









DPI620G

Genii Advanced Modular Calibration System

Combines an advanced multi-function calibrator and HART/Foundation Fieldbus communicator with world-class pressure measurement and generation. ATEX, IECEx and ETL approved intrinsically safe versions are available for use in hazardous areas.



A flexible modular system

The Druck Advanced Modular Calibration System comprises of four system components to provide the multi-functionality to perform duties formerly requiring a wide range of different instruments. These system components are:

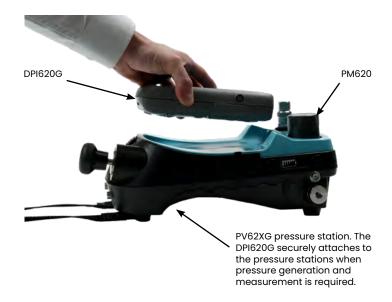
- DPI620G Multi-function or electrical calibrator, HART/ Fieldbus communicator
- PM620/PM620T Interchangeable pressure modules
- · MC620G Pressure module carrier
- PV62XG Pressure generating base stations (including PV624 portable hybrid pressure controller base station)

Or for hazardous area:

- DPI620G-IS Intrinsically safe multi-function calibrator, HART/Fieldbus communicator
- PM620-IS Intrinsically safe interchangeable pressure modules
- MC620-IS Intrinsically safe pressure module carrier
- PV62X-IS Intrinsically safe pressure generating base stations

Features

- Multi-function capabilities: electrical, frequency, temperature and pressure
- Optional HART and Foundation Fieldbus communicators
- · ATEX, IECEx and ETL approved for hazardous area use
- · Modular re-rangeable and expandable concept
- Individual components can be used as stand-alone instruments
- · Allows significant inventory reductions
- · Simplifies training and improves operator safety
- · Reduces cost of ownership
- Provided with one free 4Sight2 Lite calibration software license
- *Bluetooth connectivity for wireless communication



Re-rangeable pressure measurement and generation from 25 mbar (10 in $_{\rm H,O}$) to 1,000 bar (15,000 psi)



DPI 620 Genii advanced modular calibrator and HART/Foundation Fieldbus communicator

This ultra-compact basic electrical or electrical with frequency and temperature calibrator with full HART communicator and optional Foundation Fieldbus communicator provides simultaneous measurement and source capabilities for the setup, testing and calibration of most types of process instruments including transmitters, transducers, gauges/indicators, switches, proximity detectors, counters, RTDs, thermocouples and valve positioners.

Features

- · Multiple models to satisfy budget & application requirements
- High resolution touch display and UI (user interface) supporting gestures and swipes for a flatter menu structure and greater ease of use.
- HART and Foundation Fieldbus digital communication with complete device description libraries, internal modems and free of charge upgrades.
- ATEX and IECEx approved system for use in zone 1 and 2 classified hazardous areas.
- ETL approved for use in class I zone 1 hazardous locations.
- UI DASHBOARD to quickly launch applications such as CALIBRATOR, HART and Foundation Fieldbus.
- TASK menu allows single touch configuration for common devices such as pressure and temperature transmitters, transducers, switches, and valve positioners. Most used and user configured tasks can be added to FAVOURITES.
- Physical or *Bluetooth® wireless connection to a PV624 hybrid pressure controller base station.

Dashboard applications

Calibrator

- One touch selection of common tasks, e.g., P to I for a pressure transmitter.
- Highest accuracy for measuring, sourcing and simulating electrical, frequency, temperature and pressure (model dependant).
- Simulate device inputs and measure outputs simultaneously.
- Calculates errors between inputs/outputs.
- Pressure system generates 100 bar/1,500 psi pneumatic and 1,000 bar/15,000 psi hydraulic pressures.
- Interchangeable pressure modules from 25 mbar/10 in $\rm H_2O$ to 1,000 bar/15,000 psi.

HART communicator - optional

- Measure and source analogue variables without secondary calibration equipment.
- No power during shutdown? Genii provides loop power 24 V or 28 V (Genii-IS series 15V).
- Need a 250 ohm resistor? Just select from the menu.
- It's easy to upgrade Genii with free of charge software and latest DD library.
- · View, change, clone and store device configurations.

- · Work off-line to create and change configurations.
- · Transfer device configurations to your PC.

Foundation Fieldbus communicator - optional

- Fully featured fieldbus communicator for device configuration and calibration.
- · Complete device description library.
- It's easy to upgrade Genii with free of charge software and latest DD library.

Documenting

• Data log up to six channels simultaneously.

Calibration Procedures

Test procedures can be created and stored using the autonomous "Calibration Wizard". A single test procedure template can be run on multiple assets with live pass/fail error analysis and results for each asset saved individually in the internal storage of the DPI620G that can be locally viewed or transferred to a PC to support traceability.

With the test results exported to a PC, the data can be sorted or Druck provides a Calibration Certificate template for pressure to electrical device calibrations which transforms the results into a formatted professional-look certificate ready for printing or filing.

Compatable with Calibration Management Software

4Sight2 is the new state-of-the-art, integrated, web-based calibration manager software

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

4Sight2 calibration and maintenance software gives you total control for all your calibration and maintenance tasks.

- · Software
- · Mobile solutions
- · Workshop solutions
- Global service

4Sight2 calibration management software will help you comply with regulations, reduce running costs and improve process efficiency. As your calibration manager, its automated workflow, robust data and complete traceability will significantly reduce calibration and maintenance costs.

Please visit druck.com/4sight2 for more information.

One free 4Sight2 Lite license is provided free of charge with each DPI620 Genii Hand-held Pressure Calibrator.

Technical specifications

DPI620G general specifi	cation for safe area use
Processor and memory	800 MHz processor
	512 MB 800 MHz SDRAM
	4 GB internal flash memory
	8 GB removable microSD card - provided as standard (accepts cards up to 32 GB)
Display	Size: 110 mm (4.3 in) diagonal; 480 x 800 pixels
	LCD: Color display with touch-screen
	Protected by 2 mm toughened glass, impact tested in accordance with BS EN 61010-1:2010 (0.5 kg object from 1 m)
Languages	English {Default}, Chinese, French, German, Italian, Portuguese, Russian, Spanish, Dutch, Japanese
Operating temperature	-10° to 50°C (14° to 122°F)
Storage temperature	-20° to 70°C (-4° to 158°F)
Ingress protection	IP55
Humidity	0 to 90% RH non condensing
Shock/vibration	BS EN 61010-1:2010; MIL-PRF-28800F for Class II equipment, 1 m drop tested
EMC	Electromagnetic compatibility: BS EN 61326-1:2006
Electrical safety	Electrical – BS EN 61010-1: 2010
Pressure safety	Pressure equipment directive - Class: Sound Engineering Practice (SEP)
Approved	CE and UKCA Marked
Size (L: W: H)	183 x 114 x 42 mm (7.2 x 4.5 x 1.7 in)
Weight	575 g (1.3 lb) - battery included
Power supply	Lithium-polymer battery (Druck part number: IO620-Battery); Capacity: 4600 mAh (minimum), 4800 mAh (typical); Nominal voltage: 3.7 V. Charge temperature: 0° to 45°C (32° to 113°F) Discharge temperature: -10° to 50°C (14° to 122°F). Note: For best battery performance, keep the temperature less than 60°C (140°F). Charge/discharge cycles: > 500 > 70% capacity
Duration	Measure functions (CH1): ≈ 12 hours continuous. Dual function, mA measure (CH2): ≈ 7 hours (24 V Source at 12 mA)
Connectivity	USB Type A, USB Type Mini B, Bluetooth® (B1 model)

Intrinsically safe DPI6200	G-IS general specifications for hazardous area use
Processor and memory	800 MHz Processor
	512 MB 800 MHz SDRAM
	8 GB internal flash memory
Display	Size: 110 mm (4.3 in) diagonal; 480 x 800 pixels
	LCD: Color display with touch-screen
	Protected by 2 mm toughened glass, impact tested in accordance with BS EN 61010-1:2010 (0.5kg object from 1 m)
Languages	English {Default}, Chinese, French, German, Italian, Portuguese, Russian, Spanish, Dutch, Japanese
Operating temperature	−10° to 50°C (14° to 122°F)
Storage temperature	-20° to 70°C (-4° to 158°F)
Ingress protection	IP54
Humidity	0 to 90% RH Non condensing
Shock/vibration	BS EN 61010-1:2010; MIL-PRF-28800F for Class II equipment, 1 m drop tested
EMC	Electromagnetic compatibility: BS EN 61326-1:2006
Electrical safety	Electrical - BS EN 61010-1: 2010
Pressure safety	Pressure equipment directive - Class: Sound Engineering Practice (SEP)
Approval	CE and UKCA Marked
	ATEX and IECEx intrinsically safe: (Ex) 2G Ex ib C T4 Gb (-10°C ≤ Ta ≤ +50°C)
	ETL intrinsically safe (US and Canada): Class I, Zone 1, AEx/Ex ib IIC T4 Gb (−10°C ≤ Ta ≤ +50°C)
Size (L: W: H)	183 x 114 x 55 mm (7.2 x 4.5 x 2.2 in)
Weight	1.1 kg (2.4 lb) – battery included
Power supply	Lithium-ion battery (Druck part number: IO620G-IS-BATTERY); Capacity: 4000 mAh. Nominal voltage: 3.65 V. Charge temperature: 0° to 45°C (32° to 113°F) Discharge temperature: -10° to 50°C (14° to 12°F). Charge/discharge cycles: > 500 > 70% capacity.
	Safe area charging only using external charger IO620G-IS-CHARGER and universal mains adaptor IO620-PSU. The battery is detached from the instrument using two thumb screws and mounted on the charger.
	The battery can be taken into a hazardous area without being connected to an instrument and can be attached and detached in the hazardous area. The battery has an LED indicator to show the charge state of the battery without having to turn the instrument on or when it is not attached to an instrument
Duration	Measure functions (CHI): ≈ 7 hours continuous. Dual function, mA measure (CH2): ≈ 5 hours (Loop enabled at 12 mA)
Connectivity	USB Type Mini B (client)

Electrical med	surement and source									
		NLH&R ¹ ±1°C (2°F) for 24		Total uncertainty 10° to 30°C (50° t (note 3)	o 86°F) for 1 year	Additional error -10° to 10°C (14° to 50°F) 30° to 50°C (86° to 122°F)		Resolution	Display windov	readin v
Measure mod		%Rdg	+ %FS	%Rdg	+ %FS	%Rdg/°C	+ %FS/°C			
DC voltage	Thermocouple	Please refer to th	nermocouple specifi	cation table					CHI	
DO Voltago	TC mode -10 to 100 mV	0.0045	0.008	0.007 (0.009)	0.01	0	0.0005	0.001	CHI	
	+/- 200 mV	0.0045	0.004	0.01	0.005	0	0.0005	0.001	CHI	CH2
	+/- 2000 mV	0.0043	0.003	0.0095 (0.01)	0.005	0	0.0005	0.001	CHI	CH2
	+/- 20 V	0.0025	0.002	0.0145	0.002	0	0.0005	0.00001	CHI	CH2
	+/- 30 V	0.0025	0.0035	0.0145	0.002	0	0.0005	0.00001	CHI	CH2
AC voltage	0 to 2000 mVAC	0.125	0.125	0.2	0.15	0.005	0.005	0.1	CHI	CITZ
(note 1) not										
applicable to	0 to 20 VAC	0.1255	0.125	0.2	0.15	0.005	0.005	0.001	CH1	
DPI620G-B, DPI620G-H or DPI620G-IS versions	0 to 300 VAC	1	0.06	1.5	0.1	0.05	0.005	0.01	CHI	
Current	+/- 20 mA	0.006	0.005	0.012 (0.016)	0.006 (0.0065)	0	0.0005	0.0001	CHI	CH2
	+/- 55 mA	0.005	0.005	0.016 (0.019)	0.005 (0.006)	0	0.0005	0.0001	CHI	CH2
Resistance	RTD	Please refer to R	TD specification tab	le					CHI	
(True, 4 wire)	0 to 400 Ω	0.0055 (0.006)	0.001 (0.002)	0.009	0.0012	0	0.0005	0.001	CHI	
not applicable to DPI620G-B, DPI620G-H	0 to 4000 Ω	0.0055 (0.006)	0.001 (0.002)	0.009	0.0012	0	0.0005	0.01	CHI	
Resistance	RTD	Please refer to R	TD specification tab	le					CHI	
(4 wire) not	0 to 400 Ω	0.012	0.005	0.015	0.006	0	0.001	0.001	CHI	
applicable to DPI620G-B, DPI620G-H	0 to 4000 Ω	0.0115	0.0045	0.015	0.006	0	0.001	0.01	CHI	
requency	0 to 1000 Hz	0.0003	0.0002	0.003	0.0002			0.0001	CH1	
not applicable to	1 kHz to 50 kHz (5 kHz)	0.0003	0.0004	0.003	0.0004			0.00001	CH1	
OPI620G-B,	0 to 999999 CPM	Refer to range to	ıble above for equiv	alent frequency				0.01	CH1	
DPI620G-H	0 to 999999 CPH	Refer to range table above for equivalent frequency						0.01	CH1	
	Trigger level	Automatic and				0.1				
	Trigger level	Automatic or mo	anual setting 0 to 20				0.1			
Pressure	25 mbar to 1000 bar	Please refer to P	M 620 pressure ranç	ge table					Pl	P2
DOS external module			OOS UPM datasheet.	·	OOS-USB required				IDOS	
JSB port		Please refer to D	ruck for compatible	devices					USB	
Source mode		_								
DC Voltage not	TC mode		nermocouple specifi							
applicable to	TC mode -10 to 100 mV	0.009	0.008	0.014	0.01	0	0.0005	0.001	CHI	
DPI620G-B, DPI620G-H	0 to 200 mV	0.0045	0.004	0.01	0.005	0	0.0005	0.1	CH1	
D1 10200 -∐	0 to 2000 mV	0.004	0.003	0.009	0.005	0	0.0005	0.1	CH1	
	0 to 20 V (12 V) @ 3 mA max.	0.006	0.002 (0.0035)	0.0145 (0.015)	0.002 (0.004)	0	0.0005	0.001	CHI	
Current	0.2 to 24 mA with ext. loop power	0.01	0.004	0.015	0.005	0	0.0005	0.001	CH1	CH2
	0.2 to 24 mA with int. loop power	0.01	0.004	0.015	0.005	0	0.0005	0.001		CH2
			24/28V ±10% (15V	±10%; 100Ω output	mpeaance)				0	
2	Internal loop power	DI (: -	TD						CH1	
	RTD		TD specification tab		0.0075 (0.010)	0	0.001			
not applicable to	RTD 0 to 400 Ω (0.1 mA)	0.024 (0.026)	0.0035 (0.0045)	0.03 (0.035)	0.0075 (0.012)	0	0.001	0.01		
not applicable to DPI620G-B,	RTD 0 to 400 Ω (0.1 mA) 0 to 400 Ω (0.5 mA)	0.024 (0.026) 0.004	0.0035 (0.0045) 0.0025	0.03 (0.035) 0.008	0.003	0	0.001	0.01	CH1	
not applicable to DPI620G-B,	RTD 0 to 400 Ω (0.1 mA) 0 to 400 Ω (0.5 mA) 400 to 2000 Ω (0.05 mA)	0.024 (0.026) 0.004 0.048	0.0035 (0.0045) 0.0025 0.0035	0.03 (0.035) 0.008 0.06	0.003	0	0.001 0.001	0.01 0.01	CH1	
not applicable to DPI620G-B,	RTD 0 to 400 Ω (0.1 mA) 0 to 400 Ω (0.5 mA) 400 to 2000 Ω (0.05 mA) 2 k to 4 k Ω (0.05 mA)	0.024 (0.026) 0.004 0.048 0.048	0.0035 (0.0045) 0.0025 0.0035 0.0035	0.03 (0.035) 0.008 0.06 0.06	0.003	0	0.001	0.01	CH1	
not applicable to DPI620G-B, DPI620G-H	RTD 0 to 400 Ω (0.1 mA) 0 to 400 Ω (0.5 mA) 400 to 2000 Ω (0.05 mA) 2 k to 4 k Ω (0.05 mA) Maximum input current	0.024 (0.026) 0.004 0.048 0.048 0-400 Ω 5 mA, 4	0.0035 (0.0045) 0.0025 0.0035 0.0035 00-2000 Ω ImA, 2000	0.03 (0.035) 0.008 0.06 0.06 0-4000 Ω 0.5 mA	0.003 0.006 0.0045	0	0.001 0.001	0.01 0.01 0.01	CHI CHI	
not applicable to DPI620G-B, DPI620G-H	RTD 0 to 400 Ω (0.1 mA) 0 to 400 Ω (0.5 mA) 400 to 2000 Ω (0.05 mA) 2 k to 4 k Ω (0.05 mA) Maximum input current 0 to 1000 Hz	0.024 (0.026) 0.004 0.048 0.048 0-400 Ω 5 mA, 4 0.0003	0.0035 (0.0045) 0.0025 0.0035 0.0035 00-2000 Ω ImA, 2000 0.00023	0.03 (0.035) 0.008 0.06 0.06 0-4000 Ω 0.5 mA 0.003	0.003 0.006 0.0045	0	0.001 0.001	0.01 0.01 0.01	CHI CHI CHI	
Resistance ² not applicable to DPI620G-B, DPI620G-H Frequency not applicable to	RTD 0 to 400 Ω (0.1 mA) 0 to 400 Ω (0.5 mA) 400 to 2000 Ω (0.05 mA) 2 k to 4 kΩ (0.05 mA) Maximum input current 0 to 1000 Hz 1 kHz to 50 kHz (5 kHz)	0.024 (0.026) 0.004 0.048 0.048 0-400 Ω 5 mA, 4 0.0003 0.0003	0.0035 (0.0045) 0.0025 0.0035 0.0035 00-2000 Ω ImA, 2000 0.00023 0.000074	0.03 (0.035) 0.008 0.06 0.06 0-4000 Ω 0.5 mA 0.003 0.003	0.003 0.006 0.0045 0.00023 0.000074	0 0	0.001 0.001	0.01 0.01 0.01	CHI CHI	
Frequency noble20G-B, applicable to DPI620G-H	RTD 0 to 400 Ω (0.1 mA) 0 to 400 Ω (0.5 mA) 400 to 2000 Ω (0.05 mA) 2 k to 4 k Ω (0.05 mA) Maximum input current 0 to 1000 Hz 1 kHz to 50 kHz (5 kHz) Output waveform	0.024 (0.026) 0.004 0.048 0.048 0-400 Ω 5 mA, 4 0.0003 0.0003 Square, positive Sine and Triangu	0.0035 (0.0045) 0.0025 0.0035 0.0035 00-2000 Ω ImA, 2000 0.00023 0.000074 swing up to 20 V (12) lar, adjustable amp	0.03 (0.035) 0.008 0.06 0.06 0-4000 Ω 0.5 mA 0.003 0.003 /) adjustable, negal	0.003 0.006 0.0045	0 0 0	0.001 0.001 0.001	0.01 0.01 0.01	CHI CHI CHI	
not applicable to DPI620G-B, DPI620G-H	RTD 0 to 400 Ω (0.1 mA) 0 to 400 Ω (0.5 mA) 400 to 2000 Ω (0.05 mA) 2 k to 4 kΩ (0.05 mA) Maximum input current 0 to 1000 Hz 1 kHz to 50 kHz (5 kHz)	0.024 (0.026) 0.004 0.048 0.048 0-400 Ω 5 mA, 4 0.0003 0.0003 Square, positive Sine and Triangu 0 to 20 V +/-20 m	0.0035 (0.0045) 0.0025 0.0035 0.0035 00-2000 Ω ImA, 2000 0.00023 0.000074 swing up to 20 V (12)	0.03 (0.035) 0.008 0.06 0.06 0-4000 Ω 0.5 mA 0.003 0.003 /) adjustable, negal	0.003 0.006 0.0045 0.00023 0.000074 tive swing -120 mV (fi	0 0 0	0.001 0.001 0.001	0.01 0.01 0.01	CHI CHI CHI	

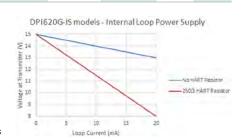
Notes:

The DPI620G-B/H models support electrical single channel function only. Values in () apply to DPI620G-IS models

- 1. Specification applies, 45 to 65 Hz and between 10% and 100% of full scale
- 2. Specification applies when calibration temperature is between 10 and 30 $^{\circ}\text{C}$
- 3. Total uncertainty includes reference standard uncertainty, NLH&R and typical long term stability for one year (K=2)

Multiple parameter display capability

The display can be configured to show a maximum of 6 (5 for IS versions) simultaneous reading windows as follows: CH1, CH2, P1, P2, IDOS (not IS versions), HART/Fieldbus)



"True Ohms" RTD measure mode (4-wire)									
Туре	Temperature coefficient	Temperature range				Total uncer 10° to 30°C	Total uncertainty 10° to 30°C (50° to 86°F) for 1 year		
		°C		۰F	°F		Rdg Tos		
		From	То	From	То	%	°C	°F	
Pt 50	3.85	-200	850	-328	1562	0.012	0.05	0.09	
Pt 100	3.85	-200	850	-328	1562	0.012	0.04	0.07	
Pt 100	3.92	-200	850	-328	1562	0.012	0.04	0.07	
Pt 200	3.85	-200	260	-328	500	0.01	0.03	0.051	
		260	850	500	1562	0.15	0.077	0.14	
Pt 500	3.85	-200	-60	-328	-76	0.01	0.026	0.044	
		-60	0	-76	32	0.015	0.05	0.086	
		0	850	32	1562	0.012	0.05	0.086	
Pt 1000	3.85	-200	-150	-328	-238	0.009	0.024	0.04	
		-150	0	-238	32	0.011	0.036	0.061	
		0	850	32	1562	0.012	0.036	0.061	
Cu 10	4.27	-200	0	-328	32	0	0.14	0.25	
		0	260	32	500	0	0.17	0.3	
D 100	6.18	-200	0	-328	32	0.01	0.035	0.06	
		0	640	32	1184	0.012	0.035	0.06	
Ni 100	6.72	-60	0	-76	32	0	0.026	0.047	
		0	250	32	482	0	0.03	0.055	
Ni 120	6.72	-80	0	-112	32	0	0.022	0.04	
		0	270	32	518	0	0.028	0.05	
		270	320	518	608	0	0.057	0.1	

Standar	Standard RTD measure mode (4-wire)								
Туре	Temperature coefficient	Temperature range				Total uncertainty 10° to 30°C (50° to 86°F) for 1 year			
		°C		°F	°F		Rdg Tos		
		From	То	From	То	%	°C	°F	
Pt 50	3.85	-200	850	-328	1562	0.021	0.16	0.28	
Pt 100	3.85	-200	0	-328	32	0.017	0.1	0.175	
		0	850	32	1562	0.0215	0.1	0.174	
Pt 100	3.92	-200	0	-328	32	0.017	0.1	0.175	
		0	850	32	1562	0.0215	0.1	0.174	
Pt 200	3.85	-200	0	-328	32	0.017	0.069	0.12	
		0	260	32	500	0.018	0.069	0.12	
		260	850	500	1562	0.033	0.33	0.6	
Pt 500	3.85	-200	-60	-328	-76	0.0165	0.051	0.09	
		-60	0	-76	32	0.017	0.16	0.29	
		0	850	32	1562	0.024	0.16	0.28	
Pt 1000	3.85	-200	-150	-328	-238	0.016	0.044	0.074	
		-150	0	-238	32	0.018	0.1	0.175	
		0	850	32	1562	0.0215	0.1	0.174	
Cu 10	4.27	-200	0	-328	32	0.035	0.66	1.18	
		0	260	32	500	0.01	0.66	1.18	
D 100	6.18	-200	0	-328	32	0.019	0.1	0.174	
		0	640	32	1184	0.02	0.1	0.174	
Ni 100	6.72	-60	0	-76	32	0	0.071	0.13	
		0	250	32	482	0.002	0.071	0.13	
Ni 120	6.72	-80	270	-112	518	0	0.06	0.11	
		270	320	518	608	0	0.2	0.36	

RTD Simulate Mode (0.1 mA min, 0-400 Ω ; 0.05 mA min, 400-4000 Ω)									
Туре	Temperature coefficient	Temperatu	Temperature range				Total uncertainty 10° to 30°C (50° to 86°F) for 1 year		
		°C		°F	°F		Tos		
		From	То	From	То	%	°C	°F	
Pt 50	3.85	-200	850	-328	1562	0.043 (0.052)	0.24 (0.35)	0.42 (0.63)	
Pt 100	3.85	-200	850	-328	1562	0.04 (0.047)	0.16 (0.22)	0.28 (0.40)	
Pt 100	3.92	-200	850	-328	1562	0.04 (0.047)	0.16 (0.22)	0.28 (0.40)	
Pt 200	3.85	-200	260	-328	500	0.0345 (0.041)	0.12 (0.16)	0.21 (0.29)	
		260	850	500	1562	0.087	0.28	0.50	
Pt 500	3.85	-200	-60	-328	-76	0.33 (0.038)	0.095 (0.12)	0.169 (0.22)	
		-60	850	-76	1562	0.078	0.23	0.41	
Pt 1000	3.85	-200	-150	-328	-238	0.32 (0.037)	0.085 (0.11)	0.15 (0.20)	
		-150	260	-238	500	0.0675	0.19	0.34	
		260	850	500	1562	0.082	0.17	0.31	
Cu 10	4.27	-200	260	-328	500	0	0.85 (1.40)	1.53 (2.52)	
D 100	6.18	-200	640	-328	1184	0.38 (0.046)	0.16 (0.22)	0.28 (0.40)	
Ni 100	6.72	-60	250	-76	482	0	0.12 (0.16)	0.22 (0.29)	
Ni 120	6.72	-80	270	-112	518	0	0.11 (0.14)	0.20 (0.25)	
		270	320	518	608	0	0.25	0.45	

Notes:

These figures relate to DPI 620 Genii uncertainties only values in () apply to DPI620G-IS models. Not applicable to the DPI620G-B or DPI620G-H.

For RTD measure and source functions the uncertainty is given by:

Urtd = $T(^{\circ}C) \times ^{\circ}Rdg + Tos(^{\circ}C)$

or

Urtd = T(°F) x%Rdg + Tos (°F)

where T() is the measurement expressed in ${}^{\circ}\text{C}$ or ${}^{\circ}\text{F}$

Measurement resolution:

0.01 °C/F

Simulation resolution 0.1 °C/F

Excitation current:

Measure mode 0 to 400 Ω 2.5 mA, 400 Ω to 4000 Ω 0.5 mA;

Simulate mode 0 to 400 Ω 5 mA max, 0.4 to 2 k Ω 1 mA max and 2 to 4 k Ω 0.5 mA max

Simulate mode pulsed excitation current minimum duration 10 ms

Thermocouple measurement and simulation										
Туре	Standard	Temperature	range			Measurement		Simulation	1	
							Total uncertainty 10° to 30°C (50° to 86°F) for 1 year			
		°C		°F		°C	°F	°C	°F	
		From	То	From	То					
В	IEC 584	250.00	500.00	482.00	932.00	4.00	7.20	4.00	7.20	
		500.00	700.00	932.00	1,292.00	2.00	3.60	2.00	3.60	
		700.00	1,200.00	1,292.00	2,192.00	1.50	2.70	1.50	2.70	
		1,200.00	1,820.00	2,192.00	3,308.00	1.00 (1.10)	1.80 (1.98)	1.10	1.98	
E	IEC 584	-270.00	-200.00	-454.00	-328.00	2.00	3.60	2.00	3.60	
		-200.00	-120.00	-328.00	-184.00	0.50	0.90	0.50	0.90	
		-120.00	1,000.00	-184.00	1,832.00	0.25	0.45	0.30	0.54	
J	IEC 584	-210.00	-140.00	-346.00	-220.00	0.50	0.90	0.50	0.90	
		-140.00	1,200.00	-220.00	2,192.00	0.30	0.54	0.40	0.72	
K	IEC 584	-270.00	-220.00	-454.00	-364.00	4.00	7.20	4.00	7.20	
		-220.00	-160.00	-364.00	-256.00	1.00	1.80	1.00	1.80	
		-160.00	-60.00	-256.00	-76.00	0.50	0.90	0.50	0.90	
		-60.00	800.00	-76.00	1,472.00	0.30 (0.40)	0.54 (0.72)	0.40	0.72	
		800.00	1,370.00	1,472.00	2,498.00	0.50	0.90	0.60	1.08	
L	DIN 43710	-200.00	-100.00	-328.00	-148.00	0.40	0.72	0.40	0.72	
		-100.00	900.00	-148.00	1,652.00	0.25	0.45	0.30	0.54	
N	IEC 584	-270.00	-200.00	-454.00	-328.00	7.00	12.60	7.00	12.60	
		-200.00	-40.00	-328.00	-40.00	1.00	1.80	1.00	1.80	
		-40.00	1,300.00	-40.00	2,372.00	0.40	0.72	0.50	0.90	
R	IEC 584	-50.00	360.00	-58.00	680.00	3.00	5.40	3.00	5.40	
		360.00	1,760.00	680.00	3,200.00	1.00	1.80	1.10	1.98	
S	IEC 584	-50.00	70.00	-58.00	158.00	3.00	5.40	3.00	5.40	
		70.00	320.00	158.00	608.00	1.50	2.70	1.50	2.70	
		320.00	660.00	608.00	1,220.00	1.10	1.98	1.20	2.16	
		660.00	1,740.00	1,220.00	3,164.00	1.00 (1.10)	1.80 (1.98)	1.20	2.16	
Т	IEC 584	-270.00	-230.00	-454.00	-382.00	3.00	5.40	3.00	5.40	
		-230.00	-50.00	-382.00	-58.00	1.00	1.80	1.00	1.80	
		-50.00	400.00	-58.00	752.00	0.30	0.54	0.30	0.54	
U	DIN 43710	-200.00	-50.00	-328.00	-58.00	0.60	1.08	0.60	1.08	
		-50.00	600.00	-58.00	1,112.00	0.30	0.54	0.30	0.54	
С		0.00	1,600.00	32.00	2,912.00	0.80 (0.90)	1.44 (1.62)	1.00	1.80	
		1,600.00	2,000.00	2,912.00	3,632.00	1.00 (1.10)	1.80 (1.98)	1.20	2.16	
		2,000.00	2,300.00	3,632.00	4,172.00	1.40 (1.50)	2.52 (2.70)	1.70	3.06	
D		0.00	100.00	32.00	212.00	1.10	1.98	1.10	1.98	
		100.00	270.00	212.00	518.00	0.80	1.44	0.80	1.44	
		270.00	1,200.00	518.00	2,192.00	0.60 (0.70)	1.08 (1.26)	0.70	1.26	
		1,200.00	1,800.00	2,192.00	3,272.00	0.80 (0.90)	1.44 (1.62)	1.00	1.80	

Values in () apply to DPI620G-IS models

Not applicable to the DPI620G-B or DPI620G-H

Measurement resolution 0.01 °C/F

Simulation resolution 0.1 °C/F

Cold Junction (CJ) uncertainty 0.2°C (0.4°F) in ambient range 10 to 30°C (50 to 86°F)

Add 0.01° CJ uncertainty/° outside of this ambient range

PM620 & PM620T pressure modules

Features

- Fully interchangeable with no need for set-up or calibration
- · Simple screw fit hand tight no tools required
- · Safe and hazardous area versions available

The PM620 is the latest development in digital output sensor technology incorporating a number of key innovations to allow pressure re-ranging of compatible equipment. A simple screw fit makes both the pressure and electrical connections without the need for tools, sealing tape, cables or plugs and digital characterization allows interchangeability without set-up or calibration.

The PM620T in addition incorporates our unique range of TERPS resonant silicon pressure sensor technology. Providing up to four times greater stability and higher accuracy.

PM620

- Ranges from 25 mbar to 1,000 bar (10 inH2O to 15,000 psi)
- · Total uncertainty from 0.025% FS

PM620T

- Ranges from 1.2 bar abs to 100 bar abs (17.5 psi abs to 1500 psi abs)
- Total uncertainty from 0.0125% FS

MC620G module carrier

Features

- · 2 independent pressure channels
- · Simple to re-range
- · Pressure protection
- · Safe and hazardous area versions available

The MC620 module carrier attaches to the head of the DPI620 to provide two independent pressure measurement channels. These can be fitted with any PM620/PM620T pressure module from 25 mbar to 1,000 bar (10 inH2O to 15,000 psi). A simple screw fit means no tools are required and ensures both a high integrity pressure seal and a reliable digital interface. Even the pressure adapters are interchangeable and only require a finger tight fit.

The carrier is designed for pressure safety and will automatically seal if a module is not fitted or if the user attempts to remove it.

MC620G specification	
Maximum pressure	400 bar (5,800 psi) pneumatic 1,000 bar (15,000 psi) hydraulic
Pressure media	Compatible with stainless steel and nitrile seals
Pressure safety	Pressure equipment directive class SEP
Size and weight	80 mm x 100 mm x 110 mm, 640 g

MC620-IS specification (where different to MC620G)				
Size and weight	78 mm x 100 mm x 110 mm, 820 g			





PM620 specification	
Maximum intermittent pressure	2 x FS
Maximum working pressure	110% FS
Sealing	IP 65 (protected against dust and jets of water)
Operating temperature	-10 to 50°C (14 to 122°F)
Storage temperature	-20 to 70°C (-4 to 158°F)
Humidity	0 to 90% RH non condensing
Shock and vibration	BS EN 61010-1:2010; MIL-PRF-28800F for Class II equipment, 1 m Drop Tested
EMC	BS EN 61326-1:2006
Electrical safety	BS EN 61010-1:2010
Pressure safety	Pressure equipment directive class SEP
Approval	CE marked
Size and weight	L. 56 mm, Dia. 44 mm,
	106 g maximum

PM620-IS Pres	PM620-IS Pressure module specification (where different from PM620)						
Approval	CE and UKCA Marked						
	ATEX & IECEx intrinsically safe: (Ex) II 1G Ex ia IIC T4 Ga (-10°C ≤ Ta ≤ +50°C)						
	ETL intrinsically safe (US and Canada): Class I, Zone 1, AEx/Ex ia IIC T4 (-10°C \le Ta \le +50°C)						

Gauge ranges (referenced to atmosphere)									
		Media	NLH&R	NLH&R	Total uncertainty				
			20°C ± 2°C (68°F ± 4°F)	0° to 50°C (32° to 122°F)	0° to 50°C (32° to 122°F)				
			24 hr	24 hr	for 1 year				
			Gauge	Gauge	Gauge				
bar	psi		%FS	%FS	%FS				
±0.025	±10 inH ₂ O	1	0.090	0.090	0.100				
±0.07	±1	1	0.025	0.030	0.047				
±0.1	±1.45	1	0.020	0.027	0.045				
±0.2	±3	1	0.020	0.027	0.045				
±0.35	±5	2	0.020	0.025	0.044				
±0.7	±10	2	0.015	0.020	0.041				
±1	-14.5 to 15	2	0.015	0.020	0.041				
-1 to 2	-14.5 to 30	2	0.015	0.020	0.025				
-1 to 3.5	-14.5 to 50	2	0.010	0.020	0.025				
-1 to 7	-14.5 to 100	2	0.010	0.020	0.025				
-1 to 10	-14.5 to 150	2	0.005	0.020	0.025				
-1 to 20	-14.5 to 300	2	0.005	0.020	0.025				
0 to 35	0 to 500	2	0.005	0.020	0.025				
0 to 70	0 to 1,000	2	0.005	0.020	0.025				
0 to 100	0 to 1,500	2	0.005	0.020	0.025				
0 to 135	0 to 2,000	2	0.005	0.020	0.025				
0 to 200	0 to 3,000	2	0.005	0.020	0.025				

NLH&R non-linearity, hysteresis and repeatability

- Compatible with non-corrosive gas/fluid
- Compatible with stainless steel

*The reading can be referenced to ambient air pressure via a software feature of the DPI620 Genii, allowing the same module to be switched between absolute and sealed gauge measurement.

DPI620 Genii pressure resolution: adjustable 4 to 7 digits. Uncertainty confidence level 95% (K=2)

Absolute ranges (referenced to vacuum)												
		Media	NLH&R 20°C ± 2°C (68°F ± 4°F) 24 hr	NLH&R 20°C ± 2°C (68°F ± 4°F) 24 hr	NLH&R 0° to 50°C (32° to 122°F) 24 hr	NLH&R 0° to 50°C (32° to 122°F) 24 hr	Total uncerta 0° to 50°C (32° to 122°F) for 1 year	inty				
			Absolute	*Sealed gauge	Absolute	*Sealed gauge	Absolute	*Sealed gauge				
bar	psi		%FS	%FS	%FS	%FS	%FS	%FS				
0 to 7	0 to 100	2	0.015		0.036		0.050					
0 to 10	0 to 150	2	0.015	0.005	0.030	0.020	0.047	0.025				
0 to 20	0 to 300	2	0.015	0.005	0.030	0.020	0.047	0.025				
0 to 35	0 to 500	2	0.015	0.005	0.030	0.020	0.047	0.025				
0 to 70	0 to 1,000	2	0.015	0.005	0.030	0.020	0.047	0.025				
0 to 100	0 to 1,500	2	0.015	0.005	0.030	0.020	0.046	0.025				
0 to 135	0 to 2,000	2	0.015	0.005	0.030	0.020	0.046	0.025				
0 to 200	0 to 3,000	2	0.015	0.005	0.030	0.020	0.046	0.025				
0 to 350	0 to 5,000	2	0.015	0.005	0.033	0.020	0.049	0.025				
0 to 700	0 to 10,000	2	0.015	0.005	0.033	0.020	0.049	0.025				
0 to 1000	0 to 15,000	2	0.015	0.005	0.033	0.020	0.049	0.025				

PM620 TERPS specification			
Maximum working pressure	110% FS	Approval	CE and UKCA Marked
Sealing	IP 65 (protected against dust and jets of water)	Size and weight	L. 56 mm, Dia. 44 mm, 106 g maximum
Operating temperature	-10 to 50°C (14 to 122°F)	RoHS	Compliant
Storage temperature	-20 to 70°C (-4 to 158°F)	Orientation stability	<0.2 mbar/g
Humidity	0 to 90% RH non condensing	Media compatibility	Media to be compatible with stainless steel
Shock and vibration	BS EN 61010-1 MIL-PRF-28800F for Class II equipment, 1 m drop tested	Resolution	Selectable - 4 to 7 digits
EMC	BS EN 61326-1	Uncertainty confidence level	95% (k=2)
Electrical safety	BS EN 61010-1		
Pressure safety	Pressure equipment directive class SEP		

Uncertainty			
Pressure range (absolute)	NLHR @ 25°C (% FS)	NLHR @ -10°C to 50°C (% FS)	Total uncertainty @ -10°C to 50°C (% FS)
1.2 bar	0.006%	0.013%	0.020%
2 bar	0.004%	0.008%	0.0125%
7 bar	0.004%	0.008%	0.0125%
20 bar	0.004%	0.008%	0.0125%
35 bar	0.004%	0.008%	0.0125%
70 bar	0.004%	0.008%	0.0125%
100 bar	0.004%	0.008%	0.0125%

Hazardous area approvals								
Approval	Baseefa 16ATEX0012X IECEx BAS 10.0004X EX II 1 G Ex ib IIC T4 Gb (-10 ≤ Ta ≤ +50°C)							
EN60079-0	Electrical apparatus for potentially explosive atmospheres - general requirements.							
EN60079-11	Electrical apparatus for potentially explosive atmospheres - intrinsic safety 'i'.							

Notes

- The reading can be referenced to ambient air pressure via a software feature of the DPI620 Genii, allowing the same module to be switched between absolute and sealed gauge measurement.
- 2. NLH&R Non-linearity, hysteresis and repeatability to reference standard.
- 3. Total uncertainty includes reference standard uncertainty, NLHR over specified range and 1 year drift.

The PV621, 622 and 623 manual pressure generating base stations

Features

- A uniquely capable, re-arrangeable and self-contained pressure test system
- · Advanced pressure generation
 - 95% vacuum to 20 bar (300 psi) pneumatic
 - 95% vacuum to 100 bar (1,500 psi) pneumatic
 - 0 to 1000 bar (15,000 psi) hydraulic
- Stand-alone replacements for hand pumps
- · Bench top use as comparators
- · Safe and hazardous area versions available

There are three pressure generation stations: the PV621, a pneumatic pressure generator for pressures 95% vacuum to 20 bar (300 psi); the PV622, a pneumatic pressure generator for pressures 95% vacuum to 100 bar (1,500 psi); and the PV623, a hydraulic pressure generator for pressures up to 1,000 bar (15,000 psi). Each pressure station is designed for stand-alone operation as a pressure generator and can replace conventional hand pumps to provide greater efficiency and ease of use. They can also be used on the workbench as comparators.

PV621G, PV622G and PV6	23G specification
Maximum pressure	PV621G 20 bar (300 psi) pneumatic
	PV622G 100 bar (1,500 psi) pneumatic
	PV623G 1,000 bar (15,000 psi) hydraulic
Pressure media	PV621G and PV622G non-corrosive gases, PV623G de-mineralized water or mineral oil (ISO viscosity grade < 22)
Operating temperature	-10° to 50°C (14° to 122°F)
	For water +4 to +50°C (39 to 122°F)
Storage temperature	-20 to 70°C (-4 to 158°F) (must be empty of water)
Shock and vibration	BS EN 61010-1:2010; MIL-PRF-28800F for Class II equipment, 1 m drop tested
Pressure safety	Pressure equipment directive class SEP
Approval	CE and UKCA Marked
Size and weight	450 mm x 280 mm x 235 mm,
	PV621G 2.65 kg, PV622G 3.30 kg, PV623G 3.75 kg

PV621-IS, PV622-IS and P (where different from abo	
Maximum pressure	PV621-IS 20 bar (300 psi) pneumatic
	PV622-IS 100 bar (1,500 psi) pneumatic
	PV623-IS 1,000 bar (15,000 psi) hydraulic
Operating temperature	-10 to 40°C (14 to 104°F)
Approval	CE and UKCA Marked
	ATEX and IECEx intrinsically safe: (x) II 2G Ex ia IIC T4 Gb (-10°C \leq Ta \leq +40°C)
	ETL intrinsically safe (US and Canada): Class I, Zone I, AEx/Ex ia IIC T4 (-10°C \le Ta \le +40°C)





PV622G PV622-IS

PV624 hybrid pressure controller base station

The PV624 is a portable hybrid pressure controller base station that combines the advantages of manual pressure generation with fully automatic pressure generation and control.

By utilising interchangeable PM620/PM620T pressure modules and connecting physically or *wirelessly via Bluetooth® with any Bluetooth® **DPI620G electrical calibrator creates a uniquely capable, flexible, self-contained portable hybrid pressure controller

The PV624 automatically selects between fast high volume manual pressure generation and fully automatic precise pressure generation to quickly achieve and accurately maintain a stable setpoint.

To achieve a fast time to up-scale pressure set points (or down-scale pressure set points for negative pressure ranges), the hand pump is requested by the PV624 to be exercised for a portion of the pressure change before automatically isolating the hand pump and seamlessly engaging fully automatic pressure generation to set point.

Down-scale pressure set points (or up-scale pressure set points for negative pressure ranges) are quickly achieved with automatically controlled venting.

Once at set point the PV624 automatically generates and controls the pressure to combat the effect of adiabatic or minor leaks.

Features

- In built barometer to enable accurate pseudo pressure ***
 measurements.
- Hybrid pressure generation and control from -0.9barg (-13psig) to 20barg (300psig).
- Automatic selection of manual pressure generation, automatic pressure generation or pressure venting with large test volume capability.
- Fully automatic pressure generation and control to accurately maintain setpoint.
- Minimise in-the-field leaks with quick-fit pressure adapters.
- Physical or *Bluetooth® wireless connection to a DPI620G electrical calibrator.
- In-the-field rechargeable battery pack replacement



PV624 specifications

Range and Performance

Hybrid pressure control range

-0.9barg (-13 psig) to 20barg (300 psig)

Compatible PM620 & PM620T (FS) pressure ranges

Gauge ranges: 0.7bar(10psi), 1bar(15psi), 2bar(30psi), 3.5bar(50psi), 7barg(100psi), 10barg(150psi), 20barg(300psi).

Absolute ranges: 2bar(30psi), 3.5bar(50psi), 7bar(100psi), 10bar(150psi), 20bar(300psi).

Maximum over range pressure (without damage)

120%FS

Barometer pressure measurement range

800-1100 mbar abs

Barometer total uncertainty (24hr)

<0.5mbar

Barometer drift/year

<0.33mbar/yr typical

Pressure control stability

50ppm of PM620 Full Scale

Speed to stable set point

0 barg to 2barg(30psig) +/-50ppm into 15ml volume <15sec 0 barg to 20barg(300psig) +/-50ppm into 50ml volume <90sec

Maximum compensated external leak rate at 20barg (300psig) with 50mL volume

60mbar/min

Combining any of the pressure base stations with a PM620 or PM620T pressure module and the DPI620G calibrator creates a uniquely capable, self-contained pressure calibrator.

^{**}Safe area models , e.g DPI620G/L/PB/FF/FFPB, MC620G, PV621/2/3G, PV621/2/3-IS and intrinsically safe models are not compatible with intrisically safe models, e.g. DPI620G-IS, PM620/T-IS, MC620-IS, PV621/2/3-IS and intrinsically safe models are not compatible with safe area models

^{***}pseudo selection only available for PM620 1 bar/15psi gauge full-scale ranges or above and for 2bar/30psi absolute full-scale ranges and above.

PV624 General Specification

Operating temperature

0 to +50 deg. C

Storage temperature

-20 to +70 deg. C

Ingress protection

IP54

Humidity

Up to 95% non-condensing

Shock/vibration

As per MIL-PRF-28800F (Class II equipment)

Altitude

Up to 3000m

EMC:

CE and UKCA approved IEC61326-1

Electrical safety:

CE and UKCA approved IEC61010

Pressure safety:

CE and UKCA approved Sound Engineering Practice

Test volume materials

Suitable for air

Approvals

CE marked, UKCA marked

Size (excl DPI620)

(L) 343mm/13.5" x (W) 192mm/7.6" x (H) 136mm/5.4"

Weight (excl DPI620)

3.4Kg/7.5lb

Power supply

15V, 2A (30W)

Battery life (from 100% charge)

Min 8hrs continuous usage (typical)

Battery charge time

8hrs

Service

>5000 pressure cycles

Power failure protection

System lock and manual vent valve feature provided

Connectivity

USB client micro-USB (+Bluetooth® low energy for Bl option)

Pressure connection

Quick fit with G1/8 female + 1/8 NPT female adapter

Ordering information

Systems for safe area use**

Please order the following model numbers and part numbers as separate line items.

Model	Description	Bluetooth Connec- tivity	Measure Pressure Via PM620 & MC620/ PV62X	USB Sensors: Pressure & RTD	IDOS Pressure Sensors	Measure mA, mV, V	Source m#	24/28V Loop Power	Source mV, V	Measure/ Source Frequency	Measure/ Source Resistance	Measure/ Source Temp (RTD/TC)	Multi channel [*] for simul- taneous Measure- ment/ Source	External AC Voltage Probe	HART	Profibus	Fieldbus
DPI620G-B	Electrical Calibrator		•	•	•	•	•	•					•				
DPI620G-B-BI	Electrical Calibrator with Bluetooth	•	•	•	•	•	•	•					•				
DPI620G-H	Electrical Calibrator & HART com- municator		•	•	•	•	•	•					•		•		
DPI620G-H-BI	Electrical Calibrator & HART com- municator with Bluetooth	•	•	•	•	•	•	•					•		•		
DPI620G-L	Multifunction Calibrator		•	•	•	•	•	•	•	•	•	•	•	•			
DPI620G-L-BI	Multifunction Calibrator with Bluetooth	•	•	•	•	•	•	•	•	•	•	•	•	•			
DPI620G	Multifunction Calibrator & HART communicator		•	•	•	•	•	•	•	•	•	•	•	•	•		
DPI620G-BI	Multifunction Calibrator & HART communicator with Bluetooth	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
DPI620G-PB	Multifunction Calibrator & HART communicator with Profi Bus		•	•	•	•	•	•	•	•	•	•	•	•	•	•	
DPI620G-PB-BI	Multifunction Calibrator & HART communicator with Profi Bus & Bluetooth	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
DPI620G-FF	Multifunction Calibrator & HART communicator with Fieldbus		•	•	•	•	•	•	•	•	•	•	•	•	•		•
DPI620G-FF-B1	Multifunction Calibrator & HART communicator with Fieldbus & Bluetooth	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•
DPI620G-FFPB	Multifunction Calibrator & HART communicator with Profi Bus & Fieldbus		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DPI620G-FF- PB-B1	Multifunction Calibrator & HART communicator with Profi Bus, Field- bus & Bluetooth	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The DPI620G are supplied with a rechargeable lithium polymer battery P/N IO620-BATTERY, universal mains adaptercharger P/N IO620-PSU, P/N IO620-AC 300 VAC true rms measurement probe (IO620-AC not supplied with the DPI620G-B or DPI620G-H), test leads calibration certificate, and quick reference guide.

▲ The DPI620G-B/H models have multifunction capability only when measuring/sourcing pressure or with the USB RTD.

Model MC620G

Genii pressure module carrier

Supplied with G 1/8 female and 1/8 NPT female adapters (2 of each).

Model PM620 or PM620T "pressure range" and "type"

Pressure module supplied with calibration certificate. Please state model number, pressure range and type gauge or absolute e.g., PM620 20 bar (300 psi) gauge (see page 10 & 11 for pressure ranges).

Model PV621G

Pneumatic pressure generation base station vacuum to 20 bar (300 psi)

Model PV622G

Pneumatic pressure generation base station vacuum to 100 bar (1,500 psi)

Model PV623G

Hydraulic pressure generation base station 0 to 1,000 bar (15,000 psi)

Model PV624-B0 or PV624-B1 (-B1 model has additional *Bluetooth connectivity)

Hybrid pressure controller base station, from vacuum to 20 bar (300 psi).

The PV621G, 622G, 623G and 624 are supplied with G1/8 female and 1/8 NPT female adapters carry strap, and quick reference guide. The PV623G in addition includes a plastic refill bottle for hydraulic fluid. The PV624 includes AC power supply, rechargeable battery pack and dirt moisture trap.



Accessories for safe area use**

(P/N IO620-BATTERY) DPI620G Spare/rechargeable lithium polymer battery (not compatible with DPI620G-IS models)

(P/N IO620-PSU) DPI620G Spare/replacement universal mains adapter. Input voltage 100 to 240 VAC 50/60 Hz Mains socket adapters are provided.

(P/N IO620-CHARGER) DPI620G Battery charging station

External battery charging station allows a spare battery to be charged independently of the DPI620G for minimum

instrument down time. Power is provided standard mains adaptor (P/N 10620-PSU complete charge cycle takes approxima 6.5 hours. The charging station can be connected to a USB port to provide a top-up charge (full charge in 13 hours).



(P/N IO624-Battery) Rechargeable PV62 battery pack

A spare battery pack that can be easily exchanged in the field

(P/N IO624-CHGR-KIT-UK) PV624 external desktop battery charger

External charger for the PV624 battery pack with UK Plug

(P/N IO624-CHGR-KIT-EU) PV624 external desktop battery charger

External charger for the PV624 battery pack with EU Plug

(P/N IO624-CHGR-KIT-US) PV624 external desktop battery charger

External charger for the PV624 battery pack with US Plug

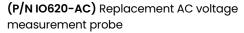
(P/N IO624-CHGR-KIT-AU) PV624 external desktop battery charger

External charger for the PV624 battery pack with Australia Plug



Add (P/N IO624-CHGR-KIT-CN) PV624 external desktop battery charger

External charger for the PV624 battery pack with China Plug



Attaches to the DPI620G, 30 V sockets to provide 300 VAC true rms measurement. Is supplied as standard with all new DPI620G.



Protective carrying case with belt loop, shoulder strap and large detachable pocket for test leads and accessories.



(P/N IO620-CASE-2) System carrying case

Protective carrying case for system components including the DPI620G,

MC620G, PM620 modules, test leads, hose and adapters.

Connects the DPI620G or DPI620G-IS to a PC

(P/N IO620-IDOS-USB) IDOS to USB converter

Allows connection of an IDOS universal pressure module to the DPI620G. P/N IO620-USB-PC is also required to connect the converter to the DPI620G USB port. (not compatible with DPI620G-IS)



(P/N IO620-USB-RS232) USB to RS 232 cable

Connects the DPI620G to an RS 232 interface (not compatible with DPI620G-IS)



Pressure relief valve

When fitted to a PV62X pressure station a relief valve protects the PM620 pressure module and the device under test from overpressure.





Relief valve table											
Part number		Factory	setting	Adjustable range							
Part number	For use with	bar	psi	bar	psi						
IO620-PRV-P1	PV621G PV622G	1	15	0.2 to 1	3 to 15						
IO620-PRV-P2	PV621G PV622G	5	100	3 to 7	45 to 100						
IO620-PRV-P3	PV621G PV622G	30	435	16 to 32	230 to 460						
IO620-PRV-P4	PV622G	60	870	30 to 60	435 to 870						
IO620-PRV-P5	PV622G	100	1,500	60 to 100	870 to 1,500						
IO620-PRV-P6	PV621G PV622G	3	45	1.1 to 3	16 to 45						
IO620-PRV-P7	PV621G PV622G	12	170	6.1 to 12	90 to 170						
IO620-PRV-P8	PV621G PV622G	18	260	12.1 to 18	175 to 260						
IO620-PRV-H1	PV623G	50	725	10 to 50	145 to 725						
IO620-PRV-H2	PV623G	200	3000	50 to 200	725 to 2,900						
IO620-PRV-H3	PV623G	400	6000	200 to 400	2,900 to 5,800						
IO620-PRV-H4	PV623G	700	10,000	300 to 700	4,350 to 10,000						
IO620-PRV-H5	PV623G	1,000	15,000	600 to 1,000	8,700 to 15,000						

(P/N IO620-RAK-5U) Rack mount Kit

Enables the DPI620G to be mounted in a 5U 19" half rack

(P/N IO620-RAK-8U) Rack mount Kit

Enables the DPI620G to be mounted in a 8U 19" half rack

(P/N IO620-RAK-MC) Rack mount Kit

Enables the DPI620G + MC620 to be mounted in a 8U 19" half rack

Accessories for safe area use**

Dirt moisture trap

Prevents contamination of the PV621, 622 and 624 pneumatic systems and cross contamination from one device under test to another. The IDT connects directly to the PV621, 622 and 624 pressure port and replicates the quick fit connection for compatibility with the hose and adapter kits.



Note: 1 off IO620-IDT621 dirt moisture trap supplied with PV624.

P/N IO620-IDT621 - NEW: Maximum working pressure 35 bar (500 psi)

P/N IO620-IDT622: Maximum working pressure 100 bar (1,500 psi)

Pressure base station carrying case

A protective carrying case with shoulder strap and large pocket for accessories. Also accommodates the assembled system including the DPI620G and PM620.



P/N IO620-CASE-3: Safe area use

(P/N IO620-CASE-4) Modular system transit case

A rigid transit case with wheels and an extendable handle. Accommodates two PV62XG pressure stations, DPI620G, MC620G and PM620 modules, with ample storage space for accessories. Size: 736 mm x 554 mm x 267 mm. Weight: 8,5 kg empty.





Pneumatic hose

Pneumatic hose terminated with quick fit connectors compatible with the test point adapters supplied with the PV62XG, MC620G and the adapter sets.



P/N IOHOSE-NP1: 1 m/3.28 ft pneumatic hose. Maximum pressure 20 bar/300 psi

P/N IOHOSE-NP2: 2 m/6.56 ft pneumatic hose. Maximum pressure 20 bar/300 psi

P/N IO620-HOSE-P1: 1 m/3.28 ft pneumatic hose. Maximum pressure 400 bar (5,800 psi)

P/N IO620-HOSE-P2: 2 m/6.56 ft pneumatic hose. Maximum pressure 400 bar (5,800 psi)

Hydraulic hose

A high pressure hydraulic hose rated to 1,000 bar (15,000 psi) and terminated with quick fit connectors compatible with the test point adapters supplied with the PV62XG, MC620G and the adapter sets. The hose is self sealing to avoid leakage when disconnected.



P/N IO620-HOSE-H1: 1 m/3.28 ft hydraulic hose P/N IO620-HOSE-H2: 2 m/6.56 ft hydraulic hose

Intrinsically safe systems for hazardous area use**

Please order the following model numbers and part numbers as separate line items.

Model	Description	Measure Pressure Via PM620 & MC620/ PV62X	Connection for RTD accesory	Measure mA, mV, V	Source mA		Source mV, V	Source	Source	Measure/ Source Temp(RTD/ TC)	Multi channel for simultane- ous Mea- surement/ Source	HART	Profi Bus	Fieldbus
DPI620G-IS-L	Multifunction Calibrator	•	•	•	•	•	•	•	•	•	•			
DPI620G-IS	Multifunction Calibrator & HART communicator	•	•	•	•	•	•	•	•	•	•	•		
DPI620G-IS-PB	Multifunction Calibrator & HART communicator with Profi Bus	•	•	•	•	•	•	•	•	•	•	•	•	
DPI620G-IS-FF	Multifunction Calibrator & HART communicator with Fieldbus	•	•	•	•	•	•	•	•	•	•	•		•
DPI620G-IS-FFPB	Multifunction Calibrator & HART communi- cator with Profi Bus & Fieldbus	•	•	•	•	•	•	•	•	•	•	•	•	•

The DPI 620G-IS Series are supplied with a rechargeable lithium ion battery P/N IO620G-IS-BATTERY, universal mains adapter P/N IO620-PSU and charger P/N IO620G-IS-CHARGER, test leads, calibration certificate, and quick reference guide.

(P/N IO620G-IS-BATTERY) Spare/replacement rechargeable battery

(P/N 10620-PSU) Spare/replacement universal mains adapter

(P/N IO620G-IS-CHARGER) Spare/replacement charger (PSU not included)

Model MC620-IS

Pressure module carrier for DPI620G-IS series.

Supplied with G 1/8 female and 1/8 NPT female adaptors (2 of each)

Model PM620-IS "pressure range" and "type"

Intrinsically safe pressure module supplied with calibration certificate. Please state model number, pressure range and type gauge or absolute e.g., PM620-IS 20 bar (300 psi) gauge (see page 11 for pressure ranges)



Model PV621-IS

Intrinsically safe pneumatic pressure generating station vacuum to 20 bar (300 psi)

Model PV622-IS

Intrinsically safe pneumatic pressure generating station vacuum to 100 bar (1,500 psi)



Model PV623-IS

Intrinsically safe hydraulic pressure generating station 0 to 1,000 bar (15,000 psi)

The PV621-IS, 622-IS and 623-IS are supplied with G1/8 female and 1/8 NPT female adapters carry strap, and quick reference guide. In addition, the PV623-IS includes a plastic refill bottle for hydraulic fluid.

Accessories for hazardous area use**

(P/N IO620-CASE-2-IS)

System carrying case

A protective carrying case for system components including the DPI620G-IS, MC620-IS, PM620-IS modules, test leads, hose and adapters.



Pressure station carrying case

A protective carrying case with shoulder strap and large pocket for accessories. Also accommodates the assembled system including the DPI620G-IS and PM620(T)-IS.

P/N IO620-CASE-3-IS: Hazardous area use



Prevents contamination of the PV621-IS and PV622-IS pneumatic systems and cross contamination from one device under test to another. The IDT connects directly to the PV621-IS and PV622-IS pressure port and replicates the quick fit connection for compatibility with the hose and adapter kits.



P/N IO620-IDT621-IS NEW: Maximum working pressure 35 bar (500 psi)

P/N IO620-IDT622: Maximum working pressure 100 bar (1,500 psi)

Pneumatic hose

Pneumatic hose terminated with quick fit connectors compatible with the test point adapters supplied with the PV62XG, MC620G and the adapter sets.

P/N IO620-HOSE-P1-IS: 1 m/3.28 ft pneumatic hose. Maximum pressure 400 bar (5,800 psi)

P/N IO620-HOSE-P2-IS: 2 m/6.56 ft pneumatic hose. Maximum pressure 400 bar (5,800 psi)

Hydraulic hose

A high pressure hydraulic hose rated to 1,000 bar (15,000 psi) and terminated with quick fit connectors compatible with the test point adapters supplied with the PV62XG, MC620G and the adapter sets. The hose is self sealing to avoid leakage when disconnected.



P/N IO620-HOSE-H1-IS: 1 m/3.28 ft hydraulic hose P/N IO620-HOSE-H2-IS: 2 m/6.56 ft hydraulic hose

Accessories

Pressure adapter set (for safe and hazardous area use)

A set of test point adapters to connect the tool less quick fit PV62XG, MC620G and the extension hoses to the device under test.

P/N IO620-BSP: G1/8 male and G¼ male, G¼ female, G3/8 female and G½ female

P/N IO620-NPT: 1/8" male and 4" male, 4" female, 3/8" female, and 2" female

P/N IO620-MET: 14 mm and 20 mm female





(P/N IO620-COMP-NEW)

Comparator adapter (for safe and hazardous use)

Allows the PV62XG pressure station to be used as a comparator. The adapter connects to the stations pressure port and provides two outlet ports for making gauge comparisons. Compatible with the test point adapters supplied with the PV62XG and the adapter sets.



(P/N IO620-BLANK) Blanking plug (for safe and hazardous use)

Allows the PV621G and 622G to be used as pressure generators independently of the DPI620G and PM620 by blanking the PV62XG pressure module port. Not required for the PV623G as the port is self-sealing.



(P/N IO620-104 ADAPT)

DPI 104 gauge adaptor (for safe and hazardous use)

Allows a DPI 104 digital pressure gauge to be connected to the PV62XG pressure module port in place of DPI620G and PM620 to provide a simple low cost pressure calibrator.





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