ALTHEN
SENSORS & CONTROLS

bar **AGS4200-USB**
Digital Pressure Transducer

■ SPECIFICATIONS

- USB powered digital pressure transducer
- Silicon-on-Sap nology
- Choice of press acuum to 4,000 bar
- Accuracy 0.15%
- Auto detection
- USB 2.0 compa
- ESI-USB© dow re with auto update
- Measure & rec ure inputs together
- Automatic tem sation
- Create customi es
- Support for eas applications created by C#, VB, Labv A (API .dll library)
- 2m lead & carr

ESI TECHNOLOGY LTD.
MODEL : HI2010-002
RANGE : 0-25 barg
OUTPUT : 0-100 mV

USB Transducer
-1 to 2.5 barg
Serial USB

USB Transducer
0-4000 barg
Serial USB

CE RoHS 2011/65/EU

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DESCRIPTION

The AGS4200-USB© 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.
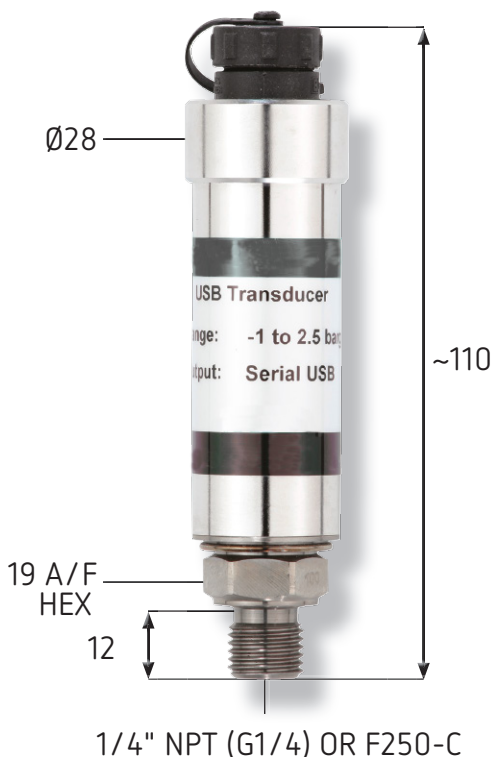
The transducer is USB 2.0 compatible and connects via a detachable USB lead. The data is captured by the ESI-USB© configurable Windows Interface software, and presented onscreen in real-time without loss of accuracy or bandwidth. It is compatible with Windows© 8, 8.1 and 10 and configures automatically 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 pressures to be measured with up to 21 bit resolution at user selectable speeds up to 5 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. Dimensions (in mm) 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 advancing the ESI-USB software, and the auto-update feature means that you will never miss a new version.
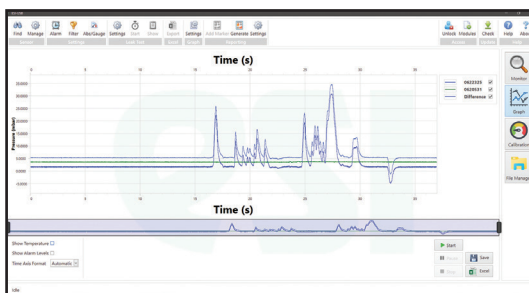
The unique Silicon-on-Sapphire sensor technology provides outstanding performance and gives excellent stability over a wide temperature range. Excellent measurement accuracy provides high resolution with a precision greater than 1 in 10,000. Nine pressure ranges have been carefully selected to enable the user to cover any pressure that the application requires, from vacuum up to 4,000 bar, via the use of the ESIUSB © 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.
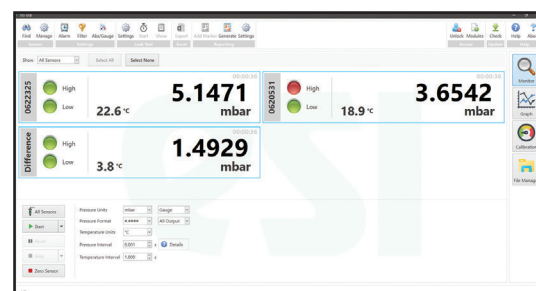
DIMENSIONS (in mm)

Ø28

USB Transducer
nge: -1 to 2.5 bar
tput: Serial USB

~110

19 A/F
HEX

12

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

ESI-USB SOFTWARE

Graph Screen

Monitor Screen

ALTHEN
SENSORS & CONTROLS

■ TECHNICAL DATA

Type	AGS4200-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 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
Standard (20 Hz)		AGS4200-USB			
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	
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	AGS4200-USB1500AB

For options not listed please contact the sales team

ACCESSORIES

USB-CAB Mini USB Cable

- IP68 rated
- USB V2.0 performance
- Shielded system
- Overmoulded cables
- Screw coupling
- Dust and waterproof to EN60529
- Data rates up to 480Mbs
- High noise immunity
- Secure, proven locking system
- EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

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Althen stands for pioneering measurement and custom sensor solutions. In addition we offer services such as calibration, design & engineering, training and renting of measurement equipment.

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