

**Quick-Select Pressure Module Specifications**

**AQS-1 Sensor Module Ranges—**

**Inches of H<sub>2</sub>O**

**Gauge and Differential**

0/0.25	0/2.0	0/10	0/50	0/200
0/0.50	0/3.0	0/15	0/100	
0/1.0	0/5.0	0/25	0/150	

**Compound**

±0.125	±1.0	±5.0	±25	±100
±0.25	±1.5	±7.5	±50	
±0.50	±2.5	±12.5	±75	

**Available Accuracies (% of span compared to standard):**

- ±0.07% of span (ranges below 1 inH<sub>2</sub>O)
- ±0.06% of span (from 0/1 through 0/200 inH<sub>2</sub>O)
- ±0.1% of span (all ranges)
- ±0.25% of span (all ranges)

**Calibration Standards:**

±0.03% of reading secondary standards, traceable to NIST

**Media Compatibility:**

Clean, dry, nonconductive, noncorrosive gases

**Overpressure Capability:**

Positive Direction: 50 psi  
 Negative Direction: 15 psi  
 Maximum zero shift of less than 0.1% of span. No measurable span shift.  
 Maximum Static Pressure: 100 psi  
 (must not exceed overpressure specifications during testing)

**AQS-2 Sensor Module Ranges—**

**PSIG and PSIA\***

0/5*	0/30*	0/100*	0/250*	0/600	0/2000	0/5000
0/10*	0/50*	0/150*	0/300*	0/1000	0/2500	0/6000
0/15*	0/60*	0/200*	0/500	0/1500	0/3000	0/7500

**Vacuum (PSI)**

0/5	0/10	0/15	-15/+15	-15/+30	-15/+60
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**Compound (PSI)**

\* Standard: nonisolated for clean, dry, nonconductive, noncorrosive gas use.  
 Optional: ranges 0/10 through 0/300 psi isolated for use with any media compatible with 316 SS. All sensors with ranges of 500 psi and higher are isolated and can be used with any media compatible with 316 SS.

**Available Accuracies:**

- ±0.05% of span (psi ranges only)
- ±0.1% of span (psi ranges only)
- ±0.25% of span (all ranges)

**Calibration Standards:**

±0.01% of reading or better primary standards, traceable to NIST

**Pressure Types:**

Gauge to 300 psi sealed gauge above 300 psi  
 Absolute ranges from 5 to 7500 psia  
 Vacuum ranges of 0/5, 0/10 and 0/15 psiv

**Overpressure Capability:**

0/2 psi and below: 5x range  
 0/5 psi through 1000 psi: 2x range  
 Above 1000 psi: 1.5x range

**General Pressure Measurement Specifications**

**Repeatability:\*** ranges 0/5 psi and above ±0.02% of span (typical)  
 ranges 0/2 psi and below ±0.05% of span

**Sensitivity:\*** ± 0.002% of span with damping  
 1 part in 50,000 (max)

\* included in accuracy specifications

**Temperature Effect Specifications:**

Operating Range Standard: 32° to 120° F (0° to 49°C)  
 Operating Range Optional: 14° to 120° F (-10° to +49°C)  
 Compensated Range: 20° to 120° F (-7° to +49°C)  
 Reference Temperature: 70° ±3° F  
 Temperature Error: maximum of ±0.004% of span per °F over the compensated range for zero and span

**Storage Limits:** -4° F to ±158° F (-20° to +70° C)

**Operating Characteristics**

**Engineering Units:** psi, inHg, inWC, ftSW, bar, mbar, kPa, MPa, mmHg, cmWC, mmWC, kgcm<sup>2</sup> and any single user-defined, field-programmable engineering unit

**Damping:** (Measurement Averaging) Programmable averaging from zero through 16 consecutive readings

**Warm-Up:** 5 minutes for rated accuracy (maximum)

**Electrical Measurement Specification**

Input (volts)	Accuracy	Input (mA)	Accuracy
0/10 Vdc	±0.025% fs	0/20 mA	±0.03% fs
0/30 Vdc	±0.10% fs	0/50 mA	±0.05% fs

Auto-ranging 10/30 Vdc and 20/50 mA  
 Temperature Effect Electrical Measurement:  
 ±0.001% of span per °F over the compensated range

**Physical Characteristics**

**Display:** Alphanumeric LCD, 0.37 in. height per line  
 2 lines, 16 characters/line

**Display Update:** 100 ms

**Process Connection:** 1/8 NPT, internal thread

**Electrical Connection:** Miniature recessed banana jacks

**Housing:** Molded, high-impact ABS case, gray

**Weight:** Base unit: 2.2 lb (1.3 kg)  
 Pressure Module: 0.5lb (0.3kg) each

**Dimensions:** 7.88 x 4.24 x 3.25 (l x w x h) inches nominal

**Power Supply:**

Internal: 9 Vdc batteries (2 required)  
 External: ac adaptor 9 Vdc, 500 mA

**Portable Operation:** 30 hours on two 9 Vdc alkaline batteries

**Serial Interface**

**Type:** RS-232

**Baud Rate:** 300, 1200, 2400, 9600

**Calibration**

Both Quick-Select pressure modules and base unit electronics can be calibrated in the field.