Genspec®
GS4200-USB

Digital Pressure Transducer

- USB powered digital pressure transducer

- Silicon-on-Sapphire sensor technology

- Choice of pressure ranges from vacuum to 4,000 bar

- Accuracy 0.15% NLHR

- Auto detection and configuration

- USB 2.0 compatible

- ESI-USB© downloadable software with auto update

- Measure & record up to 16 pressure inputs together

- Automatic temperature compensation

- Create customised test certificates

- 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

SILICON-ON-SAPPHIRE TECHNOLOGY

SOS

CE

esi

Genspec® GS4200-USB
Digital Pressure Transducer

Description

The GS4200-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. 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 4,000 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.
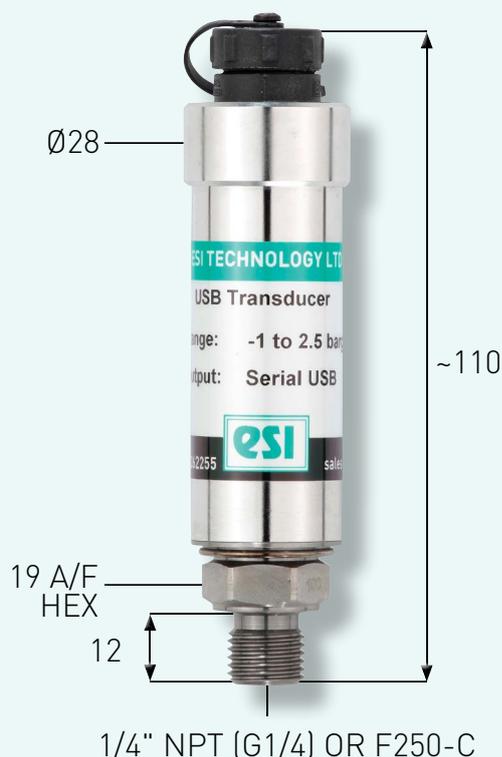
ESI-USB© software

Graph Screen

Monitor Screen

Dimensions (in mm)

Ø28

~110

19 A/F HEX

12

1/4" NPT (G1/4) OR F250-C

Genspec®GS4200-USB
Digital Pressure Transducer

Technical Data

Type:	GS4200-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
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
Accuracy NLHR:	≤ ±0.15 % of span BFSL
Sample Rate:	User selectable to 5 readings per second (5Hz); resolution [3] 21 bits
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 -20 °C to +70 °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	GS4200-USB			
Electrical Connection / Option				
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	
0-1,500 bar			1500	
0-2,000 bar			2000	
0-4,000 bar			4000	
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	GS4200-USB1500AB

For options not listed please contact sales team.

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