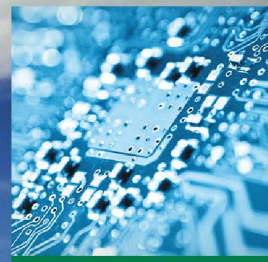
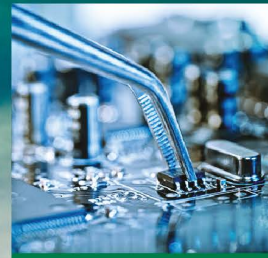


Pressure Transducers and Transmitters



Our Key Markets...

Pressure measurement plays an important role in many applications

ESI has become a respected industry leader due to the wide scope and high quality of our product range.

Using a variety of state of the art technologies, our pressure transducers and transmitters can measure from a few inches of water column up to 5,000 bar pressure.

Our early success was founded on designing and manufacturing solutions for exacting aerospace and defence applications, today we serve an extensive range of major industries

- Aerospace
- Automotive
- Clean Rooms
- Defence
- Depth & Level
- Hydraulic
- Marine
- OEM
- Oil, Gas & Subsea
- Process & Industrial
- Test Calibration



Customer Service

Our objective is to create close working partnerships with our customers. Our dedicated sales team strive to understand your application by closely listening to your requirements in order to advise you promptly and accurately on the ideal solution.



Global

A significant proportion of our sales are exports, so it is imperative that we have clear communication channels with the rest of the world. The development and extension of our sales network shows a thriving enterprise and we now have more than 45 sales partners across 41 countries.



Standards

Our customers expect high performance from their ESI product. Achieving this requires flawless execution across the entire supply chain. From design and sourcing quality components through to shipment, our quality control and inspection procedures ensure that each and every unit that leaves our premises conforms to the highest standards. We operate to a Quality Management System approved to ISO 9001:2008 and ISO/IEC 80079-34:2011. We also conform to aerospace and military standards.



SOS Technology

Unbeatable performance, high accuracy, excellent chemical compatibility

Silicon-on-Sapphire sensor technology has redefined the performance capability of ESI products.

The outstanding elastic properties of the sapphire substrate provide the perfect platform on which to create a pressure sensor with no measurable hysteresis and superb repeatability.

The measurement sensitive element consists of a silicon piezoresistive strain gauge microcircuit. The single crystal silicon forms a strong molecular bond to a sapphire substrate which is joined to a robust titanium alloy pressure diaphragm through a high temperature diffusion process. The excellent insulation properties of the sapphire allow the sensor to operate over a very wide temperature range without loss of performance.

Combined with all titanium wetted parts, this sensor offers unbeatable performance with high over pressures and excellent chemical compatibility.

SOS Technology features extensively throughout the ESI portfolio.



EX Certification

ESI has an extensive range of intrinsically safe transmitters, all ATEX and IECEx approved for explosion protection for flammable gases (zone 0), dusts (zone 20) and mining areas (group I MI).

Technical Marking:



II I G Ex ia IIC T4 Ga
II I D Ex ia IIIC T135°C Da
I M I Ex ia I Ma



Product Conditioning

At ESI we understand the difficulties faced by equipment manufacturers and the requirement to provide products that have been pre-conditioned to suit the working environment. We have developed comprehensive test facilities to enable us to offer Environmental Stress Screening (ESS) and Hyperbaric testing up to 4,000 metres depth.



Documentation

The provision of documentation to support products supplied to industry is usually beyond the scope of most quality systems, but with our extensive experience we have developed procedures to offer full and comprehensive document support including certificates of conformity, calibration certificates and material certificates for traceability.



ESI Technology Ltd

Product Range

Genspec GS4000

Standard Pressure Transmitter

- Suitable for the majority of industrial applications
- Pressure ranges available from 0-500 mbar to 0-700 bar
- Gauge or Absolute reference
- Reliable pressure measurement
- Long service life
- Robust yet compact designs



Genspec GS4200

General Purpose Pressure Transmitter

- Silicon-on-Sapphire sensor technology for outstanding performance
- Pressure ranges to 1500 bar
- Unblemished track record of reliability
- Excellent corrosion resistance
- High strength titanium pressure port
- High resistance to overpressure and pressure transients
- ATEX/IECEx option available (includes M1 for mining applications)
- DNV GL certification available



GenSpec *DYNAMIC*

GD4200-USB

USB Powered Digital Pressure Transducer

- Sample rate software selection up to 1,000 hz
- Choice of pressure ranges from vacuum to 5,000 bar
- Accuracy (1nhr) $\pm 0.15\%$ of span bsl
- 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 certificates
- 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



Hispec HI2000 Series

High Precision Pressure Transducer

- High accuracy and performance
- Silicon-on-Sapphire sensor technology for outstanding stability
- Pressure ranges to 1,500 bar
- Titanium wetted parts for excellent chemical compatibility
- High thermal stability over wide operating temperature
- ATEX/IECEx option available (includes M1 for mining applications)
- TEDS Version available



Hipres HP1000

High Pressure Transmitter

- Pressure ranges to 5,000 bar
- High pressure integrity for safe use due to unique sensor design
- Pressure diaphragm and process connection is machined from one piece of Titanium with no seals or welds
- High resistance to overpressure and pressure transients
- Silicon-on-Sapphire (SOS) sensor technology for outstanding performance and reliability
- ATEX/IECEx option available (includes M1 for mining applications)



Lopres LP1000 Series

Low Pressure Transmitter

- Piezoresistive sensor technology for high performance
- Low pressure measurement from 50 mbar
- Robust stainless steel construction for durability
- Low hysteresis and excellent long term stability
- Wide operating temperature
- On-site zero and span adjustment



www.esi-tec.com

Our wide range of pressure transducers and transmitters incorporate the superior Silicon-on-Sapphire sensor technology to make one of the most advanced ranges available on the market

Protran PR3200

Differential Pressure Transmitter

- Wide range of pressure ranges to 200 bar DP
- WET/WET or DRY/DRY operation
- Available for gauge reference or bi-directional measurement
- Durable designs for industrial and commercial installations
- R.F.I. SHIELDED for protection against electromagnetic radiation
- ATEX/IECEx option available (includes M1 for mining applications)



Protran PR3202

Low Pressure Differential Transmitter

- Wide range of low pressure ranges from 0-5 mbar
- Available for gauge reference or bi-directional measurement
- Durable designs for industrial and commercial installations
- ATEX/IECEx option available (includes M1 for mining applications)



Protran PR3920

Subsea Differential Pressure Transmitter

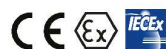
- Silicon-on-Sapphire sensor technology for outstanding performance
- Standard sensing range 0-50 bar DP
- 690bar line pressure
- 1200bar secondary containment
- Submersion to 3000 mtrs sea level
- High accuracy option
- NACE corrosion resistance
- ATEX/IECEx option available (includes M1 for mining applications)



Protran PR3800 Series

Flush Diaphragm Pressure Transmitter

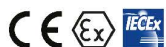
- Easy clean flush membrane to prevent clogging
- Thick film sensor technology for long service life
- Pressure ranges to 40 bar
- Range of sanitary grade pressure fittings
- ATEX/IECEx option available (includes M1 for mining applications)



Protran PR3850

Flush Diaphragm Pressure Transmitter

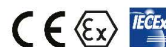
- Easy clean flush membrane to prevent clogging
- Thick film sensor technology for long service life
- Pressure ranges to 400 bar
- Integral O-ring seal to ensure flush pressure seal
- ATEX/IECEx option available (includes M1 for mining applications)



Protran PR3860

High Temperature Pressure Transmitter

- High operating temperatures of up to 250 °C
- Easy clean flush membrane to prevent clogging
- Thick film sensor technology for long service life
- Pressure ranges to 400 bar
- Good chemical compatibility for a range of applications
- Integral O-ring seal option to ensure flush pressure seal
- ATEX/IECEx option available (includes M1 for mining applications)



To view our complete portfolio please visit www.esi-tec.com

Protran PR3913

Control Valve Pressure Transmitter

- Silicon-on-Sapphire sensor technology for outstanding performance
- Submersion to 3,000 mtrs sea level
- Pressure ranges available to 1,000 bar
- High accuracy option
- Hyperbaric testing to 3,300 m depth
- Environmental Stress Screening (ESS Testing)
- Suitable for ROV and deep sea test equipment
- Comprehensive documentation package and certification
- ATEX/IECEx option available (includes M1 for mining applications)



Protran PR3441

Submersible Depth/Level Pressure Transmitter

- Piezoresistive sensor technology for excellent stability and repeatability
- Robust stainless steel construction
- Pressure ranges available from 0-1mWG
- strength, moulded cable for protection against ingress
- ATEX/IECEx option available (includes M1 for mining applications)
- DNV GL certification available



Protran PR3442

Slim Submersible Depth/Level Pressure Transmitter

- Slimline 16mm diameter
- Piezoresistive sensor technology for excellent stability and repeatability
- Robust stainless steel construction
- Pressure ranges available from 0-50 mWG
- High strength, moulded cable for protection against ingress



Protran PR3900

Hazardous Area Pressure Transmitter

- ATEX and IECEx certified
- Designed for operation in zone 0, zone 20 and M1 mining
- Wide choice of pressure ranges from 0-10 bar to 0-1,500 bar
- NACE corrosion resistant materials
- Rugged, weatherproof design
- DNV GL certification available



Protran PR9000

Heavy Duty Pressure Transmitter

- Silicon-on-Sapphire sensor technology for outstanding performance and reliability
- Pressure ranges up to 1500 bar
- All stainless steel, robust construction for harsh environments
- Wetted parts in various materials
- ATEX/IECEx option available, including M1 for mining applications



Protran PR9500

Wireless Pressure Transmitter

- Wireless for lower installation cost and maintenance
- Silicon-on-Sapphire sensor technology for outstanding performance and reliability
- Pressure ranges up to 1500 bar
- All stainless steel, robust construction for harsh environments
- Wetted parts in various materials
- Paired with RX9500 radio receiver

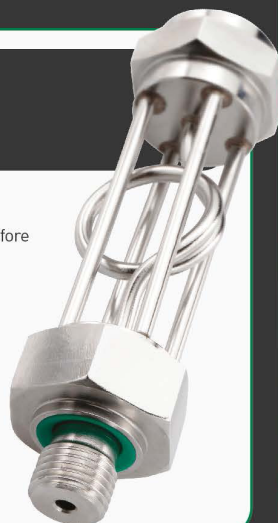


Accessories

ADHT

High Temperature Cooling Coil Adapter

- For use with media up to 200 °C
- Reduces the temperature of the media before coming in to contact with the transmitter
- Safe to use with pressures up to 400 bar
- For use with steam or hot gases
- A range of process connections available
- Great chemical compatibility



PM1000 Series

Plug-in Display

- Indication range -999 to 9999
- Plugs on to any transmitter with 4-20 mA output
- Bright LED display
- Set point option
- Easy to use
- Provides compact localised display



PM8005/6

Panel Meter

- AC and DC supply options
- 5 digit LED display
- Direct access menu
- Functions for calibration, alarm setting and more
- Wide range of optional functions



The custom design service from ESI

From Conception to Completion.....

Whatever your application may be, there are times when your requirements aren't so straight forward and you need a tailor made pressure measurement solution to your unique specifications.

ESI Technology specialise in the design and manufacture of pressure transducers and transmitters. In addition to our standard range of instruments our team of qualified engineers, with extensive experience in electronic, software and mechanical instruments, offer a complete design service using the latest technologies.

Sensor technology, pressure port threads, output signals, pressure ranges, electrical connections and wetted parts can be adapted to customer requirements. Stringent quality control and inspection is exercised at every stage of the manufacturing process to ensure our customers complete satisfaction with the end product, backed up with technical advice and support. We maintain customer focus and high quality regardless of whether your project is small, mid or high volume.

If you have an application headache and a standard instrument just won't do, please talk to our sales team about how we can design and build an engineered pressure measurement solution for you.

About us

Since our establishment in the 1980's, ESI Technology Ltd has been at the heart of the pressure measurement industry, specialising in the design and manufacture of pressure transducers and pressure transmitters.

Our focus has been on specialist applications using state-of-the-art sensing technologies including the innovative **Silicon-on-Sapphire strain gauge**. Due to our expertise in such a niche field, the team are able to analyse and interpret customer specific requirements and create a product that meets, and more often than not exceeds, the exact needs of the application in order to eradicate any compromise from the customer.

Our portfolio boasts solutions for applications:

- Oil & Gas
- Subsea
- Marine
- Aerospace
- Defence
- Hydraulics
- Depth & Level
- Hazardous Area
- Automotive
- Process & Industrial
- Clean Rooms
- Test Calibration
- OEM Markets

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