



Your Engineering Partner...

• PRESSURE • HUMIDITY • DEWPOINT • LEVEL • FLOW • DATA LOGGER • RMS

COMPANY PROFILE

ACT Sensors is your engineering partner for Sensor solutions for process parameters **Pressure**, **Flow, Level, Dewpoint, Moisture, Vibration**, **Temperature** and more. A purpose-built technology company and solutions provider, ACT Sensors was founded nearly 10 years ago with very specific goals in mind. ACT Sensors recognized key deficiencies and market issues in the sensor/transducer industry, things we thought we could greatly improve upon. Most of ACT Sensors competitors were and still are somewhat limited by their technology options when addressing customer design needs. Designed from the beginning to be a world-class manufacturer of high technology products, ACT Sensors set out to shake up the sensor industry in the coming years.

With our broad technology offering and impressive portfolio we have the product and process flexibility to provide the perfect solutions for our customers, no matter how stringent the design requirements.

We have the infrastructure in place to support customers on a global scale. Sales, engineering, customer support and logistics solutions are in place with upcoming assembly site in Asia. Now a trusted and key supply partner to several original equipment manufacturers, **ACT** Sensors continues to grow and expand in traditional markets and into new and exciting programs, platforms and market segments. We hope you'll explore our product catalog and give us the opportunity to show you exactly why we truly are **Your Engineering partner...**

QUALITY SYSTEMS

ACT achieved the important objective of certification of the Company's Quality System in compliance with the NQAC International **ISO9001:2015**

The certified activities include the marketing of instruments for process control and industrial automation as well as undertaking engineering projects.

The purpose of the certification is to develop, carry out and improve the efficiency of the quality management system, to increase the satisfaction of our customers.

CORE VALUES



PRESSURE

ACT a Leader in Pressure Sensor Technology

Pressure Sensors/Pressure Transducers/ Pressure Transmitters converts the physical quantity 'pressure' into an industrystandard signal. In addition to a wide range of pressure sensors for general industrial applications. ACT Sensors specializes in offering pressure & pressure/temperature combination sensors for a wide variety of industries including automotive, HVAC/R, industrial, off-road vehicles, over-the-road truck & bus, marine, rail and more.ACT Sensors is a purpose-built technology innovator, and was founded with very specific goals in mind. Designed from the beginning to be a world-class manufacturer of high technology products. ACT Sensors has a very specific focus: Engineering partner for **Automation Control Technologies**

SUBMERSIBLE PRESSURE TRANSMITTER



ASPT11s Series

Pressure Ranges: 0~1m...10mH2O **Sensor Technology**: Diffused Silicon

Accuracy: $\leq \pm$ 0.5% FS (typ) Output Signal: 4...20 mA, 0...5V

Wetted Parts: SS3161

Options: Digital Output, Housing with

Display

USP: Water pressure level measurement, Deep well and groundwater monitoring, Pumping Station

OEM INDUSTRIAL PRESSURE TRANSMITTER



ASPT11i Series

Pressure Ranges: From Vac upto 1000 Bar

Sensor Technology: Diffused Silicon

Accuracy: $\leq \pm 0.5\%$ FS Output Signal: 4...20 mA

Wetted Parts: SS316L Diaphragm

USP: OEM Industrial Applications for Hydraulic and Pneumatic Applications

UNIVERSAL PRESSURE TRANSMITTER



ASPT11 Series

Pressure Ranges: From Vac upto 1000 Bar

Sensor Technology: Diffused Silicon

Accuracy: $\leq \pm 0.5\%$ FS

Output Signal: 4...20 mA, 0...5V, 1...5V, 0.5 to

4.5 V (RM), 0...10V, RS485, I2C **Wetted Parts:** SS316L Diaphragm

Options:

ASPT11t High Temperatures (150 Deg C|250

Deg C | 350 Deg C)

ASPT11h High Pressure upto 6000 Bar **ASPT11d** Digital Output (RS485/I2C)

ASPT11c Compact Version

USP: Universal Industrial Pressure Transmitter for Hydraulic and Pneumatic Applications

FLUSH MOUNT PRESSURE TRANSMITTER

AUTOMOTIVE PRESSURE TRANSMITTER



ASPT11f Series

Pressure Ranges: From Vac upto 100 Bar

Sensor Technology: Diffused Silicon

Accuracy: $\leq \pm 0.5\% FS$

Output Signal: 4...20 mA, 0...5V, 1...5V, 0.5 to

4.5 V (RM), 0...10 V

Wetted Parts: SS316L Diaphragm

Options: High Temperatures (150 Deg C|250

Deg C)

USP: Food and beverage industry, Filling and packing machinery, Level measurement

Applications

ASPT11v Series

Pressure Ranges: From Vac upto 150 Bar

Sensor Technology: Ceramic | Back Side

Silicon

Accuracy: $\leq \pm 0.5\%$ FS (typ)

Output Signal: 4...20 mA, 0...5V, 1...5V, 0.5 to

4.5 V (RM)

Wetted Parts: Ceramic Al2O3 96% | Silicon

Options: I2C Output, CANBUS 2.0 other

Customization

USP: Customization as per automotive

application demand

ECO SERIES PRESSURE TRANSMITTER



ASPT11e Series

Pressure Ranges: From Vac upto 150 Bar

Sensor Technology: Ceramic

Accuracy: $\leq \pm$ 0.5% FS (typ) $\leq \pm$ 1% FS

Output Signal: 4...20 mA, 0...5V, 1...5V, 0.5 to

4.5 V (RM)

Wetted Parts: Ceramic Al2O3 96%

Options: I2C Output

USP: Economical OEM Series for High-Volume Low-Cost Projects. Quick Lead time

HYDROGEN PRESSURE TRANSMITTER



ASPT-H2

Pressure Ranges: From Vac upto 1000 Bar

Sensor Technology: Thin Film **Accuracy:** \leq ± 0.5% FS (typ)

Output Signal: 4...20 mA, 0...5V, 1...5V, 0.5 to

4.5 V (RM), 0...10 V

Wetted Parts: SS316L Diaphragm

Options: EX Variants are available for

Hazardous Areas

USP: Suitable for Hydrogen, Seal Free,

Measuring Cell, free from welded Seams

DIFFERENTIAL PRESSURE TRANSMITTER



ASDP-21A

Pressure Ranges: From -100Pa upto 100kPa **Sensor Technology:** Piezo-Resistive Silicon

Accuracy: $\leq \pm$ 3% FS (100Pa..250Pa), $\leq \pm$ 2% FS (500Pa..2KPa), $\leq \pm$ 1.5% FS (5kPa..10KPa),

< <u>+</u> 0.5% FS (10kPa...100kPa)

Output Signal: 4...20mA

Wetted Parts: Silicon

USP: Zero-Span Adjustment

WET-WET DIFFERENTIAL PRESSURE TRANSMITTER



ASDP-22W

Pressure Ranges: From 100milliBar upto

25Bar

Sensor Technology: Diffused Silicon

Accuracy: < ± 0.5% FS

Output Signal: 4...20 mA, 0...5V, 1...5V

Wetted Parts: SS316L Diaphragm

USP: Suitable for Filtration, Leakage Testing,

Scientific Experiment

PRESSURE SENSOR CELL



ASPT11m Series

Pressure Ranges: From Vac upto 1000 Bar

Sensor Technology: Diffused Silicon

Accuracy: $\leq \pm 0.5\%$ FS Output Signal: mV/V

Wetted Parts: SS316L Diaphragm

Options: Pressure Sensor Cell with O Ring

All Welded Pressure Sensor with Process

Connection

Welded Pressure Sensor with 4-20 mA PCB

Board

USP: Customization based on the needs of users, such as pressure sensors of all welded structure, wide temperature compensation, high reliability, anti-shock and anti-vibration sensors, especially for national defense weapons and equipment

DIGITAL PRESSURE GAUGE





ASDG1/ASDG2

Pressure Ranges: From -1 Bar onwards upto

700 Bar G

Sensor Technology: Diffused Silicon

Accuracy: $\leq \pm 0.4\%$ FS

Wetted Parts: SS316L Diaphragm

Options: 4 Digit/5Digit

USP: Ideal for commercial and industrial applications in both test measurement and

general-purpose installations

HIGH ACCURACY DIGITAL PRESSURE **GAUGE**



ASDGA/ASDGA2.0

Pressure Ranges: From Vac upto 2500 Bar

Sensor Technology: Diffused Silicon

Accuracy: $\leq \pm 0.1\%$ FS/ $\leq \pm 0.05\%$ FS/ $\leq \pm 0.01\%$

FS

Wetted Parts: SS316L Diaphragm

Options: EX Variants are available for Hazardous Areas, 5 Digit/6 Digit option, **Recording Function**

USP: Calibration of electronic pressure transmitters, Relative, absolute, differential and vacuum pressure, Combined ranges (vacuumpressure)

BOARD MOUNT DIFFERENTIAL PRESSURE SENSOR



AS22A/AS22D | AS24

Ranges:-100kPa...-0.5kPa~0kPa...0.5kPa... 200kPa

Optional 5V or 3.3V or 3V power supply

Differential or Gauge Pressure Type

For Non-corrosive gas or air

Calibrated Amplified Analog signal or Digital output(IIC)

Temp. Compensated: 0° C \sim +60 $^{\circ}$ C(32 $^{\circ}$ F \sim +140 $^{\circ}$ F)

Customized Pressure Range Available

USP: Mounting package equivalent to Honeywell/Freescale available. Contact factory for OEM requirements

BOARD MOUNT PRESSURE SENSOR



AS21A/AS21D | AS23

Ranges: -100kPa...-1kPa~0kPa...1kPa... 1500kPa

Optional 5V or 3.3V or 3V power supply

Gauge & Vacuum Type

For Non-corrosive gas or air

Calibrated Amplified Analog signal or Digital

output(IIC)

Temp. Compensated: 0° C \sim +60 $^{\circ}$ C(32 $^{\circ}$ F \sim +140 $^{\circ}$ F)

Customized Pressure Range

USP: Mounting package equivalent to Honeywell/Freescale available. Contact factory for OEM requirements

UNAMPLIFIED-UNCOMPENSATED PRESSURE SENSOR



AS60/61

Ranges: -100kPa...-1kPa~0kPa...1kPa... 1000kPa

Power supply: ≤ 15 Vdc or ≤ 3.0mAdc

Gage & Vacuum Type

SMD package with/without barb inlet pipe

MEMS Technology, Solid-state reliability

Working temp.: $-30^{\circ}\text{C} + 125^{\circ}\text{C}(-22^{\circ}\text{F} + 257^{\circ}\text{F})$

For Non-corrosive gas or air

USP: Low-Cost High-Volume applications like BP Monitoring, Vending Machine, etc

UNAMPLIFIED-UNCOMPENSATED DIFFERENTIAL PRESSURE SENSOR



AS70/AS71

Ranges: -100kPa...-1kPa∼0kPa...1kPa... 200kPa

≤15Vdc or ≤ 3.0mAdc power supply Differential or gauge Type For Non-corrosive gas or air MEMS Technology

Working temp.: -30°C~+125°C(-22°F~+257°F)

BOARD MOUNT PRESSURE SENSOR APPLICATIONS

For Medical and healthy equipment field, such as Ventilators/ breathing machine/respiration, CPAP (Continuous Positive Airway Pressure), Sleep Apnea, Spirometers, Gas flow instruction, Air flow monitor, hospital bed etc,.

For Industrial field, such as Airflow measurement, HVAC and Pneumatic gauges, Gas flow instrumentation, Exhaust system, Pressure switches, Liquid level measurement.

For Other fields, such as sport equipment, Fire protection, Biological Science, Consumer appliances application etc.

DEWPOINT

Dry compressed air is one of the most important quality parameters when it comes to process safety. When ambient air is compressed, the humidity in the air volume will rise drastically, therefore the air is easy to condensate by forming water droplets. What can be worse than having water droplets in the compressed air piping which can cause machinery breakdown, contaminating your process or even cause blockages.

Using an instrument to measure dew point, a so-called dew point analyzer or dew point meter, will help users to operate a safe and reliable compressed air system, notifying in case of alarms at early points and not when things are already got worse.

COMPRESSED AIR DEW POINT TRANSMITTER (-100°C Td)



S220

For high tech applications with a measurement range of -100 ... +20 °C Td.

Dual Sensor System for high precision over the whole range.

Compact size makes them ideal for dryer installations.

Optional display for on-site values.

Display can be rotated by 340° to fit your needs

User friendly signal outputs: 2-wire analog 4... 20 mA or 3-wire analog 4...20 mA + Modbus/RTU.

IP65 casing provides robust protection.

Measured values available in several units: °C Td g/m3 mg/m3 ppmv g/kg (@ reference pressure)%

COMPRESSED AIR DEW POINT TRANSMITTER (-60°C Td)



S217

The Small size makes it ideal for dryer installations

Measures accurately dew points down to - $60\,^{\circ}\text{C}\,\text{Td}$

Digital Modbus/RTU or IO-Link output

IP65 casing provides robust protection in rough industrial environment

Very fast response time ensures safe and reliable indication whenever dew points are out of valid ranges

Can be installed directly into dryers through G 1/2" thread connection

Withstands condensation on the sensor element

COMPRESSED AIR DEW POINT TRANSMITTER (-20°C Td)



S215

For Fridge Dryers with a measurement range of -20 ... +50 °C Td.

Compact size makes them ideal for dryer installations.

Optional display for on-site values.

Display can be rotated by 340 $^{\circ}$ to fit your needs.

User friendly signal outputs: 2-wire analog 4... 20 mA or 3-wire analog 4... 20 mA + Modbus/RTU.

IP65 casing provides robust protection.

PORTABLE DEWPOINT METER



S520

Measures dew point, temperature and pressure in one device

Sensor selection according to your needs

-100 ... +20 °C Td with pressure sensor as standard version

-50 ... +50 °C Td without pressure sensor as economic version

Measurement according to ISO 8573-1

Optional smart features: End value prediction, camera and measurement snapshot

Wireless printer for on-site reporting, perfect for audits

Unique Measuring chamber with parking function as standard included

Integrated pressure sensor

Touch screen for easy operation

EX DEWPOINT TRANSMITTER



S230/231

Ex Dew point sensor for compressed air and other gases with optional IECEx approval (Ex area)

Dual sensor technology for high accuracy of 2°C Td over the whole range from -100 ... +20°C Td

For low dew point applications down to -100 °C Td

IP65 casing provides robust protection in rough industrial environment

Fast response time ensures safe and reliable indication whenever dew points are out of valid ranges

Two outputs available: 4...20 mA, RS-485 (Modbus/RTU)

High accuracy over the whole range

G1/2" Process connection

FLOW

Almost any industrial process uses compressed air as one of its energy resources. Compressed air is easily accessible and available throughout the factories and plants as a reliable energy form. But where it is normal to measure electrical power consumption, it is often found that compressed air as an energy source is not measured and monitored. A constant and reliable air flow at any point in the network is necessary to keep the process under control.

Measuring the compressed air flow gives the control back to the operators, knowing how much air is consumed during which period of productions and how much air is actually needed.

FLOW AND CONSUMPTION METER FOR COMPRESSED AIR AND GASES (INSERTION TYPE)



Thermal mass flow, independent of pressure and temperature changes

Sensor can be calibrated in 2 different gases

Selectable gas type (Some gases require real gas calibration!)

With the integrated display users can see the actual flow and the total consumption

IP65 casing provides robust protection in rough industrial environment

Isolated mA and pulse output signals or Modbus/RTU interface

Very fast response time, high accuracy and wide measuring range

Tube diameters of DN25 to DN500

COMPACT INLINE FLOW AND CONSUMPTION METER FOR COMPRESSED AIR AND GASES

FLOW AND CONSUMPTION METER FOR COMPRESSED AIR AND GASES (INLINE-SENSOR)





S415 / S418

Thermal mass flow with no additional compensation required

Perfect to measure your compressed air flow and consumption

Economic and affordable compressed air flow meter - S415

High end compressed air flow meter - S418

Wireless communication interface for sensor settings

Accuracy up to 1%

Various sensor outputs: 4 ... 20 mA, Modbus RTU, M-Bus

No straight pipe requirements thanks to the integrated flow conditioner

No by-pass measurement, measures the whole mass flow

G inner thread connection - DN8, DN15, DN20, DN25 or DN32 (ISO 228-1)

S418 with integrated data logger and pressure measurement

Eco version S415: Accuracy of 3% of RDG, measuring volume 50:1

Pro version S418: Accuracy of 1.5% of RDG, measuring volume 100:1

Pro version S418: Integrated datalogger and integrated pressure sensor

Real gas calibration in 2 different gases possible

S421

Easy and affordable sensor solution to measure the compressed air flow and consumption

Sensor is calibrated in the measuring section, this allows a very high precision

Two calibration curves can be saved on to the sensors internal memory

Due to the two calibration curves the sensor can be used with highest precision in two different gases

Velocity, Flowrate, Consumption and Temperature are displayed

IP65 protection class offers a rugged protection in rough industrial environment

Isolated analog and pulse outputs or MODBUS/RTU interface

Thermal mass flow measurement, pressure and temperature independent

Very fast response time, high precision and wide measuring range

Pipes sizes available: DN15, DN20, DN32, DN40, DN50, DN65, DN80

Integrates seamlessly in your compressed air system

Fits your needs: various process connections available (R-thread, EN 1092-1 flange or ANSI flange)

Exchangeable sensor unit (easy sensor swap)

Optional flow conditioner, no need for a straight inlet any more

FLOW AND CONSUMPTION METER FOR WET COMPRESSED AIR (PITOT TUBE FLOW METER)

MASS AIR FLOW SENSOR FOR MEDICAL EQUIPMENT





S430

Flow and consumption measurement in wet air or high mass flow / velocity applications

Measurement at compressor outlet

Made to measure your compressed air flow at the outlet of the compressor

Tube diameters of 1.25" ... 10". Other diameters on request

Insertion type, easy installation under pressure through ball valve possible

High temperature applications up to 230 °C

No mechanical wear parts

All parts which are in contact with flow medium are made of stainless steel

Compressor-FAD-Measurement

Measures Flow, Consumption, Temperature and Pressure

AS20|AS40|AS50

Ranges: 200 sccm to 10 SLM|12 SLM to 300 SLM | 15 SLM to 60 SLM

Unsurpassed performance in a robust and cost-effective package

"Solid state" sensing core (no surface cavity or fragile membrane) resistant to clogging and pressure shock

Highly accurate (4% reading typ.)

Fast response time (5 ms typ.)

Linear output and temperature compensation

Long-term stability with minimal null drift

USP: Suitable for Oxygen concentrators, Respirators and ventilators, Nebulizers, CPAP equipment, Anesthesia delivery, Leak detection, Spectroscopy, Mass flow controller, Fuel cell control

OIL QUALITY

Online monitoring of moisture content in lubricating, hydraulic and insulation oil is an important factor in maintaining the functional reliability of equipment and machines in the long term.

OIL CONDITION TRANSMITTER



MiO-21

Continuous measurement of water activity in oil and temperature

Professional calculation of moisture content in ppm for transformer oil

Accurate and reliable, robust design under hostile environments

Convenient local & remote calibration

Excellent pollution & pressure tolerance

Compact, easy for integration

Analog and Digital Signals Output

USP: Ideal for online monitoring of moisture in lubrication, hydraulic or insulation oil, which is significant for the long-term performance and preventive maintenance of plant and machinery.

DATALOGGER

Data loggers are electronic devices which automatically monitor and record environmental parameters over time, allowing conditions to be measured, documented, analyzed and validated.

SINGLE TIME USE TEMPERATURE DATA LOGGER



PDF99

-30°C to +70°C

The temperature data logger is mainly used for monitoring and logging temperature in storage and transportation of food and pharmaceuticals, such as cooler boxes, refrigerated trucks, containers, etc.

The logger connects to a computer via USB port to export a PDF report.

It features an internal sensor and a CR2450 lithium battery.

IP67 waterproof protection.

One-time use, memory capacity: 99 Days

1-year warranty.

PORTABLE TEMPERATURE TEMPERATURE + HUMIDITY DATA LOGGER

DRY ICE TEMPERATURE DATA LOGGER





PDFT | PDFTH | PDFTI

Up to 14,000 temperature points and 14,000 humidity points.

High-precision Internal Temperature and Humidity Sensor.

Plug and read. No cable or reader required; the USB connector enables quick connection to PCs to download data.

PDF Report. Auto encrypted and generated PDF report with password protection function; Personalized settings and management provided by free Apresys software.

Long Working Life. Adopting a replaceable lithium battery, it can be stored and used within 2 years*.

Each S/N number comes with a calibration certificate.

1-year warranty.

179-DI

Ultra-low operating Temperature: -85 Deg C

Can be placed in direct contact with Dry Ice

No External Probes or wiring

Connect with PC to read and print directly

High Accuracy

Dual data encryption technology to ensure data is real

MULTICHANNEL DATALOGGERS

OFFICIAL PARTNER OF PPI FOR WIRED DATALOGGING SOLUTION

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Welcome to the world of ACT I/O Sense

ACT I/O Sense is a comprehensive cloud based IoT software platform that is configured to cater multiple applications like energy management, water management, temperature monitoring etc. ACT I/O Sense also serves as an Industrial Internet of Things (IIoT) platform to help in digitization & predictive analytics of processes and assets. Several enterprises have leveraged I/O Sense's capabilities to drive visibility, automate their operations, incorporate process analytics & perform data-driven decision making.

Keys Solutions under ACT I/O Sense Platform

Energy Management

Monitor and analyse your energy meters, bus bars, transformers to optimize equipment efficiency, penalties, T&D losses and power quality

Customized OEM Suite

Leverage existing platform and co-develop digital solution for your product line to enhance your customer experience

Water Management

Smartly monitor and manage your water infrastructure by monitoring flow meters, level sensor, pumps, pressure sensor etc.

Ambient Monitoring

Monitor the ambient temperature and humidity for the controller room environments like server rooms, meeting rooms, cold storages etc.

Condition Monitoring

Monitor and diagnose the vibration level, velocity and FFT to enable preventive maintenance for your critical equipment

Steam Trap Diagnostics

Smart analytics to predict the various failures in steam traps like blow through, plugged, rapid cycling, flooded etc.

HVAC Optimization

Digitize your machine sensors, create digital twins and use a smart analytics library to get insights on health, performance and maintenance

Automated Metering

Smarty digitize your energy, water and gas meters by connecting them to I/O Sense MDAS system

Fleet Monitoring

Monitor the location, fuel and condition of your critical fleet to ensure optimized cost for operation and performance



CLIENTLIST































































































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