

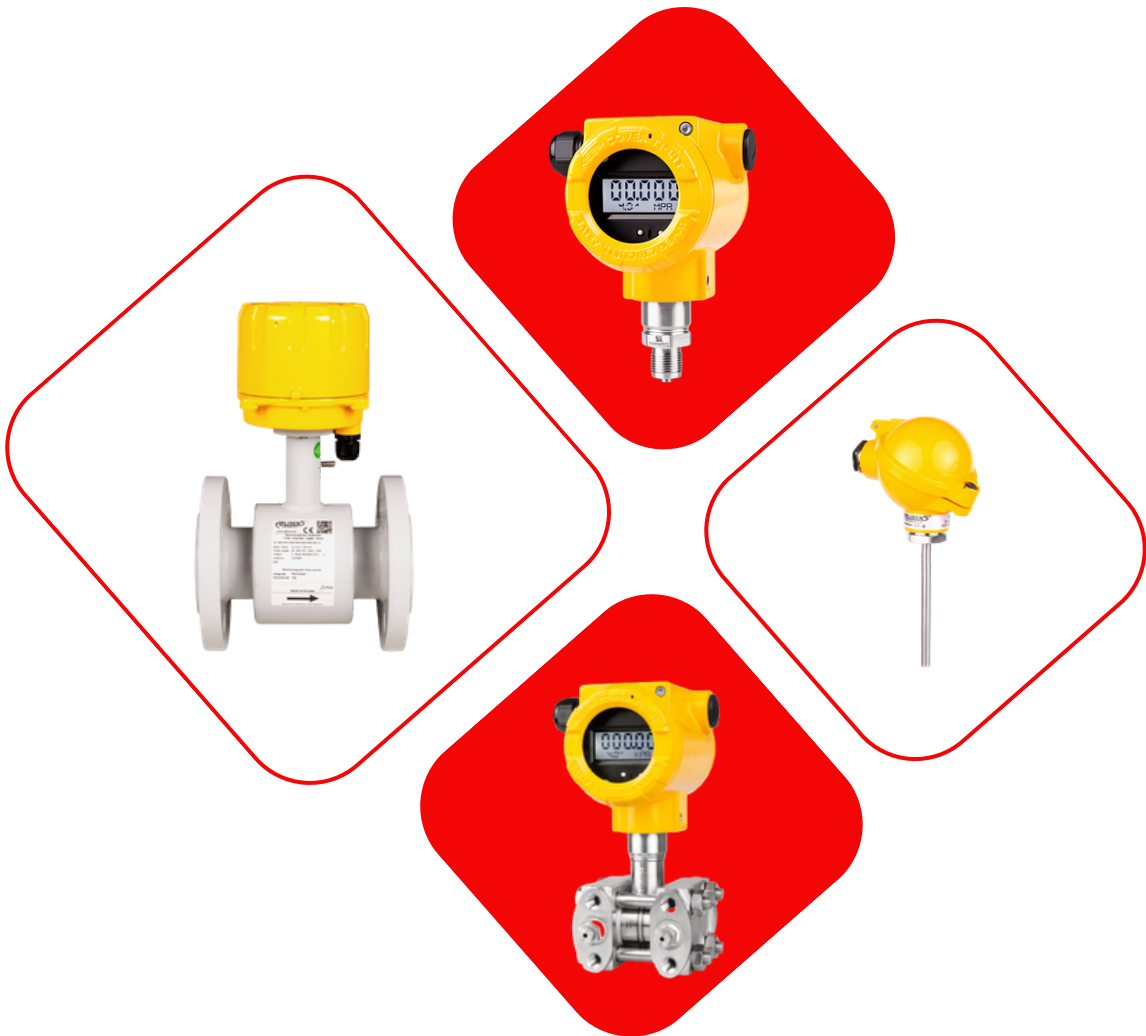


SAFE | ADVANCED | INNOVATIVE

— SENSING — ANALYSE — CONTROL —

Pressure • Differential Pressure Level • Temperature • Flow

High Precision • High Stability • High Reliability



Product Brochure

SAI Process Sensing For Oil & Gas Fields Equipment L.L.C



About us

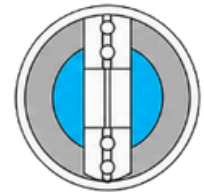
SAI Process Sensing For Oil & Gas Fields Equipment L.L.C is a Dubai-based instrumentation company supporting oil & gas and industrial process applications.

Through trusted partnerships, we provide access to reliable solutions for pressure, level, temperature, flow and process measurement.

Our focus is simple: safe, advanced and innovative instrumentation support for demanding industrial environments.



Brands We Work With



STAR-MECH



GAS DETECTION
a DwyerOmega brand



Instrumentation Valves,
Fittings and Accessories



ASR MET TECH PVT. LTD.
MANUFACTURER OF STAINLESS STEEL PIPES TUBES & "U" TUBES



HOME OF VALUES

Pressure



Pressure Transmitter

Range: up to 1000 bar
 Output: 4...20 mA + HART
 Accuracy: Up to 0.075% F.S
 Housing: Aluminum / 316 SS
 Connection: 1/2" NPT, M20x1.5, G1/2"
 Flush Diaphragm: G1/2", G1"



Smart Pressure Transmitter

Range: 0...5 mbar to 0...1000 bar
 Output: 4...20 mA + HART
 Accuracy: 0.1%
 Housing: 304 / 316 SS
 Connection: NPT / M20 / G1/2"
 Flush Diaphragm: G1/2", G1"



Pressure Transmitter with Modbus

Range: 0...5 mbar to 0...1380 bar
 Output: Modbus RTU / 4...20 mA
 Accuracy: 0.1%
 Housing: 304 / 316 SS
 Connection: NPT / M20 / G1/2"
 Flush Diaphragm: G1/2", G1"



Differential Pressure Transmitter

Range: 0...1 mbar to 0...70 bar
 Output: 4...20 mA + HART
 Accuracy: Up to 0.075% F.S
 Diaphragm: 316L SS / Hastelloy / Tantalum
 Housing: Aluminum / 316 SS



Remote Seal DP Transmitter

Range: 0...0.1 mH₂O to 0...16 bar
 Output: 4...20 mA + HART
 Accuracy: 0.1% F.S
 Housing Material: Aluminum / 316 SS



Differential Pressure Transmitter

Range: 0...16 mbar to 0...25 bar
 Overload Limit: Up to 413 bar static pressure
 Accuracy: 0.25% F.S
 Housing Material: Aluminum / 316 SS



Industrial Pressure Gauge

Range: Wide pressure range selection
 Dial Size: 4.5"
 Case: Solid-front safety case
 Wetted Parts: 316L SS available
 Connection: Multiple process connections



DP Gauge with Switch

Range: 0-150 psid
 Accuracy: ±2% F.S
 Connection: NPT options
 Housing: SS / Aluminum / Brass
 Static Pressure: Up to 6000 psi



Pressure Switch

Range: Vacuum to 15,000 psi
 Switch Output: SPDT / DPDT
 Housing Material: 316L SS
 Connection: 1/2" FNPT, Tri-Clamp®, G1/4"
 IP67 / NEMA 6 Protection

Level



Radar Level Transmitter

Distance: Up to 120 m
 Temperature: -196 to 450 °C
 Pressure: -1 to 160 bar
 Frequency: Up to 80 GHz
 Accuracy: ±1 mm
 Output: 4–20 mA + HART, Modbus, Profibus PA



Guided Radar Level Transmitter

Distance: Up to 75 m
 Temperature: -60 to 200 °C
 Process Pressure: -1 to 40 bar
 Accuracy: ±2 mm
 Output: 4–20 mA + HART, Modbus, Profibus PA
 Material: Plastic, Aluminum, SS



BT Radar Water Level Meter

Frequency: 76GHz–81GHz
 Range: 0.1m–65m
 Accuracy: ±1mm
 Beam Angle: 6°
 Output: 4–20mA + HART
 Temperature: -45°C ~ 85°C
 Housing Material: PP / Aluminum / SS



Magnetostrictive LT

Distance: Up to 22.8 m
 Temperature: -195 to 427 °C
 Process Pressure: -1 to 165 bar
 Accuracy: ±1.27 mm
 Output: 4–20 mA + HART
 Housing: Aluminum / 316 SS



Float Level Transmitter

Range: Model-dependent
 Output: 4–20 mA
 Material: 316 SS
 Connection: Flanged / threaded options
 Application: Continuous liquid level measurement



Submersible Smart Hydrostatic Level Probe

Measuring Range: 1...100 mH₂O
 Output: 4–20mA + HART
 Accuracy: 0.1% F.S
 Diaphragm: Hastelloy / 316L SS
 Titanium Version Available



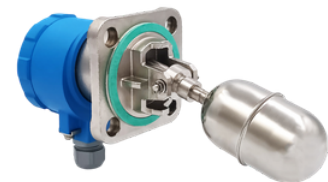
Magnetic Level Gauge

Measuring Range: -40...40 bar
 Process Temperature: -90°C ~ 400°C
 Accuracy: Up to 0.065% F.S
 Connection: ¼–18 NPT
 Housing: Plastic, Aluminum, SS
 Output: 4–20mA, HART



Potentiometric Level Transmitter with Gauge

Measuring Range: 1...100 mH₂O
 Output: 4–20mA + HART
 Accuracy: 0.1% F.S
 Diaphragm Material: Hastelloy / 316L SS
 Titanium Version Available



Level Switch

Application: Point level detection
 Types: Float, vibrating fork, capacitive, conductive, and more
 Output: SPDT / DPDT / PNP / NPN options
 Material: 316 SS / plastic / coated options
 Connection: Threaded / flanged options

Temperature & Humidity



Temperature Transmitters

Head Mounted, Rail Mounted & Industrial Transmitters
Output: 4–20mA + HART
Programmable Measuring Range
Suitable for Industrial Process Applications



Temperature Sensors

RTD & Thermocouple Temperature Sensors
Type K, J, T, E, N & PT100 Available
Temperature Range: -200°C to 1600°C
Custom Insertion Lengths Available



Humidity & Temperature Transmitters

Range: -20°C to 60°C / 0–100% RH
Accuracy: ±2% RH, ±0.3°C
Wall, Duct & Industrial Mounting Options



Temperature Controllers

PID Self-Tuning & ON/OFF Control
RTD & Thermocouple Compatible
MODBUS Communication Supported
Panel Mount Configurations Available



Temperature & Humidity Data Loggers

Humidity, Temperature, Pressure & Dew Point Monitoring
Storage Capacity: Up to 64,000 Records
Suitable for Industrial & Storage Applications



Temperature Displays

RTD & Thermocouple Compatible
Real-Time Temperature Monitoring
Panel, Wall & Field Mount Options
Programmable Alarm Functions



Temperature Switches

Setpoint Accuracy: ±1% F.S
SPDT / DPDT Switching Options
Explosion Proof Aluminum Housing
Direct & Remote Mount Versions
Suitable for Industrial Process Applications



Thermowells

Material: 316 SS / Hastelloy
Connection: Threaded / Flanged / Welded
RTD & Thermocouple Protection
Custom Insertion Lengths Available
High Pressure & Corrosion Resistance



Bimetal Thermometers

Accuracy: ±1.0% F.S
Aluminum Case Construction
Surface & Flush Mount Options
Bayonet, Hinged & Threaded Ring Styles
Suitable for Industrial Applications

Flow



Electromagnetic Flowmeter

Electromagnetic Flowmeter
 Size: DN 10...300 / ANSI 0.5"...12"
 Pressure: Up to 4 MPa
 Accuracy: 0.5%
 Output: 4...20 mA / pulse / frequency
 Communication: Modbus RTU / RS485



Vortex Flowmeter

Accuracy: $\pm 0.75\%$ liquids / $\pm 1.0\%$ gas & steam
 Size: DN15...DN300
 Material: Stainless steel
 Temperature: -40°C to 350°C
 Protection: IP67 enclosure
 Application: Liquid, gas and steam flow



Coriolis Mass flowmeter

Accuracy: $\pm 0.1\%$ liquids / $\pm 0.5\%$ gases
 Measurement: Mass flow, density and temperature
 Output: 4...20 mA / pulse
 Communication: HART / Modbus
 Application: Liquid and gas flow measurement



Thermal Mass Flowmeter

Measurement: Direct gas mass flow
 Accuracy: Up to $\pm 1.0\%$
 Sensitivity: Low gas velocity detection
 Output: 4...20 mA / pulse
 Communication: HART / Modbus
 Application: Gas flow monitoring



Variable area Flowmeter

Media: Liquids and gases
 Output: Local indicator / 4...20 mA + HART
 Material: 316L SS wetted parts
 Connection: Threaded / flanged / Tri-Clamp options
 Temperature: Up to 400°C



Ultra sonic Flowmeter

Accuracy: Up to $\pm 0.5\%$
 Output: 4...20 mA / pulse / relay
 Communication: Modbus RTU / RS485 / HART
 Design: Inline / clamp-on options
 Pressure Drop: Zero pressure drop



Pitot Tube Flow Sensor

Accuracy: $\pm 1.0\%$ to $\pm 2.0\%$ F.S
 Material: SS316
 Temperature: -50°C to 500°C
 Output: 4...20 mA / HART option
 Design: Low-profile insertion type
 Application: Stable flow monitoring



Venturi flowmeter

Accuracy: $\pm 0.5\%$ to $\pm 1.5\%$ F.S
 Size: DN50...DN1200+
 Output: DP transmitter compatible
 Signal: 4...20 mA / HART / Modbus
 Energy Recovery: Up to 90% pressure recovery



Restriction Orifice Flowmeter

Accuracy: $\pm 1.0\%$ to $\pm 2.0\%$
 Size: DN15...DN1000+
 Material: SS316 / Monel / Hastelloy
 Temperature: Up to 600°C
 Rating: High-pressure service
 Application: Flow restriction and pressure drop control

Gas Detection



Fixed Gas Detector Transmitter

Gas Types: Toxic, combustible and O₂
 Sensors: Single / dual sensor options
 Display: Color TFT display
 Communication: Modbus TCP / RS-485
 Enclosure: Poly / Aluminum / SS
 Relays: 3 programmable relays + fault relay



Wireless Gas Transmitter

Gas Types: Toxic, combustible and O₂
 Sensors: Single / dual sensor options
 Wireless: 900 MHz / 2.4 GHz radio
 Power: Lithium battery operated
 Mounting: Magnetic mount option
 Enclosure: Poly / Aluminum options



Flame Detector

Detection Type: IR3 / UV-IR options
 Application: Fire and explosion detection
 Feature: High false alarm immunity
 Output: Alarm / fault event logging
 Options: HD video recording available
 Mounting: Tilt mounting bracket



Sample Draw Assembly

Application: Remote gas sampling
 Sensors: Single / dual sensor support
 Use: Tanks, ducts, vessels and confined spaces
 Display: Status indicating color display
 Calibration: Dedicated calibration port
 Pump: Long-life brushless pump



Alarm Notification Assembly

Alarm Type: Horn / strobe annunciator
 Sound Level: 99 dB / 120 dB option
 Indicators: Up to 4 strobe lights
 Strobe Colors: Red / amber / blue / green / clear
 Power: 24 VDC option
 Protection: NEMA 4X / IP66



Gas Detection Control Panel

Channels: 4 / 16 / 32 / 48 / 64
 Display: QVGA color LCD
 Communication: RS-485 Modbus
 Relays: Alarm / fault relays
 Protection: NEMA 4X
 Logging: SD card data logger



Wireless Alarm Bar

Alarm Type: Horn / strobe notification
 Wireless: 900 MHz radio
 Sound Level: 112 dBA
 Tone Options: 64 selectable tones
 Input Voltage: 85...264 VAC
 Protection: NEMA 4X



Wireless Alarm Relay

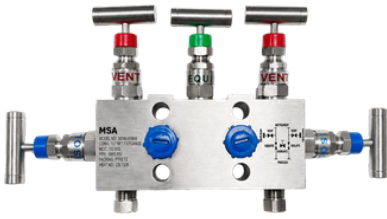
Wireless: 900 MHz / 2.4 GHz radio
 Relays: 4 alarm relays + horn relay
 Indicators: 4 alarm indicators
 Memory: Non-volatile memory
 Enclosure: Explosion-proof / NEMA 7
 Mounting: Magnetic mount option



Wireless Radio Repeater

Function: Extends wireless signal range
 Wireless: Dual 900 MHz radios
 Operation: Client / server mode
 Relay: Fail-safe fault relay
 Alert: Server out-of-range / power loss
 Application: Oil & gas / water treatment

Fittings & Accessories



Valve Manifolds

2, 3 & 5 Valve Manifolds Available
S, Y, L, R & Wafer Style Configurations
Direct & Remote Mount Designs
Suitable for Pressure & Differential
Pressure Applications
High Pressure 316 SS Construction



Industrial Valves

Ball, Needle, Check & Instrumentation
Valve Types Available
316 / 316L Stainless Steel Construction
Threaded & Compression Connections
Reliable Isolation & Flow Control



Flange & Monoflanges

Standard & Compact Monoflange
Designs
High Pressure 316 SS Construction
Reduced Leak Path Installation Design
Suitable for Pressure & DP Applications



Hex Nipples

Male-to-Male Threaded Connectors
316 / 316L Stainless Steel Construction
NPT & BSP Thread Configurations
Available
High Pressure Industrial Design



Union Fittings

Leak Tight Tube & Pipe Connections
316 SS Compression Fitting Design
Easy Installation & Maintenance
Threaded & Compression
Configurations Available



Elbow Fittings

90° & 45° Compression Fittings
316 SS Instrumentation Design
Reliable Leak Tight Connections
Threaded & Compression Types
Available



Tee Connectors

Equal & Reducing Tee Configurations
316 SS Compression Design
Reliable Tube Branch Connections
Threaded & Compression Types
Available



Reducer Fittings

Tube & Pipe Size Reduction
Connections
316 SS Compression Design
Reliable Leak Tight Performance
Threaded & Compression Types
Available



Instrumentation Tubing

Seamless Annealed 316 SS Tubing
High Pressure & Corrosion Resistant
Construction
Multiple Sizes & Wall Thicknesses
Available
Reliable Industrial Performance

Fittings & Accessories



Strainers

Inline Filtration & Debris Protection
316 SS Industrial Construction
Suitable for Liquid & Gas Applications
Threaded & Flanged Configurations
Available
Reliable Protection for Process
Systems



Air Header

Multiple Outlet Instrument Air
Distribution
316 SS Corrosion Resistant Construction
Threaded & Compression Connections
Available
Leak Tight Design for Industrial
Applications



Condensate Pots

Steam Service Condensate Collection
Solutions
Used for Pressure & DP Measurement
Systems
316 SS & Carbon Steel Fabrication
Threaded, Socket Weld & Flanged
Designs



Syphons

Steam Service Instrument Protection
Solutions
Reduces Temperature Exposure to
Pressure Instruments
316 SS & Carbon Steel Construction
Pigtail, Coil, Straight & Custom
Configurations Available
Suitable for Industrial Process
Applications



Mounting Brackets

Instrument Support & Mounting
Solutions
316 SS & Carbon Steel Construction
Wall, Pipe & Panel Mount Options
Suitable for Transmitters &
Instrumentation Devices
Designed for Industrial Applications



Calibration Pots

Process Flow & Level Calibration
Systems
316 SS Heavy Duty Construction
Visual Monitoring & Measurement
Design
Flanged & Threaded Configurations
Available
Suitable for Industrial Process
Applications



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SAI Process Sensing offers a wide range of instrumentation and process sensing solutions beyond the products presented in this brochure. Additional models, configurations, and custom solutions are available upon request.