

## Type ST-2A Digital Indicator



### FEATURES

- *Measurement of pressure, temperature, voltage and current*
- *Accuracy ratings of  $\pm 0.1$ , 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*

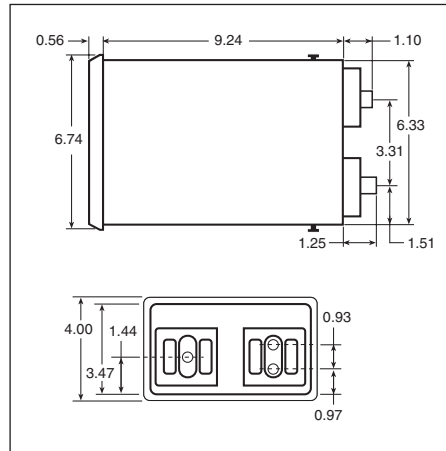
The ST-2A is the perfect bench companion product to the Ashcroft® ATE-100 field handheld calibrator. This bench top (or panel mounting) package shares the same pressure and temperature modules and interfaces with the same software packages as the Ashcroft ATE-100. An intuitive menu-driven user interface 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.H<sub>2</sub>O, in.Hg, ftSW, bar, mbar, kPa, MPa, mmHg, cmH<sub>2</sub>O, mmH<sub>2</sub>O and kgcm<sup>2</sup> 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°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.  |
- 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 <sub>2</sub> O (gauge/ differential pressure)	Other Engineering Units**
5	0.25*	psi in. H <sub>2</sub> O in. Hg ftSW Bar mBar kPa mPa mmHg cmH <sub>2</sub> O mmH <sub>2</sub> O kg/cm <sup>2</sup> 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		
<b>vacuum</b>		**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 <sub>2</sub> O (AQS-1) or psi (AQS-2) are also available. Consult factory.
5		
10		
15		
<b>compound</b>		
±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		