

# PRODUCT OVERVIEW

A guide to products for the Oil & Gas,  
Petrochemical, Chemical and Power segments.

**Measurement and Control**


**Temperature Sensors**

**Grab Sampling Systems**

**Electronic Instrumentation**



**SOR**  
CONTROLS GROUP



**SOR® customer service representative discusses pressure solutions with a plant manager at a mining and cement facility in Sugar Creek, Missouri.**

# Pressure Transmitters

## 800 Series Compact Transmitters



815PT  
Smart  
Pressure  
Transmitter

- Includes Modbus communications
- HART® 7 with 4-20 mA or 1-5 VDC output
- Durable, compact 316 stainless steel explosion proof housing
- 9-way configurable normally-open solid state switch output
- Accuracy of +/-0.25% (URL)
- FM and ATEX certified for hazardous locations in U.S., Canada and Europe
- Dual Seal approval available
- 3 year warranty

815DT Smart  
Differential  
Pressure  
Transmitter



## 1800 Series Conventional Transmitters

- Gauge Pressure Ranges  
-1 psi to 1 psi through -14.5 psi to 14,500 psi  
-6 kPa to 6 kPa through -100 kPa to 100 MPa
- Differential Pressure Ranges  
-0.87 psid to 0.87 psid through -72.5 psid to 1,450 psid  
-6 kPa to 6 kPa through -500 kPa to 10 MPa
- 4-20 mA with optional HART®, 1-5VDC low power or Modbus output
- ±0.075% accuracy (F.S.)
- Aluminum explosion proof housing
- Standard push-buttons for setup
- Optional integral LCD display
- EMC (EMI/RFI) protection
- ATEX / IECEx certified for intrinsically safe and flameproof applications
- CSA certified for explosion proof applications
- 2, 3 & 5 valve manifolds available
- 3 year warranty



1800PT  
Conventional  
Gauge  
Pressure



1800PR  
Piezoresistive  
Gauge  
Pressure



1800DP  
Differential  
Pressure



1800RM  
Differential Pressure  
with Remote Mount  
Diaphragm Seals

1800DM  
Differential  
Pressure with  
Direct Mount  
Diaphragm Seal



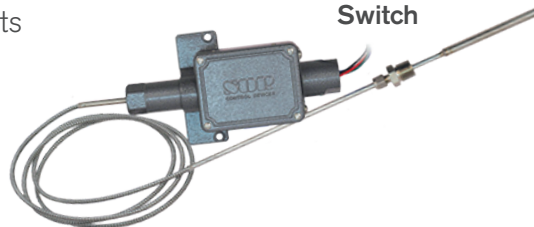
# Pressure and Temperature Switches



NN  
Pressure  
Switch

- Rugged, high-cycle rate of tolerance, long life, vibration resistant
- Excellent corrosion resistance to withstand demanding applications
- High resolution of set points
- Variety of process connections and sizes
- Weatherproof and explosion proof housings
- Wide selection of wetted parts
- No periodic service required
- Simple installation
- High repeatability
- Narrow dead band
- SIL Certified
- 3 year warranty – one of the longest in the industry

Big Hermet  
Temperature  
Switch



Mini Hermet  
Pressure Switch

# Level Switches

700 Series  
Top Mounted  
Displacer Level  
Switches



- Stainless steel switching mechanisms – no aluminum or brass
- Carbon or stainless steel construction, exotic materials available
- High pressure capabilities
- Wide variety of agency approvals
- Float, displacer and electronic level switches available
- Versatile switching mechanisms for retro-fit situations
- Excellent corrosion resistance to perform in harsh environments
- Easy to install and maintain with low cost of ownership
- 5 year warranty
- PED is available on some level products
- SIL certified

1500 Series  
Level Switches with  
Manual Check



100 & 200 Series  
Flanged, Sealed Steam  
Trap Chambered  
Level Switches



# Level Transmitters

- Versatile and long lasting
- Rugged, industrial quality transmitters designed to be versatile
- Models to handle all processes from liquids to solids
- Excellent performance in harsh conditions
- All SOR level transmitters may be customized to meet your specific requirements
- Variety of RF probes available for multiple applications
- Worldwide service and fast delivery
- Emergency shipments available
- Low cost of ownership
- Factory tested before shipping



815LT  
Submersible Smart  
Level-Pressure  
Transmitter



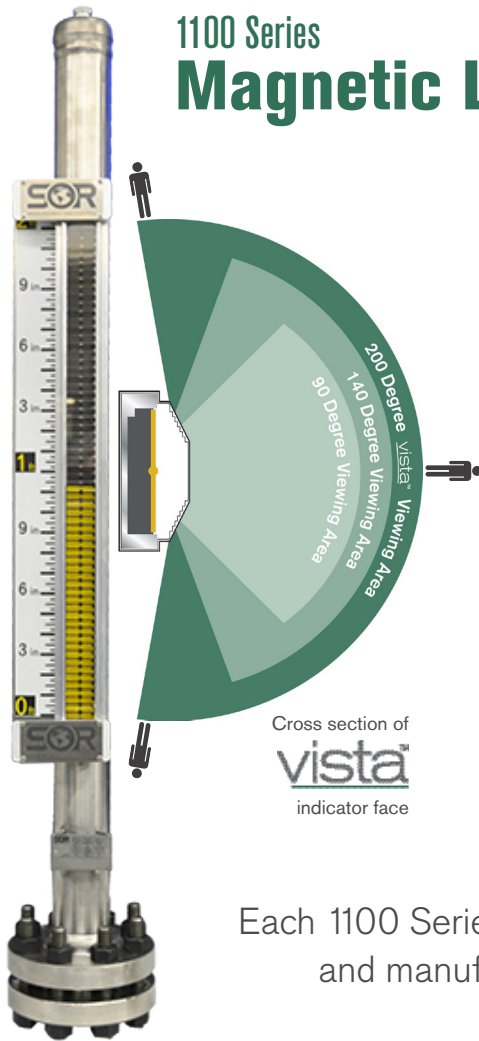
815DT  
Smart  
Differential  
Pressure  
Transmitter



670 Series  
RF Continuous  
Level  
Transmitters

Level switches and transmitters provide superior alarm and monitoring control for heavy industries such as power generation, refining, petrochemical and general manufacturing.

## 1100 Series Magnetic Level Indicators



Cross section of  
**vista**  
indicator face

- 200° viewing angle with **vista** indicator
- Forward viewing distance of 250 feet (76 meters)
- Chambers designed to ASME B31.1 B31.3 guidelines
- Schedule 10 & 40 316/316L stainless steel construction standard, schedule 80+ and other materials available
- ASME Section IX and AWS qualified welding system
- Standard dimensional drawings available at quotation
- No pressurized floats
- Interface detection capability
- NACE, CRN and PED certifications available
- High temperature and cryogenic designs suitable for extreme applications
- Extensive auxiliary instrumentation available
- 5 year warranty

Each 1100 Series MLI is engineered for your exact application and manufactured to our rigorous quality standards.

## 1000 Series Engineered Bypass Chambers

- Completely customizable design
- Chambers designed to ASME B31.1/B31.3 guidelines with certificates available
- 2-8" chamber size with Schedule 10 – XXS wall thickness in a wide variety of materials
- ASME Section IX and AWS qualified welding system
- Hydrotested @ 1.5 MAWP standard
- NACE, CRN and PED certifications available
- Inspections and testing certifications done to SOR standards or your specific requirements
- Extensive list of auxiliary instrumentation available
- 5 year warranty

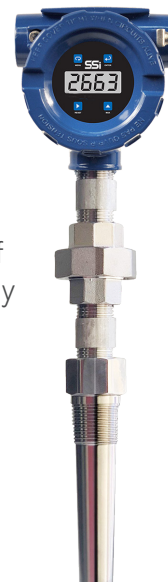


# Temperature Sensors and Thermowells

- Industrial, remote mount and field adjustable thermocouples and RTDs
- Sanitary RTDs and thermocouples
- High pressure thermocouples
- Hi temp and ceramic protection tube assemblies
- General purpose and specialty sensors
- Multipoint sensors and assemblies
- Transmitters and indicators
- Sample probes



- Complete custom application designs
- Size and material of thermowells are fully customizable
- Barstock and pipe thermowells
- Quick delivery on standard product offering



## Specialty Sensors

We offer a variety of specialty temperature sensors that can be customized to meet your specific application.



### Sample Probes

Used in applications where a representative sample needs to be extracted from a process.

### Multipoint Sensors

Typically used in applications where there is a need for temperature profiling at various points over distance.



### Tubeskin Thermocouples

Measures temperature of the tube wall to determine tube life and temperature trending along with detection of coke buildup on tubes.

### Custom Assemblies

We have the capabilities to help design and manufacture custom temperature solutions for a variety of applications.

### High Temp Assemblies

High temp assemblies are for applications where the temperatures are in excess of 2000°F/1093.3°C.



- High quality industrial temperature transmitters, signal isolators, signal conditioners, alarm trip and custom OEM designs
- Field proven wide range ambient designs
- IEC pre-compliance testing
- Standard dimensional drawings available at quotation
- 100% final test and inspection
- Nuclear qualified products are available
- 4 year warranty

## 2800 SERIES

### Universal T/C and RTD Temperature Transmitters

- Self-contained, programmable
  - Built in display
  - -40 to +85°C Ambient Installation
  - RFI protected
  - Accuracy: <1 °C or °F



## ALARM MODULES

### Critical and Dedicated Point Monitoring

- Inputs - VAC, AAC, VDC, mADC, T/C RTD
- Adjustable Time Delay
- Latching Action
- Adjustable Deadband
- 10A, SPDT Relay Output

## 100 SERIES

### Two Wire Temperature Transmitters (Hockey Puck Style)

- Temperature, T/C and RTD
- AC Current and AC Voltage
  - VDC and mVDC
  - Hz (Speed and rotation)
- -30°C to +85°C Ambient Installation



## 200/300 SERIES

### DIN Mounted Temperature Transmitters

- 2 and 3 Wire Output Powered
- Current and Voltage Outputs
- Temperature, T/C and RTD
- AC Current and AC Voltage
- Hz (Speed and rotation)
- -30°C to +85°C Ambient Installation



## ISOLATORS

### Solves Ground Loop Problems

- DIN and Hockey puck packaging
  - Input Loop Powered
- 2 and 3 Wire output loop power
  - Isolated Prime Power
- Quick shipment available



# Sampling Systems

- SENSOR Sampling has a design to meet all your liquid and vapor applications, even the most difficult and dangerous.
- Systems are designed to meet Leak Detection Repair (LDAR), Maximum Achievable Control Standards (MACT) and Volatile Organic Compounds (VOC) emission standards.
- PED compliant and TPED components can be supplied when required.
- Since no two sampling systems are exactly alike, each of our products is engineered to order.



## Low Vapor Pressure Liquids

- Inline Sampling Systems (**ISS**)
- Basic Bottle Sampling Systems (**BBSS**)
- Pressure Isolating Bottle Sampling Systems (**PIBSS**)

## Liquefied Gases and Vapors

- Liquefied Gas Sampling System (**LGSS**)
- Vapor Sampling System (**VSS**)



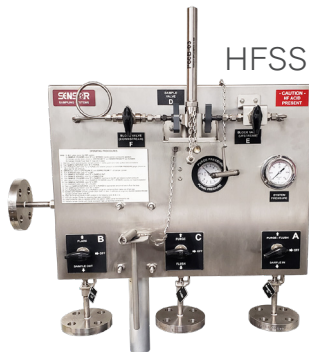
## Chemical Industry

- Inline Valve Sampling System (**IVSS**)



IVSS

HFSS



## Hydrofluoric (HF) Acid

- Hydrofluoric Acid (HF) (**HFSS**)

## Heavy Liquids

- Heavy Products Sampling System (**HPSS**)
- RAM Sampling System (**RSS**)



HPSS

## Other Applications



SHCSS



DTSS

- Steam Condensate & Boiler Blowdown (**SCSS**)
- Spot Sampling for Trace Gases (**DTSS**)
- Steam & Hot Condensate (**SHCSS**)
- Tank Farms (**TFSS**)
- Sulfuric Acid (**BBSS**)
- Phosgene (**SHFVSS**)

# 1800 Series PRESSURE TRANSMITTERS



SHORT LEAD TIMES



4-20 mA WITH OPTIONAL HART®, 1-5VDC  
LOW POWER OR MODBUS OUTPUT



±0.075% ACCURACY (F.S.)



ATEX/IECEX CERTIFIED FOR INTRINSICALLY  
SAFE AND FLAMEPROOF APPLICATIONS



CSA CERTIFIED FOR EXPLOSION  
PROOF APPLICATIONS



2, 3 AND 5-VALVE MANIFOLDS



3 YEAR WARRANTY

**1800DM**  
Differential Pressure with  
Direct Mount Diaphragm Seal



**1800PT**  
Conventional  
Gauge  
Pressure



**1800PR**  
Piezoresistive  
Gauge Pressure



**1800DP**  
Differential  
Pressure



**1800RM**  
Differential Pressure  
with Remote Mount  
Diaphragm Seals



## EASY | RUGGED | RELIABLE

### SALES OFFICES

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**Chennai, India** | +91 735 838 8250 | Fax +1 913-312-3572

**Dubai, UAE** | +971 4 278 9632 | Fax +1 913-312-3596

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### Houston, TX, US

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SENSOR Sampling Systems

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**SOR**  
CONTROLS GROUP