



Genspec[®] GS4200-USB

USB POWERED 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 supplied with the transducer. It has instant connection with auto-detection, and will configure automatically with your desktop or laptop pc 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 1.1 and USB 2.0 compatible, the ESI-USB[®] interface configuration and analysis software is compatible with Windows[®] 7 (32bit & 64bit), Vista, XP & 2000. 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.

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. Pressure ranges are available from 2.5bar to 4000bar. Each unit is supplied with ESI-USB[®] software, 2m USB lead rated to IP68 and a convenient carry case.

- SILICON-ON-SAPPHIRE SENSOR TECHNOLOGY
- PRESSURE RANGES 0-2.5bar TO 0-4000bar
- ACCURACY 0.15% NLHR
- AUTO DETECTION AND CONFIGURATION
- USB 1.1 AND USB 2.0 FULL SPEED COMPATIBLE
- ESI-USB[®] SOFTWARE SUPPLIED
- 2M LEAD & CARRY CASE INCLUDED
- MEASURES UP TO 16 INPUTS SIMULTANEOUSLY
- CREATE CUSTOMISED TEST CERTIFICATES
- INCLUDES BUILT-IN TEMPERATURE MONITORING

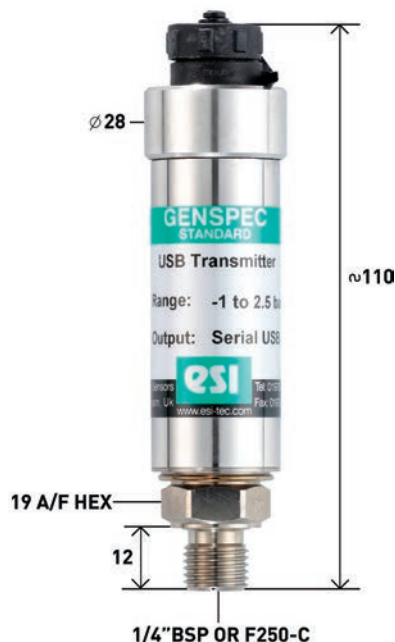


PRESSURE RANGES

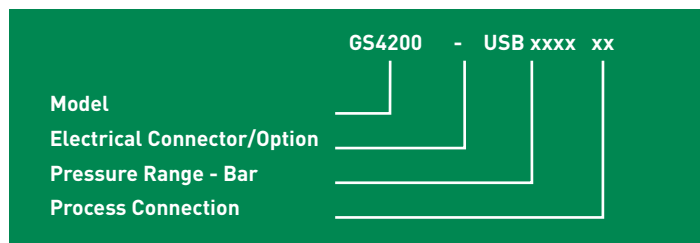
-1 to 2.5bar through to 4000 bar, see table below for list of all standard pressure ranges.

Range (bar)	Order Code	Range (bar)	Order Code
-1-2.5	02.5	0-2000	2000
0-16	0016	0-3000	3000
0-100	0100	0-4000	4000
0-400	0400		
0-1500	1500		

DIMENSIONS (in mm)



ORDERING INFORMATION



ELECTRICAL CONNECTION/OPTION

2 metre A to USB mini B lead

PROCESS CONNECTION

1/4" BSP male thread

1/4" NPT male thread

9/16" x 18 UNF-2B F250C Autoclave (2000bar +)

EXAMPLE

2 metre A to USB mini B lead

Pressure range 0-100barg

Pressure connection 1/4" BSP male

Correct Part Number

For options not listed contact sales team

Order Code

GS4200-USB

Order Code

AB

AM

DE

Order Code

GS4200-USB

0100

AB

GS4200-USB0100AB

DISCLAIMER :

ESI Technology Ltd operates a policy of continuous product development. We reserve the right to change specification without prior notice. All products manufactured by ESI Technology Ltd are calibrated using precision calibration equipment with traceability to international standards.



SPECIFICATION

PRESSURE REFERENCE

Gauge (default). Absolute reference input by user.

OVERPRESSURE

Pressure can exceed rated range by the multiple shown below with no damage or change in calibration above $\pm 0.5\%FS$.

2x for ranges up to 400bar

1.5x for 1500bar

1.5x for 2000bar

1.25x for 4000bar

OUTPUT SIGNAL

USB 1.1 and USB 2.0 full speed connection.

RECALIBRATION

Fully configured and re-calibrated via PC software, including pressure unit selection linearity and temperature compensation adjustment.

SUPPLY VOLTAGE

5Vdc via USB bus.

ACCURACY (NON LINEARITY, HYSTERESIS & REPEATABILITY)

$\pm 0.15\%FS$ Typical Max. Best fit straight line.

PRESSURE MEDIA

All fluids compatible with titanium alloy.

RESOLUTION

Up to 21 bit pressure measurement.

OPERATING TEMPERATURE RANGE

Ambient: $-20^{\circ}C$ to $+85^{\circ}C$

Media: $-50^{\circ}C$ to $+125^{\circ}C$

Storage: $+5^{\circ}C$ to $+40^{\circ}C$

ELECTROMAGNETIC CAPABILITY

Certification: CE marked

PRESSURE CONNECTION

1/4" BSP 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.

