 bar or above.

Ranges 350mbar and below are not available.

**Pressure connections:** G 1/8 female or 1/8 NPT female

### DPI 802 only

**mA measure:** 0 to 55 mA 0.02% rdg + 3 counts.

Includes 1 yr stability. Outside 10 to 30°C add 0.002%FS/°C.

**24V loop power:** +/-10% (35 mA maximum).

**Switch detection:** Open and closed. 2 mA whetting current.

**HART® resistor:** Menu selectable 250 ohm resistor

### DPI 800 series common specification

**Operating temperature:** -10 to 50°C.

**Humidity:** 0 to 90% non-condensing (Def Stan 66-31, 8.6 cat III).

**Ingress protection:** IP 54 dust and splashing water.

**Shock and vibration:** Def Stan 66-31, 8.18 and 8.4 cat III.

**EMC:** EN61326-1 :1997 + A1 :1998 + A2: 2001

**Safety:** Electrical EN61010:2001. Pressure directive, class SEP. CE marked

**Display:** Graphic 48 X 48 mm LCD with backlight. 99999 resolution.

**Size and weight:** 180 x 85 x 50 mm, 500g.

**Batteries:** 3 x AA alkaline. > 50 hrs measure. > 10 hrs 24V source.

### Accessories

**IO800A: Carry case:** Soft fabric case with accessory pocket.

**IO800B: Belt clip, wrist strap/hanging loop and bench stand.**

**IO800C: NiMh batteries with charger:** Batteries charged externally.

### Ordering information

Please state the model number DPI 800 or 802 for standard accuracy and 800P or 802P for high accuracy, pressure range(s) G, A or G/D, G1/8 female or 1/8 NPT female and accessories as separate items.

Note: Each unit is supplied with batteries, calibration certificate and user guide. The DPI 802 and 802P include a set of electrical test leads.

### Related products

GE Druck is a world leader in the design and manufacture of pressure, temperature and electrical field calibrators, laboratory/workshop calibration equipment and pressure sensors.

Continuing development can mean specification changes without notice