Genspec®

DYNAMIC GD4200-USB

USB PRESSURE TRANSDUCER

- 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

RoHS 2011/65/EU

CE

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Description

The GD4200-USB© Digital Pressure Transducer has been designed to measure, analyse and record pressure directly on your computer 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.

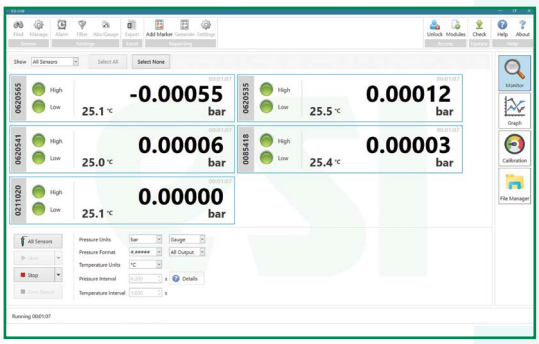
The transducer is powered by the computer's USB port, data is then presented on the PC via the ESI-USB© configurable Windows Interface software. It has instant connection with auto-detection, and will configure automatically with your desktop, laptop or Windows tablet via USB protocol. The sample rate enables dynamic pressures to be measured with up to 21 bit resolution at user selectable speeds up to 1,000 Hz. For real-time analysis, data transferred to the PC is achieved without loss of accuracy or bandwidth. This pressure transducer is USB 2.0 compatible, the ESI-USB© interface configuration and analysis software is compatible exclusively with Windows© 7 (32bit & 64bit), 8, 8.1 and 10. 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.

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.

ESI-USB© software

Graph Screen



Monitor Screen

Dimensions (in mm)

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

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Technical Data

Type:	GD4200-USB
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:	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 7, Windows 8, Windows 8.1 and Windows 10

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Order Matrix

Output	Type	Electrical Connector	Pressure Range	Process Connection
USB 2.0 full speed connection	GD4200-USB			

Electrical Connection / Option	Electrical Connector
Mating to USB mini B socket	–

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

Process Connection	Process Connection
1/4" BSP male (G1/4)	AB
1/4" NPT male	AM
Autoclave F-250-C female (for pressures above 1500bar)	DE

Order Number Example	GD4200-USB**1500AB**

For options not listed please contact sales team.

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