



GE Druck

DPI 811/812

RTD Calibrator/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.

- Measure and source RTDs
- 2, 3 and 4 wire auto detection
- Temperature test and maintenance
- Transmitter calibration
- Loop set-up and diagnostics
- Switch verification

Automatic detection of 2, 3 and 4 wire RTDs highlights faulty probes

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 811/812

RTD Calibrator/Loop Calibrator

Features	Pressure		Temperature			
	DPI 800	DPI 802	RTD		T/C	
			DPI 811	DPI 812	DPI 820	DPI 821
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✓
Programmable step and ramp output			✓	✓	✓	✓
Hold, Max/Min/Avg, Filter, Alarm, Tare	✓	✓	✓	✓	✓	✓
25 pressure units plus 5 user, Leaktest	✓	✓	②✓	②✓	②✓	②✓
1000 point data memory, RS 232					✓	
Applications						
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.

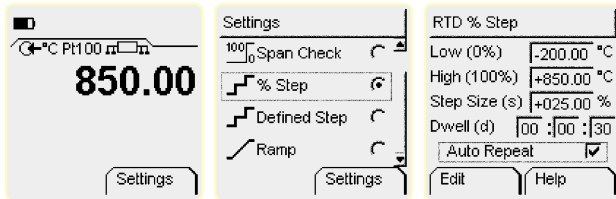
Temperature test and measurement

DPI 811 RTD Calibrator measures or simulates RTD sensors and is the ideal tool for checking probes, indicators, recorders and controllers.

Automatic detection of 2, 3 and 4 wires quickly detects faulty sensors and wiring.

Pulsed RTD transmitter compatibility, in simulation mode.

Advanced features such as Step, Ramp, Max/Min/Avg, and Hold facilitate troubleshooting and system checks.

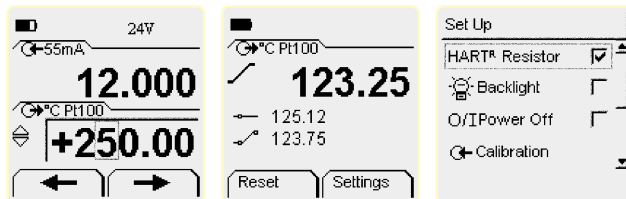


Temperature instrumentation and loop maintenance

DPI 812 RTD Loop Calibrator additionally provides simultaneous RTD output and mA measurement for transmitter/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.

Please refer to IDOS Universal Pressure Module datasheet.

DPI 811 and 812 specification

Measure & simulate	Standard	Range	*Accuracy
Pt 50 (385)	IEC 751	-200 to 850°C	0.5°C
Pt 100 (385)	IEC 751	-200 to 850°C	0.25°C
Pt 200 (385)	IEC 751	-200 to 850°C	0.6°C
Pt 500 (385)	IEC 751	-200 to 850°C	0.4°C
Pt 1000 (385)	IEC 751	-200 to 400°C	0.2°C
D 100 (392)	JIS 1604-1989	-200 to 650°C	0.25°C
Ni 100	DIN 43760	-60 to 250°C	0.2°C
Ni 120	MINCO 7-120	-80 to 260°C	0.2°C
Ohms		0 to 4000	0.1 to 1.3Ω

***Accuracy:** Total accuracy for 1 year. Outside 10 to 30°C add 0.005%FS/°C.

Excitation: 0.2 to 0.5 mA measure, 0.05 to 3 mA simulate

Pulse excitation currents: Minimum duration 10ms.

DPI 812 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. 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. > 70 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 model number DPI 811 or 812 and accessories as separate items. Note: Each unit is supplied with batteries, calibration certificate, user guide and 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