

Type ST-2A Digital Indicator



FEATURES

- *Measurement of pressure, temperature, voltage and current*
- *Accuracy ratings of ± 0.1 , 0.05% and 0.025% F.S. (pressure)*
- *Pressure ranges from 0.25 inches of water to 10,000 psi*
- *Interchangeable pressure and temperature modules*
- *Multiple engineering units*
- *Temperature measurement with most common RTDs and thermocouples*
- *Programmable damping*
- *Tare capability*
- *Display hold*
- *RS232 two-way communications*
- *Standard N.I.S.T.-traceable certificate of calibration*

The ST-2A is the perfect bench companion product to the Ashcroft® ATE-100 field handheld calibrator. This bench top (or panel mounting) package shares the same pressure and temperature modules and interfaces with the same software packages as the Ashcroft ATE-100. An intuitive menu-driven user interface puts all of the ST-2A's power at the simple press of a key. It uses the AQS (Ashcroft Quick-Select™) modular sensor system to provide the ultimate in measurement flexibility.

Now you can purchase a calibration system to serve your field and bench mounting requirements while enjoying the significant cost savings gained through the availability of common pressure modules and software.

SPECIFICATIONS

Standard Display: Alphanumeric LCD, 0.37-inch height, 2 lines, 16 characters/line

Optional Display: Backlit LCD alphanumeric with 2 lines and 16 characters/line

Display Resolution: $\pm 0.002\%$ of span, 60,000 counts (max)

Display Update Rate: 130ms (nominal) with one sensor installed

Engineering Units: psi, in.H₂O, in.Hg, ftSW, bar, mbar, kPa, MPa, mmHg, cmH₂O, mmH₂O and kgcm² and any single user-programmable engineering unit

Damping: Programmable averaging from zero through 16 consecutive readings

Standard Operating Range: 32° to 120°F (0 to 49°C)

Compensated Range: 20° to 120°F (–7° to +49°C)

Reference Temperature: 70 $\pm 3^\circ$ F

Standard Temperature Effect: $\pm 0.004\%$ of span per degree Fahrenheit over the compensated range

Optional: AQS-2 Quick-Select modules are available calibrated to maintain rated accuracy over the 20° to 120°F (–7° to +49°C) compensated temperature range.

Storage Limits: –4°F to +158°F (–20° to +70°C)

Electrical Sourcing Specification: 24 Vdc at 25mA

Electrical Measurement Specification:

Input (volts)	Accuracy
0/10 Vdc	$\pm 0.025\%$ F.S.
0/30 Vdc	$\pm 0.10\%$ F.S.
Input (mA)	Accuracy
0/20mA	$\pm 0.03\%$ F.S.
0/50mA	$\pm 0.05\%$ F.S.

Auto-ranging 10/30 Vdc and 20/50mA

Temperature Effects Electrical Measurement:

$\pm 0.001\%$ of span per °F over the compensated range

Weight: ST-2A Base unit: 3.0 lb (1.4 kg)

Housing: Molded, high-impact ABS case

Electrical Connections: Standard banana jacks

Optional Battery Power Supply: 5 "AA" nicads with built-in charger or 5 "AA" alkaline (non-rechargeable)

External Power Supply: AC adaptor 9 Vdc, 500mA

Portable Operation: 20 hours with optional backlight off, 2 hours with backlight on

Warm-up: 5 minutes for rated accuracy (maximum), 30 minutes for complete stability

RS232 Serial Interface: with 9-pin D type at 300, 1200, 2400, 9600 baud.

Field Calibration: Calibration module and proper pressure and electrical standards are required.

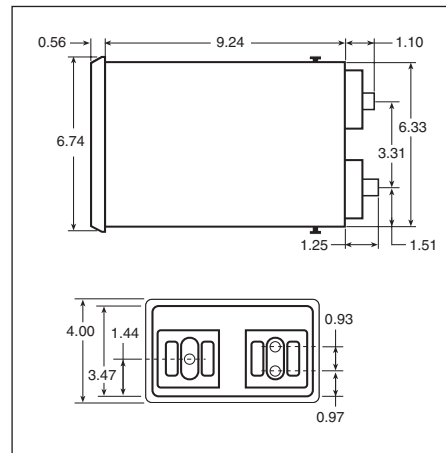
Optional Data Logging Capacity:

Standard measurements: 714 records

Date/time stamped measurements: 384 records

Provides prompts for storage of calibration history information, including instrument tags, As Found/As Left data and corresponding ambient temperature

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STANDARD RANGES

AQS-2 psi (gauge & absolute pressure)	AQS-1 H ₂ O (gauge/ differential pressure)	Other Engineering Units**
5	0.25*	psi in. H ₂ O in. Hg ftSW Bar mBar kPa mPa mmHg cmH ₂ O mmH ₂ O kg/cm ² User Selectable
10	0.5*	
15	1.0*	
20	2.0*	
25	3.0*	
30	5.0*	
50	10*	
60	15*	
100	25*	
150	50*	
200	100*	
250	150*	
300	200*	
500		
600		
1000		
1500		
2000		
2500		
3000		
5000		
6000		
7500		
10,000		
vacuum		**Note: Engineering units identified above are accessible through the unit select feature. However, readout will default to the primary unit of measure on start-up. Sensor modules scaled in primary units other than in. H ₂ O (AQS-1) or psi (AQS-2) are also available. Consult factory.
5		
10		
15		
compound		
±5	±0.125*	
±10	±0.25*	
±15	±0.5*	
-15/+30	±1.0*	
-15/+60	±1.5*	
	±2.5*	
	±5.0*	
	±7.5*	
	±12.5*	
	±25*	
	±50*	
	±75*	
	±100*	

* Non-isolated, for clean dry gas only