## **GE Measurement & Control**

## **DPI 612 Flex Series**



## Range Flexible Pressure Calibrators

[29-Jun-2016]



imagination at work

## Takes the "Druck" to the next level in Pressure Calibration and Measurement

The DPI 612 Flex Series builds on the success of the DPI 600 Series by providing all of the tools for pressure generation and signal measurement in a self-contained portable package

- The complete pressure calibration tool: pump, measure & analyse
- Best in class pressure accuracy
- Interchangeable pressure modules for simple field re-ranging
- Fast & dependable pressure generation from 95% vacuum to 1000 bar/15000 psi
- Easy-to-use touch screen
- No in-the-field leaks with quick-to-fit pressure adaptors & hoses





## Rugged, Easy-to-Use & Highly Accurate

#### **GE Branding**

 Druck Portable Calibrators – DPI 611, DPI 612 Flex Series, DPI 620 Genii series. One family with Druck DNA

#### Technology

- High accuracy interchangeable pressure modules
- High accuracy electrical measurement and sourcing
- High efficiency pressure generation

#### **User Interface**

- High resolution colour touch screen
- Easier-to-use flatter menu structure
- Intuitive navigation, use swipes and gestures
- Help application with manual down download and wiring diagrams

#### Design

- Ergonomically designed to convey precision, quality, easy-to-use features.
- Backwards and forwards compatible with all PM 620 pressure modules and accessories including hoses, adaptors, dirt traps and pressure limiting protection valves.





#### **DPI 612 Flex features**

- 3 Models available to generate from 95% vacuum to 1000 bar/15000 psi
- Complete pressure calibration kits
- Pressure generation to 100 bar/1500 psi without gas bottles and regulators and 1000 bar/15000 psi hydraulic pressure
- One touch selection of common tasks
- Measures and sources mA, mV and volts
- 31 Interchangeable pressure modules from 25 mbar/10 in H20 to 1000 bar/15000 psi
- Precision from 0.005% FS
- Calculates PASS/FAIL errors, documents results and interfaces with calibration software
- Documenting and data logging
- Step and ramp mA output
- Quick-to-fit pressure adaptors/hose system requires no tools or sealing for leak free pressure connections
- 24V loop power





#### **DPI 612 Flex accessories**

- Batteries and chargers
- Dirt moisture traps
- Pressure release valves
- Pneumatic hose kits
- Hydraulic hose kits
- BSP, NPT and Metric adaptor sets
- Comparator adaptor
- IDOS remote sensor adaptor
- Spares screen protector, stylus, test leads, shoulder strap





#### What makes the DPI 612 a "Druck"

- The DPI 612 integrates high accuracy pressure measurement, reliable pressure generation, signal measurement and power supplies
- With all this in a rugged enclosure, it's all you need to maintain and calibrate pressure instrumentation
- The GE Pressure business is the centre of excellence for the design and manufacture of high accuracy pressure sensors, measurement and digital electronics, ergonomic enclosures and precision mechanical pressure systems
- We have total control over design, development and manufacturing and we are a UKAS accredited facility. Quality and performance is guaranteed





#### What makes the DPI 612 better than a DPI 610?

- Interchangeable pressure modules for pressure range flexibility
- Generate 0 to 20 bar / 300 psi in less than 30 seconds
- Generate 100 bar / 1500 psi without gas bottles
- Generate 1000 bar / 15000 psi hydraulic pressure
- Pressure measurement is twice as accurate
- Three times better electrical accuracy
- DUT and pressure module overpressure protection
- Quick-to-fit and tool-less pressure connection system
- Simplified touch screen interface with application DASHBOARD, quick TASK selection and FAVOURITES storage
- Fast, three touch set-up for any application
- Calculates PASS/FAIL errors, documents results and interfaces with Calibration Software





#### DPI 612 pneumatic pressure generation

The DPI 612 pFlex and DPI 612pFlex are more efficient and easier to use than the DPI 610/615 PC

- Both generate 95% vacuum
- Both generate 20 bar / 300 psi with greater ease
- The DPI 612 pFlex generates 20 bar / 300 psi in less than 30 seconds
- With the DPI 612 pFlexPro it's even quicker and easier by virtue of it's pressure intensifier
- The DPI 612 pFlexPro has a unique recharge system allowing pressure up to 100 bar / 1500 psi to be generated



DPI 612 pFlex Hand pump 20 bar / 300 psi < 30 seconds



DPI 612 pFlexPro Intensifier Even quicker and easier



## **DPI 612 hydraulic pressure generation**

The DPI 612 hFlexPro is more convenient and easier to use than the DPI 610 / 615 HC

- Internal fluid reservoir and priming pump simplify setup
- The highly efficient screw press generates pressure to 1000 bar
  / 15000 psi exceeding the DPI 610's capability by 600 bar / 8700 psi
- Improved fine adjustment for greater set point accuracy
- Improved thermal dissipation reduces settling time
- The DPI 612 hFlexPro has a unique recharge system allowing pressure to be generated into larger system volumes





#### **DPI 612 pressure measurement**



Using advanced "Druck" silicon technology from the flagship DPI 620 Genii series, the PM 620 interchangeable pressure modules achieve up to 0.005% FS precision.

Taking stability and temperature errors into account over the one year calibration period, the DPI 612 Flex is more than twice as accurate as the DPI 610 series

- + 31 ranges from 25 mbar / 10 inH $_{\rm 2}{\rm 0}$  to 1000 bar / 15000 psi
- Pressure modules are fully interchangeable without tools, wires or seals
- Reduces cost of ownership shared resources, simple upgrade and expansion, less downtime for calibration and repairs

#### DPI 612 Quick-to-fit pressure adaptor system Significantly reduces set-up time



Making a leak-tight pressure connection in the field is inevitably frustrating. The DPI 611 comes with a quick-to-fit adaptor system

- No tools or sealing required and connections are leak free
- Damaged adaptors are very simply replaced and there's no repair downtime
- The DPI 611 system is proven to significantly reduce set-up time







# DPI 612 Electrical capability – three times better accuracy



The DPI 611 retains the comprehensive electrical

measurement and sourcing capability of the DPI 610 series

	$P_1$	P <sub>2</sub> IDOS	mA	V	mV	10Vdc	24V	Switch
Measure	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$
Source	$\checkmark$		$\checkmark$			$\checkmark$	$\checkmark$	

• Three times better accuracy

Simplified electrical connections



## DPI 612 With simplified touch screen -As easy as 1, 2, 3





The DPI 612 uses the same interface design as the unique and award winning DPI 620 Genii

- The DASHBOARD allows quick application selection
- The TASK menu provides a library of popular configurations
- A FAVOURITES menu for even quicker access to regularly used and customised TASKS
- · The touch screen is quicker and simpler to use than complex keypads with special function keys
- Application connection diagrams can be viewed on screen Setting up for a job

1) Swipe from right to left

👁 🍋 Current

55.0000

20.0

Pressure

2) Touch to make a selection

3) Touch to select the TASK



CALIBRATOR Crease mA Cressure ൙ m A . 🛄 l C Pressure GVO 24V Pressure (ComA C Pr 

## DPI 612 With full documenting capability



The DPI 612 is a simple to use "everyday" tool for maintaining and calibrating pressure instruments. It also has the advanced features of the DPI 620 Genii for automating calibration procedures, calculating errors and interfacing with calibration and maintenance systems.

- Automated calibration procedures
- PASS/FAIL error analysis
- Multi-channel data logging
- Connectivity with leading calibration and maintenance software including Intecal v10 and 4Sight from GE



# DPI 612 With calibration and maintenance software

4Sight is the new state-of-the-art, integrated, webbased Software as a Service (SaaS) calibration manager. It can be scaled for multiple simultaneous users across multiple sites

- Maintains compliance with industry standards
- Provides a full-time and date stamped audit trail
- Significantly reduces your operating costs
- Provides automated paperless solutions
- Ensures that you are always ready for an audit
- Optional web hosting means no IT overhead



- Software
- Mobile Solutions
- Workshop Solutions
- Global services



# DPI 612 With calibration and maintenance software

Intecal 10 is a simple to use single PC application for managing the calibration cycles and historical data of process instrumentation. It works with Druck portable calibrators and workshop instruments to automate the calibration process

- User accounts and access levels
- Asset database
- Automated scheduling
- Defined procedures
- Supports portable field and fixed workshop calibrators
- Data analysis, certificate generation, archiving
- Extensive connectivity including the DPI 611, DPI 612, DPI 620 and PACE series of instruments



#### **Calibration Software**

Complete Calibration System for Portables and Real Time Laboratory Automated Calibration





#### **Benefits**

These fully self-contained pressure test & calibration systems have interchangeable pressure modules for flexible ranging, generate pneumatic or hydraulic pressures, measure process signals & supply loop power. They provide all the convenience of the Druck DPI 610/615 series with significantly improved generation capabilities, higher accuracy & simplified touch screen operation.

(ge)

- High Accuracy: Total uncertainty to 0.025% FS, 2x Better than many other brands
- Convenience: Hand held, fully integrated pressure calibration & maintenance tool
- Three models available: DPI 612 pFlex, DPI 612 pFlexPro & DPI 612 hFlexPro
- **Cost saving 1:** Interchangeable pressure modules less inventory. A single unit can cover a multitude of pressure applications.
- Cost saving 2: 20 bar/300 psi in 30 seconds, automated procedures, documenting and analysis saves time per test
- Cost saving 3: Field replacement pressure adaptors reduce service downtime and cost
- Time saving 1: Intuitive swipe touch screen simplifies training & is easy to use
- Time saving 2: Quick-to-fit pressure adaptors and hoses save time connecting to devices
- **Reliability:** Tough, weatherproof & reliable to avoid downtime & service costs
- Connectivity: Link to calibration software, gather data at shop floor, transfer to ERP

## **Precision Engineering**

#### Performance is a function of precision engineering

The innovative design of the DPI 612 Flex series pressure systems achieves efficient generation and precise control through the use of carefully selected materials with high tolerance machining and perfect finishes.

The choice of case materials and precision moulding ensures that DPI 612 Flex are rugged and weatherproof.

State-of-the-art analogue and digital microelectronics contribute both accuracy and processing power to provide a class leading pressure and electrical capability with unique pressure re-ranging and simple-to-use interface.









Imagination at work