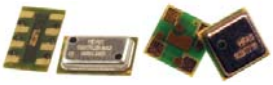
PRESSURE SENSORS

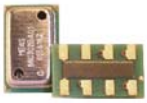
We design and manufacture pressure sensors ranging from the sensing element to system packaging for harsh environments. We are an industry leader for our range of both standard and custom pressure sensors, from board level components to fully amplified and packaged transducers. Based on piezoresistive Microelectromechanical (MEMS) and silicon strain gage (Microfused, Krystal Bond) technology, our sensors measure everything from inches of water column (<5 mbar) to 100K psi (7K bar). Sophisticated design and advanced manufacturing techniques create reliable cost-effective solutions for medical, HVACR, off road/heavy equipment and general industrial applications. We manufacture one of the world's lowest power and smallest package pressure sensors for altimeter/NAV applications. Our sensors are signal conditioned, calibrated over temperature and include digital or analog outputs.

BOARD LEVEL PRESSURE SENSORS

Digital Output and Altimeter

	MEAS MS4515DO, MS4525DO	MEAS MS5803	MEAS MS5837
Package	8 pin DIL	Surface mountable	Surface mountable
Type	Gage, compound (MS4515DO) Gage, absolute, differential, compound (MS4525DO)	Absolute	Absolute
Pressure Range	0 - 2 to 30" H_2O (MS4515DO) 0 - 1 to 150 psi (MS4525DO)	0 - 1 to 30 bar	0 - 30 bar
Output / Span	14-bit ADC SPI or I^2C	24-bit ADC I^2C and SPI (Mode 0, 3)	24-bit ADC I^2C
Resolution	—	12 µbar (MS5803-01BA) 0.5 mbar (MS5803-30BA)	0.2 mbar
Unique Features	• Optional gel coat, low power • Pressure and temperature measurement • Single supply of 3.3 or 5.0 VDC • Top, side barbed or manifold o-ring port • J lead or thru hole pins	• 24-bit digital sensor, software calibration and temperature compensation (I^2C and SPI), no external components • Supply voltage 1.8 to 3.6 V	• Supply voltage: 1.5 to 3.6 V • Excellent long term stability • Hermetically sealable for outdoor devices • Sealing designed for 1.8 x 0.88 mm o-ring
Linearity/Absolute Accuracy	0.25% / 1% TEB	±1.5 mbar at 25°C (MS5803-01BA) ±250 mbar at 0°C to 40°C (MS5803-30BA)	±400 mbar
Overpressure	300 psi	10 bar (1, 2 bar), 30 bar (5, 7, 14 bar) 50 bar(30 bar)	50 bar
Operating Temp.	-10°C to 85°C (MS4515DO) -25°C to 105°C (MS4525DO)	-40°C to 85°C	-20 to 85 °C
Dimensions (mm)	12.5 x 9.9	6.4 x 6.2 x 2.9	3.3 x 3.3 x 2.75
Typical Applications	Medical instruments, air flow measurements, process control, leak detection	Precision altimeter, diving and multi-mode watches, in-building navigation, variometers / flight instruments	Mobile water depth measurement systems, diving computers, adventure or multi-mode watches, data loggers





	MEAS MS5525DSO	MEAS MS5607, MS5611, MS5637	MEAS MS5805	MEAS MS8607
Package	SOIC-14	Surface mountable	Surface mountable	Surface mountable
Type	Gage, absolute, differential, compound	Absolute	Absolute	Absolute
Pressure Range	0 - 1 to 30 psi	10 - 2K mbar	10 - 2K mbar	10 - 2K mbar
Output / Span	24-bit ADC SPI or I^2C protocol	24-bit ADC I^2C	24-bit ADC I^2C	24 bit ADC I^2C
Resolution	—	0.016 mbar	0.02 mbar	0.016 mbar
Unique Features	• 24-bit digital small outline sensor • Pressure and temperature measurement • Single supply of 1.8 or 3.6 VDC • Barb, tube and hole package style options	• 24-bit digital sensor • 13 cm resolution (MS5607, MS5637) • 10 cm resolution (MS5611) • Supply voltage: 1.5 to 3.6 V (MS5637) Supply voltage: 1.8 to 3.6 V (MS5607, MS5611) • Low power, 0.6 µA (Standby ≤ 0.1 µA at 25°C)	• 24-bit digital sensor • 20 cm resolution • Supply voltage: 1.8 to 3.6 V • Sealing designed for 2.5 x 1 mm o-ring • Silicone gel protection • Waterproof	• Integrated pressure, humidity and temperature • Supply voltage: 1.5 to 3.6 V • Fully factory calibrated sensor
Linearity/Absolute Accuracy	0.25% / 2.5% TEB	±2.0 mbar at 25°C	±2.0 mbar at 25°C	±4 mbar
Overpressure	3X range	6 bar	5 bar	6 bar
Operating Temp.	-40°C to 125°C	-40 to 85°C	-40 to 85°C	-40°C to 85°C
Dimensions (mm)	12.5 x 7.9	3 x 3 x 0.9 (MS5637) 5 x 3 x 1 (MS5607, MS5611)	4.5 x 4.5 x 3.5	5 x 3 x 1
Typical Applications	Medical respirators, ventilators, factory automation, altitude and airspeed measurements, leak detection, home appliances	Smart phones, tablets , personal navigation devices, tire pressure monitoring, compressors	Mobile altimeter and barometer systems, bike computers, adventure or multi-mode watches, variometers, data loggers	Smart phones, tablets, HVACR, weather stations, printers, home appliances and humidifiers

BOARD LEVEL PRESSURE SENSORS

Amplified Output

	MEAS MS4515, MS4525	MEAS MS5525ASO
Package	8 pin DIL	SOIC-14
Type	Gage, differential (MS4515) Gage, absolute, differential, compound (MS4525)	Gage, absolute, differential, compound
Pressure Range	0 - 2 to 30" H_2O (MS4515) 0 - 1 to 150 psi (MS4525)	0 - 1 to 30 psi
Output / Span	10% to 90% or 5% to 95% of supply	10 - 90% VDC
Unique Features	• Ratiometric analog output sensor • Single supply of either 3.3 or 5.0 VDC • Top, side barbed or manifold o-ring port • J lead or thru-hole pins • Optional gel coat	• Temperature compensated • 2.75 to 5.5 VDC supply voltage • Amplified ratiometric analog output • Barb, tube and hole package style options
Accuracy	0.25% span / 1% TEB	±0.5% span / 2.5% TEB
Operating Temp.	-10°C to 85°C (MS4515), -25°C to 105°C (MS4525)	-25°C to 105°C
Dimensions (mm)	12.5 x 9.9	12.5 x 7.9
Typical Applications	Medical instruments, air flow measurements, process control, leak detection	Factory automation, altitude and airspeed measurements, medical instruments, leak detection

mV Output

	MEAS 1210, 1220, 1230, 1240	MEAS 13, 23, 33, 43, 17, 27, 37, 47	MEAS MS4425, MS4426
Package	8 pin DIL	TO-8	6 pin DIL
Type	Gage, absolute, differential	Gage, absolute, differential	Gage, absolute, differential
Pressure Range	0 - 5 and 10" H_2O 0 - 1 to 100 psi	0 - 1 to 250 psi	0 - 1 to 300 psi
Output / Span	50 mV and 100 mV typical	100 mV typical	60 mV, 90 mV, 100 mV, and 150 mV typical
Unique Features	• Temperature compensated • High performance UltraStable die (1230, 1240) • Current excitation (1210, 1230) • Voltage excitation (1220, 1240)	• Temperature compensated • High performance UltraStable die (17, 27, 37, 47) • Can gel fill for humid conditions	• Temperature compensated • High performance UltraStable die • Voltage excitation
Accuracy	±0.1% non-linearity	±0.1% non-linearity	±0.1% non-linearity
Operating Temp.	-40°C to 125°C	-40°C to 125°C	-25°C to 85°C
Dimensions (mm)	15.2 x 14.7	Ø11.4, application dependent	15.2 x 13.7
Typical Applications	Medical instruments, air flow measurement, process control, factory automation, leak detection	Medical instruments, air flow measurement, HVACR, process control, factory automation, leak detection	Drop-in for 6 pin industrial sensor for PCB mounted medical

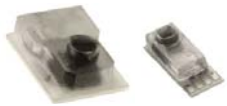
BOARD LEVEL PRESSURE SENSORS

mV Output

	MEAS MS1451, MS1471	MEAS MS52xx, MS54xx
Package	Surface mountable	Surface mountable
Type	Gage, absolute	Gage, absolute
Pressure Range	0 - 5 to 500 psi	0 - 1 to 12 bar
Output / Span	60 mV typical	150 mV, 240 mV
Unique Features	• Low cost • Coarse calibrated at room temp. (MS1471) • With gel to protect against moisture • Tube or hole	• Small size (MS54xx) • High linearity or high sensitivity options • Plastic tube or metal ring options • With gel to protect against moisture • High endurance (Option HM)
Accuracy	±0.25% non-linearity	±0.05%, ±0.15% FS non-linearity (MS52xx) ±0.05%, ±0.2% FS non-linearity (MS54xx)
Operating Temp.	-40°C to 125°C	-40°C to 125°C
Dimensions (mm)	7.6 x 7.6, application dependent	7.6 x 7.6, application dependent (MS52xx) 6.4 x 6.2 (MS54xx)
Typical Applications	Altitude measurement, barometric pressure, medical instrumentation, consumer appliances, tire pressure	Absolute pressure sensor systems, engine controls, high resolution altimeters, variometers, waterproof watches, diver computers, barometers, tire pressure monitoring systems (TPMS), medical instrumentation, pneumatic controls

DISPOSABLE MEDICAL PRESSURE SENSORS

mV Output



	MEAS 1620, 1630	MEAS Fully Assembled 1620 (Customized per customer specifications)
Package	Hybrid assembly	Plastic housing
Type	Gage	Gage
Pressure Range	-30 to 300 mmHg	-30 to 300 mmHg
Output / Span	5 µV/V/mmHg	5 µV/V/mmHg
Unique Features	• Low cost, disposable design • Supplied in tape and reel • Compliant to AAMI spec • ISO13485 certified	• Low cost, disposable design • Compliant to AAMI spec • Custom designs available
Accuracy	±1.0% FSO	±1.0% FSO
Operating Temp.	10°C to 40°C	10°C to 40°C
Dimensions (mm)	1620: 11.43 x 8.13 x 4.20 1630: 12.7 x 5.08 x 3.94	42.8 x 30.3 x 19.0
Typical Applications	Disposable blood pressure, surgical procedures, ICU, kidney dialysis machines, medical instrumentation	Disposable blood pressure, kidney dialysis machines, surgical procedures and intensive care units. Ready to use, fully assembled disposable sensor units with cable, connector, stop cock, flush device in a plastic housing.

MEDIA ISOLATED PRESSURE SENSOR MODULES

Digital Output




	MEAS 85BSD	MEAS 86BSD	MEAS 89BSD	MEAS 154BSD
Package	• 13 mm diaphragm diameter • Weldable or threaded process fittings	• 16 mm diaphragm diameter • O-ring mount	• 9 mm diaphragm diameter • Threaded or weldable	• 19 mm diaphragm diameter • O-ring mount
Type	Gage, absolute	Gage, absolute	Absolute, sealed gage	Gage, absolute
Pressure Range	0 - 0.35 to 20 bar / 0 - 5 to 300 psi	0 - 0.07 to 20 bar / 0 - 1 to 300 psi	0 - 6 to 30 bar	0 - 1 to 300 psi
Output / Span	14-bit ADC I²C or SPI	14-bit ADC I²C or SPI	24-bit ADC I²C	14-bit ADC I²C or SPI
Unique Features	• Pressure and temperature read-out • Cable and connector options • Low power option	• Pressure and temperature read-out • Cable and connector options • Low power option	• Pressure and temperature read-out • Low power: 1 µA (Standby < 0.15 µA)	• Pressure and temperature read-out • Cable and connector options • Low power option
Accuracy	±0.25% span	±0.25% span	±0.3% span	±0.25% span
Total Error Band	±1.0% FSO	±1.0% FSO	±3.0% FSO max.	±1.0% FSO
Overpressure	2X	2X	2X	2X
Operating Temp.	-40°C to 125°C	-40°C to 125°C	-40°C to 85°C	-40°C to 125°C
Dimensions (mm)	Ø15.85 x 7.9	Ø15.82 x 9.3	Ø9.04 x 7.5	Ø19 x 13.8
Typical Applications	Level controls, tank level measurement, corrosive fluids and gas measurement systems, sealed systems, manifold pressure measurement, submersible depth monitoring	Level controls, tank level measurement, corrosive fluids and gas measurement systems, sealed systems, manifold pressure measurement, submersible depth monitoring	Level controls, tank level measurement, corrosive fluids and gas measurement systems, sealed systems, manifold pressure measurement, dive computers	Level controls, tank level measurement, corrosive fluids and gas measurement systems, sealed systems, manifold pressure measurement, submersible depth monitoring

MEDIA ISOLATED PRESSURE SENSOR MODULES

Analog Output



	MEAS 82, 85 with Fittings	MEAS 89 Button, 89 with Fittings	MEAS 86A Amplified
Package	Weldable (85) or process fitting	Weldable or process fitting	5/8" (16 mm) diameter o-ring mount
Type	Gage, absolute, vacuum gage	Sealed gage, absolute	Gage, absolute
Pressure Range	0 - 5 to 500 psi (85) 0 - 1 to 500 psi (82)	0 - 1K to 10K psi	0 - 1 to 150 psi
Output / Span	100 mV typical	100 mV typical	0.5 - 4.5 VDC
Unique Features	• Modular design	• High pressure • Modular design	• Small diameter, amplified output • Bar ranges available
Non-linearity	±0.3% FSO (1 psi) ±0.2% FSO (5 psi) ±0.1% FSO (≥15 psi)	±0.25% FSO	±1.0% FSO
Operating Temp.	-40°C to 125°C	-40°C to 125°C	-20°C to 85°C
Dimensions (mm)	Fittings: application dependent	89 Button: Ø9.04 x 13.2 89 with Fittings: application dependent	Ø15.82 x 9.3
Typical Applications	Medical, process control, refrigeration compressor, oceanography, level systems	Air tank pressure, hydraulics, process control, robotics, refrigeration compressors, oceanography	Level measurement, OEM transmitters and transducers, process control

MEDIA ISOLATED PRESSURE SENSOR MODULES

Analog Output

	MEAS 82, 85, 85F, 86, 154N	MEAS DP86 O-Ring Mount, with Fittings/Cable	MEAS U86B
Package	• 3/4″ (19 mm) diameter o-ring mount (82, 154N) • 5/8″ (16 mm) diameter o-ring mount (86) • 1/2″ (13 mm) diameter o-ring flush mount (85F) • 1/2″ (13 mm) diameter o-ring mount (85)	• 5/8″ (16 mm) diameter o-ring mount or threaded process fittings	• Mountable with o-ring seal
Type	Gage, absolute, vacuum gage (82, 85, 86, 154N) Gage, absolute (85F)	Differential	Sealed gage, absolute
Pressure Range	0 - 1 to 500 psi (Absolute, gage: 82, 154N) 0 - 5 to 500 psi (Absolute, gage: 85, 86) 0 - 15 to 500 psi (85F, vacuum gage: 82, 85, 86, 154N)	0 - 1 to 500 psi	0 - 5 to 13 bar / 0 - 50 to 200 psi
Output / Span	100 mV typical	100 mV typical / sensitivity dependent	0.5 - 4.5 VDC (Ratiometric output)
Unique Features	• High performance • High stability for OEM applications • Minimizes trapped volume (85F)	• Wet/wet differential pressure • Line pressure max. 1000 psi	• Amplified
Non-linearity	±0.3% FSO (1 psi), ±0.2% FSO (5 psi) ±0.1% FSO (≥15 psi), ±0.1% FSO (85F)	±0.3% FSO (1 psi) ±0.2% FSO (5 psi) ±0.1% FSO (≥15 psi)	±0.5% FSO
Operating Temp.	-40°C to 125°C (82 / 85 / 86 / 154N), -20°C to 125°C (85F)	-40°C to 125°C	-7°C to 105°C
Dimensions (mm)	82: Ø19 x 6.48 86: Ø15.82 x 11.4 154N: Ø18.97 x 13.8 85F: Ø17.2 x 11.33 85: Ø15.85 x 9.3	O-ring: Ø15.82 x 17.5 Fittings: Application dependent	Ø15.82 x 13.6 Socket spacing: 31.75
Typical Applications	Hydraulic controls, process control, oceanography, refrigeration/compressors, pressure transmitters, level systems, dialysis machines, infusion pumps, medical systems	Level controls, tank level measurement, corrosive fluids and gas measurement systems, flow measurement	Urea level, urea pressure, air brakes, corrosive fluid measurement for E&V applications

TRANSDUCERS AND TRANSMITTERS

Wireless

	MEAS M5600, U5600
Type	Gage, sealed, absolute, compound
Pressure Range	0 – 50 to 15K psi (M5600) 0 – 5 to 10K psi (U5600)
Output / Span	24-bit ADC I²C
Unique Features	• Pressure and temperature • 2.3 – 3.6 V supply voltage • Compact and battery-powered • Weather resistant (IP66 and IP67) • Stainless steel and polycarbonate enclosure
Accuracy	±0.25% FS (M5600) Down to ±0.1% FS (U5600)
Operating Temp.	-20°C to 85°C
Dimensions (mm)	24 x 24 x 69
Typical Applications	Industrial process control and monitoring, advanced HVACR systems, refrigeration systems, automotive test stands, off-road vehicles, pumps and compressors, hydraulic and pneumatic systems, agriculture equipment, energy generation and management
Agency Approvals	CE, FCC

Industrial

	MEAS MSP100	MEAS MSP300, MSP340
Type	Gage	Gage
Pressure Range	0 - 100 to 500 psi	0 - 100 to 10K psi (MSP300) 0 - 50 to 10K psi (MSP340)
Output / Span	100 mV typical	0 - 100 mV, 0.5 - 4.5 VDC, 1 - 5 VDC, 4 - 20 mA
Unique Features	• Microfused • Low cost stainless steel isolated transducer • No threads needed for pressure connect • Highly customized for OEM application • Small size • Solid state reliability	• Microfused • Highly customized for OEM applications • Small size • Solid state reliability
Accuracy	±0.5% FSO	±1% FSO
Operating Temp.	0°C to 55°C	-20°C to 85°C
Dimensions (mm)	12.7 x 24.38 x 20.32	MSP300: 22.23 x 22.23 x 55.88 MSP340: 15.88 x 15.88 x 75.44
Typical Applications	Beverage dispensing systems, automation, HVACR controls, energy and water management, pumps, compressors, pneumatic equipment	Paint sprayers, braking systems, HVACR controls, energy and water management, pumps, compressors, pneumatic equipment, off road heavy equipment, agriculture equipment
Agency Approvals	—	UL 508 (MSP300)

TRANSDUCERS AND TRANSMITTERS

Industrial

	MEAS US300	AST20HA, AST20PT, AST20SW	AST4000
Type	Gage, absolute	Gage, sealed gage, absolute	Gage, sealed gage, compound
Pressure Range	0 - 15 to 5K psi	0 - 1 to 60K psi	0 - 25 to 10K psi
Output / Span	0 - 10 mV/V, 0.5 - 4.5 V, 1 - 5 V, 4 - 20 mA	0.5 - 4.5 V [Ratiometric] 1 - 5 V 4 - 20 mA, 0 - 5 V, 0 - 10 V, switch (AST20SW)	0.5 - 4.5 V [Ratiometric], 1 - 5 V, 1 - 10 V, 4 - 20 mA, 0.5 - 2.5 V
Unique Features	• UltraStable technology • Highly customized for OEM applications • Small size • Solid state reliability	• Excellent performance over temperature • Semi-custom designs available • Fault mode condition settings • Four standard sensor material options • Additional temperature output (AST20PT)	• Four standard sensor material options • Rugged construction • 100 V/m EMI/RFI protection • Semi-custom designs available
Accuracy	±0.15% FSO (15 - 1K psi), ±0.25% FSO (>1K psi)	±0.1% FSO	±0.5% FSO
Operating Temp.	-40°C to 105°C	-40°C to 85°C	-40°C to 85°C
Dimensions (mm)	15.88 x 15.88 x 98.00	Application dependent	Application dependent
Typical Applications	Paint sprayers, braking systems, HVACR controls, energy and water management, pumps, compressors, pneumatic equipment, off road heavy equipment, agriculture equipment	Test and measurement, industrial controls	Water, hydraulic equipment, HVACR, industrial controls
Agency Approvals	—	ABS, CE	UL/cUL508, ABS, CE

	MEAS M5200	MEAS U5200, U5300	MEAS D5100
Type	Gage, sealed, compound	Gage, sealed, absolute, compound	Differential wet/wet
Pressure Range	0 - 3.5 to 1K bar / 0 - 50 to 15K psi	0 - 0.14 to 700 bar / 0 - 2 to 10K psi	0 - 0.07 to 35 bar / 0 - 1 to 500 psi
Output / Span	0.5 - 4.5 V, 1 - 5 V, 0 - 5 V, 0 - 10 V, 4 - 20 mA, 1 - 6 V	0.5 - 4.5 V, 1 - 5 V, 0 - 5 V, 0 - 10 V, 4 - 20 mA, 1 - 6 V	80 mV / 100 mV, 0.5 - 4.5 VDC, 1 - 5 VDC, 4 - 20 mA
Unique Features	• Microfused technology • High performance at a low cost • Solid state reliability • ±1% FSO TEB (-20°C to 85°C) • Weatherproof • 17 - 4 PH or 316L SS	• UltraStable technology • High performance at a low cost • ±0.75% FSO TEB (-20°C to 85°C, >5 psi and ≤5000 psi) (U5200) • ±0.5% FSO TEB (-20°C to 85°C) (U5300) • Weatherproof • High accuracy (U5300)	• UltraStable technology • High performance at a low cost • Solid state reliability • ±1% FSO TEB (-20°C to 85°C) • Line pressure max. 1000 psi
Accuracy	±0.25% FSO	±0.1% FSO (>5 and ≤500 psi)	±0.3% FSO (<5 psi), ±0.25% FSO (5 psi), ±0.1 % FSO (≥15 psi)
Operating Temp.	-40°C to 125°C	-40°C to 125°C	-40°C to 125°C
Dimensions (mm)	24 X 24 X 82 max.	24 X 24 X 82 max.	25.4 x 58.4 x 72.0
Typical Applications	Industrial process control and monitoring, advanced HVACR systems, refrigeration systems, automotive test stands, off road vehicles, pumps and compressors, hydraulic and pneumatic systems, agriculture equipment, energy generation and management	Industrial process control and monitoring, advanced HVACR systems, refrigeration systems, automotive test stands, off road vehicles, pumps and compressors, hydraulic and pneumatic systems, agriculture equipment, energy generation and management, military and aerospace test stands, calibration equipment, high accuracy applications, stationary motor fuel control, high end industry machinery	Process controls, tank level measurement, filter performance monitoring, corrosive fluids and gas measurement systems, flow measurement
Agency Approvals	CE (EMC)	CE (EMC), UL 508	CE (EMC)

TRANSDUCERS AND TRANSMITTERS

Industrial

MEAS M7100, U7100

Type	Gage, no vent gage (M7100) Gage, sealed gage, absolute (U7100)
Pressure Range	0 - 10 to 700 bar / 0 - 150 to 10K psi (M7100) 0 - 1 to 10 bar / 0 - 15 to 150 psi (U7100)
Output / Span	0.5 - 4.5 VDC [Ratiometric output] 1 - 5 VDC [Regulated] (M7100) 0.5 - 4.5 VDC [Ratiometric output] (U7100)
Unique Features	• ±1% FSO TEB (-20°C to 85°C) • Solid state reliability • Survives high vibration and immersion • Microfused technology (M7100) • UltraStable technology (U7100) • Copper tube for HVACR (M7100)
Accuracy	0.25% FSO
Operating Temp.	-40°C to 125°C
Dimensions (mm)	26.7 x 26.7 x 50.0
Typical Applications	HVACR refrigeration controls, off road vehicles engine control, compressors, hydraulic, energy and water management
Agency Approvals	CE (EMC), UL 508

Heavy Industrial

MEAS P900, P981, P1200, P700, P9000

Type	Gage, absolute
Pressure Range	0 - 5 bar to 700 bar / 0 - 75 to 10K psi
Output / Span	0 - 5 VDC, 0 - 10 VDC, 4 - 20 mA
Unique Features	• High overpressure (10X over pressure) • Shock and vibration resistant • Heavy industrial grade transducer (P9000) • Advanced digital compensation / calibration • Mechanical over pressure stops • High temperature operation
Accuracy	0.1% to 0.2% FSO
Operating Temp.	-54°C to 120°C
Dimensions (mm)	Application dependent
Typical Applications	Steel mills, hydraulic controls, power generation equipment, torpedo depth, military and aerospace, vehicle braking systems
Agency Approvals	CE, CENELEC (Intrinsically Safe)

MEAS P101, P105, P125

Type	Gage
Pressure Range	0 - 10 to 7K bar / 0 - 150 to 100K psi
Output / Span	7.5 to 20 mV (4 V; 5 V optional)
Unique Features	• Stainless steel diaphragm • Female pressure connectors: M16 x 1.5, M20 x 1.5, 1/4 NPT • Metal to metal seal
Accuracy	±0.3% FSO
Operating Temp.	-20°C to 80°C
Dimensions (mm)	Ø29 x 85 max.
Typical Applications	Harsh environments, aggressive liquids
Agency Approvals	—

TRANSDUCERS AND TRANSMITTERS

Miniature

MEAS XP Series

Type	Gage, sealed, absolute
Pressure Range	0 - 1 to 350 bar / 0 - 15 to 5K psi (XP5, XPM10) 0 - 5 to 200 bar / 0 - 75 to 3K psi (XPM4) 0 - 100 to 1K bar / 0 - 1.5K to 15K psi (XPM6)
Output / Span	20 - 100 mV, 4 V FSO (Amplified)
Unique Features	• Titanium construction (XP5, XPM4) • Stainless steel housing (XPM6, XPM10) • Amplified output options (XP5, XPM6, XPM10) • Cable and connector options • For static and dynamic applications
Accuracy	Down to ±0.25% FSO (XP5, XPM6, XPM10), down to ±0.35% FSO (XPM4)
Operating Temp.	-40°C to 120°C
Dimensions (mm)	XPM4: M4 x 0.7 thread; Hex 8 XP5: M5 x 0.8 or 10-32 UNF thread; Hex 10 XPM6: M6 x 1 thread; Hex 12 XPM10: M10 x 1 thread; Hex 15
Typical Applications	Corrosive liquids and gases, braking system pressure, onboard equipment monitoring, military and aerospace, explosive test benches, robotics and effectors, laboratory and research, extreme miniature devices

MEAS XPC10

Type	Gage, sealed, absolute
Pressure Range	0 - 10 to 500 bar / 0 - 150 to 7.5K psi
Output / Span	12 mV FSO, 4 V FSO (Amplified)
Unique Features	• Amplified output available • For static and dynamic applications • Optional IP67 ingress protection • High temperature operation
Accuracy	Down to ±0.25% FSO
Operating Temp.	-40°C to 220°C
Dimensions (mm)	M10 x 1 or 3/8-24 UNF thread; Hex 15
Typical Applications	Aerospace, test benches, oven monitoring equipment, cooling regulation systems

TRANSDUCERS AND TRANSMITTERS
Miniature

	MEAS EB, EPRB	MEAS EPIH	MEAS EPB, EPB-PW, EPL
Type	Gage, sealed, absolute	Gage, sealed, absolute	Gage, sealed, absolute
Pressure Range	0 - 0.35 to 700 bar / 0 - 5 to 10K psi	0 - 0.35 to 20 bar / 0 - 5 to 300 psi	0 - 0.35 to 350 bar / 0 - 5 to 5K psi
Output / Span	0.5 to 4.5 VDC	12 mV to 75 mV	10 mV to 125 mV
Unique Features	• High accuracy • Miniature design • UltraStable technology • EMI protected • Combined pressure and temperature	• Diffused silicon diaphragm with a large variety of sizes and shapes available as small as 0.05" outside diameter • High frequency response (To 1.7 MHz) • Ultra-miniature design	• Miniature flush mountable • Flush stainless steel diaphragm, flanged or non-flanged • Bonded silicon gage, high frequency response (To 400 KHz) • IP68 ingress protection in Titanium construction (EPB-PW)
Accuracy	±0.25% FSO	±1.0% FSO	±0.5 to ±1% FSO
Operating Temp.	-40°C to 125°C (Available option up to 150°C)	-40°C to 120°C	-40°C to 120°C
Dimensions (mm)	11 body diameter	Application dependent	3.2 to 7 outside diameter
Typical Applications	Motor sport, hydraulic / pneumatic systems, automotive test stands, military and aerospace test stands	Aerospace testing, wind tunnels, biomedical testing, aircraft body and wing dynamics, high frequency measurements	Air flow testing, hydraulic pressure systems, air pressure systems, bearing studies, ballistics, water hammer, miniature scale model testing, centrifuge pore water pressure measurements
Agency Approvals	CE (EMC)	—	—

TRANSDUCERS AND TRANSMITTERS
Liquid Level

	MEAS U5700	AST45xx
Type	Gage, sealed, absolute, compound	Gage, absolute
Pressure Range	0 - 2 to 10K psi	0 - 1 to 100 psi (AST4500, AST4510, AST4520)
Output / Span	0.5 - 4.5 V, 1 - 5 V, 0 - 5 V, 0 - 10 V, 4 - 20 mA, 1 - 6 V	0.5 - 4.5 V [Ratiometric], 1 - 5 V, 4 - 20 mA, 0.5 - 2.5 V
Unique Features	• UltraStable technology • High accuracy • IP68 rated connection and submersible polyurethane jacketed cable • Optional Polyoxymethylene cap	• Intrinsically safe ratings • Material options including: 316L, alloy C276, and PVDF • Low power options • High quality cable options
Accuracy	0.1 % FSO	±0.25% FSO
Operating Temp.	-10°C to 60°C	-40°C to 85°C
Dimensions (mm)	22.23 x 22.23 x 98.04	Application dependent
Typical Applications	Industrial process control and monitoring, advanced HVACR systems, refrigeration systems, automotive test stands, off road vehicles, pumps and compressors, hydraulic / pneumatic systems, agriculture equipment, energy generation and management, liquid level applications	Diesel tanks, chemical tanks, water tanks
Agency Approvals	CE (EMC)	UL/CSA Class I Div I, ATEX/IECEx Exia, ABS, CE

TRANSDUCERS AND TRANSMITTERS

Hazardous Location

	AST43xx, AST44xx	AST46xx
Type	Gage, sealed gage, compound, absolute	Gage, sealed gage, compound, absolute
Pressure Range	0 - 1 to 15 psi (AST43LP, AST44LP) 0 - 25 to 20K psi (AST4300, AST4400, AST4401)	0 - 1 to 20K psi
Output / Span	0.5 - 4.5 V [Ratiometric], 1 - 5 V, 4 - 20 mA, 0.5 - 2.5 V	0.5 - 4.5 V [Ratiometric], 1 - 5 V, 4 - 20 mA, 0.5 - 2.5 V, switch (AST46SW)
Unique Features	• Available with 316L, alloy C276, or alloy 718 materials • Low current consumption options • Low power options • High proof and burst pressure	• Available with 316L, alloy C276, or alloy 718 materials • Low current consumption options • Low power options • Local display (AST46DS) • Additional temperature output
Accuracy	±0.25% FSO	±0.25% FSO (AST4600, AST46DS), ±0.1% FSO (AST46HA, AST46PT)
Operating Temp.	-40°C to 85°C	-40°C to 85°C
Dimensions (mm)	Application dependent	Application dependent
Typical Applications	Compressors, well sites, ships, factory automation, SCADA equipment, offshore equipment	SCADA/RTU, well sites, offshore equipment, hydraulic controls
Agency Approvals	UL/CSA Class I Div I and II, ATEX/IECEx Exia/Exn, CCOE, CNEx, ABS, CE	CSA Class I/II Div I, ATEX/IECEx Exd, ABS, CE

	AST5100, AST5300, AST5400
Type	Differential
Pressure Range	0 - 5 H_2O″ to 5K psi
Output / Span	0.5 - 4.5 V [Ratiometric], 0 - 5 V, 1 - 5 V, 4 - 20 mA
Unique Features	• Wide range of pressures available • Full line pressure on either side without zero shifts • Hazardous location approvals (AST5300, AST5400)
Accuracy	±0.25% FSO (AST5100, AST5300), 1% TEB (AST5400)
Operating Temp.	-40°C to 85°C
Dimensions (mm)	Application dependent
Typical Applications	Filter monitoring, flow measurement, tank level measurement
Agency Approvals	CSA Class I/II Div I and II, ATEX/IECEx Exd/Exn, ABS, CE