DYNAMIC GD4200HUSB

HYDROGEN COMPATIBLE USB PRESSURE TRANSDUCER

- Compatible for use within Hydrogen based environments
- Sample rate software selection up to 1,000 Hz
- Silicon-on-Sapphire pressure sensor technology
- Choice of pressure ranges from vacuum to 5,000 bar
- Accuracy (NLHR) ±0.15% of span BFSL
- Auto detect and configuration
- USB 2.0 compatible
- ESI-USB© downloadable software with auto update
- Measure & record up to 16 pressure inputs together
- Create customised test certificate
- Automatic temperature compensation
- Support for easy integration with applications created by C#, VB, Labview and Excel VBA (api dll library)
- 2m lead & carry case included

Vers. 21/12/Eng

RoHS 2011/65/EU

BIBUS

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Description

The GD4200HUSB © Digital Pressure Transducer has been designed to measure, analyse and record pressure directly on your PC without the need for costly I/O interface boards. It allows the user to measure up to 16 pressure inputs simultaneously and easily create customised test certificates.

The transducer is USB 2.0 compatible and connects via a detachable USB lead. The data is captured by the ESI-USB© configurable Windows Interface software, and presented on-screen in real-time without loss of accuracy or bandwidth. It is compatible with Windows© 8, 8.1 and 10 and configures automatically with your desktop, laptop or tablet via USB protocol. It has instant connection and will automatically detect when a sensor is connected. The sample rate enables dynamic pressures to be measured with up to 21 bit resolution at user selectable speeds up to 1,000 Hz. Data can be displayed in graphical or tabular form, with a choice of pressure units and fully adjustable scales. Data can be saved to a file or exported to Excel, PDF and .csv.

The ESI-USB software has many features including certificate generation, customisable certificate templates, leak testing, measure, record and view up to 16 sensors at the same time, virtual differential pressure measurement, set automatic test start and stop times, and alarm levels for each individual sensor. We are continually enhancing the ESI-USB software, and the auto-update feature means that you will never miss a new version.

The unique Silicon-on-Sapphire sensor technology provides outstanding performance and gives excellent stability over a wide temperature range. Excellent measurement accuracy provides high resolution with a precision greater than 1 in 10,000. Nine pressure ranges have been carefully selected to enable the user to cover any pressure that the application requires, from vacuum up to 5,000 bar, via the use of the ESI-USB© digitally self scaling software.

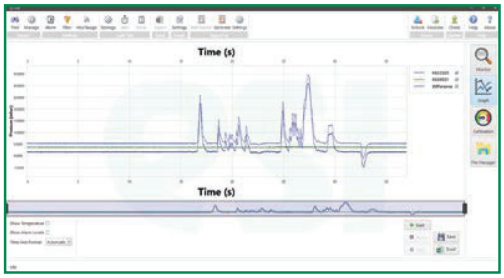
Each unit requires free download of the ESI-USB© software and is supplied with 2m USB lead (rated to IP68), and a convenient carry case.

The suitability of the material for use with Hydrogen is confirmed following compatibility testing based on ISO 11114-2:2017 according to the European Regulations EC 79/2009 and EU 406/2010

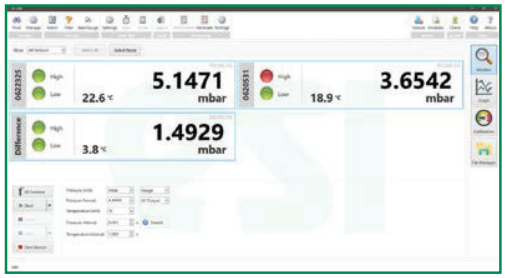
Dimensions
(in mm)

1/4" BSPM (G1/4) OR 1/4" NPTM OR F250-C

ESI-USB Software



Graph Screen



Monitor Screen

Technical Data

Type	GD4200HUSB
Sensor Technology:	Silicon-on-Sapphire (SoS)
Output Signal:	USB 2.0 compatible
Supply Voltage:	5 VDC via USB bus
Pressure Reference:	Gauge (default); Absolute reference input by user
Standard Pressure Ranges:	-1 to 2.5 bar; 0 – 16 bar; 0 – 100 bar; 0 – 400 bar; 0 – 1,000 bar; 0 – 1,500 bar; 0 – 2,000 bar; 0 – 4,000 bar, 0 – 5,000 bar
Standard Pressure Ranges (other):	User selectable for psi and other measurement units
Overpressure Safety:	2x up to 400 bar; 1.5x for 1,000 bar; 1.1x for 1,500 bar; 1.5x for 2,000 bar; 1.25x for 4,000 bar; 1.2x for 5,000 bar;
Accuracy NLHR:	≤ ±0.15 % of span BFSL
Sample Rate:	User selectable to 1,000 samples per second (1,000 Hz) Resolution: 21 bits for ≤5 Hz; 16 bits for >5 - 1,000 Hz
Operating Ambient Temperature:	-20 °C to +85 °C (-4 °F to +185 °F)
Operating Media Temperature:	-50 °C to +125 °C (-58 °F to +257 °F)
Storage Temperature:	+5 °C to +40 °C (+41 °F to +104°F) Recommended Best Practice
Temperature Effects:	±1.5 %FS total error band for -10 °C to +80 °C. Typical thermal zero and span coefficients ±0.015 %FS/ °C
Electromagnetic Compatibility:	EN61326-1, EN61326-2-3 (Laboratory equipment)
Wetted Parts:	Titanium alloy
Pressure Media:	Hydrogen and all fluids compatible with Titanium alloy
Pressure Connection:	1/4" BSP male (G1/4); 1/4" NPT male or F250-C (Autoclave)
Electrical Connection:	Mating to USB mini B socket for cable connection to PC. Supplied with 2m USB lead rated to IP68 as standard.
Software compatibility:	Windows 8, Windows 8.1 and Windows 10
Net. Weight (Kg):	0.4 Kg

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Order Matrix

Output	Type	Electrical Connection	Pressure Range	Process Connection
Dynamic (1,000 Hz)	GD4200HUSB			

Electrical Connection	
Mating to USB mini B socket	-

Pressure Range in bar	
-1 to 2.5 bar	02.5
0-16 bar	0016
0-100 bar	0100
0-400 bar	0400
0-1,000 bar	1000
0-1,500 bar	1500
0-2,000 bar	2000
0-4,000 bar	4000
0-5,000 bar	5000

Process Connection	
1/4" BSP male (G1/4)	AB
1/4" NPT male	AM
Autoclave F-250-C female (for pressures above 1,500bar)	DE

Order Number Example	GD4200HUSB1500AB

For options not listed please contact the sales team

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SUCO GROUP WORLDWIDE