Purpose
The Cert-Pro data acquisition units provide the necessary bridge between your spectrophotometer output signal and the ASHRAE 110 software running on your computer. Both data acquisition units are custom designed to provide maximum flexibility and use with the ASHRAE 110 system.
Two separate data acquisition units are available for use with the ASHRAE 110 system to allow users to select only the specific features needed. Both systems will provide 100% compliance with the ASHRAE 110 test standard.

ASH100 Data Acquisition System.

The ASH100 data acquisition unit is the most sophisticated data collection unit offered. With a variety of analog and digital input/outputs available, this system will allow you to go far beyond the basic ASHRAE 110 test requirements and provide maximum flexibility and extensive troubleshooting and trending of test data for the difficult tests.

Features

- 8 channels of 12 bit analog to digital (A/D) conversion.
  - One A/D channel is required for connection of the gas spectrophotometer. This connection is provided on a 4 pin DIN connector on the rear of the ASH100 controller. A prefabricated cable is provided with the controller which includes 6 feet of shielded cable. The customer must provide the connection to the spectrophotometer analog output connector.
  - Two additional DIN connectors are provided for connection of a variety of instruments which provide an analog output signal. Examples of additional instruments which may be connected are multi sensor velocity probes, the ASHRAE 110 system will accept up to 4 anemometer inputs simultaneously. Additionally, pressure transducers, temperature transducers and other instruments may be connected and trended with the gas test to allow observation of related environmental conditions on one graph. The two auxiliary connectors also provide 12 VDC power at the connectors for ease of instrument connection.
- Digital input for connection of hand remote switch. The hand remote switch is included with the ASH100 controller. This switch may be used to initiate data collection for the smoke test, VAV response test and air velocity probe inputs.
- Audible alarm on front panel. The audible alarm is triggered to signal the end of a test, receipt of air velocity data and maximum gas reading during the sash scan test.
- 1 Air velocity meter RS232 connection. One RJ45 connection is available on the rear of the ASH100 controller for RS232 connection of an anemometer.

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The anemometer RS232 connection allows for bi-directional communication with the meter and will automatically enter all data into the air velocity grids. (Anemometer with polling capability is required for initiation of a sample. Meters without polling capability will still allow for automatic collection but the technician must press the read button to initiate each reading.) Polling capable instruments include TSI models with data logging features and the Shortridge ADM instruments with the 'C' option. Additionally, for air velocity meters will polling capability, the system will provide long term trend graphing capabilities for extremely powerful troubleshooting capabilities. Additionally, when polling equipped meter is connected, air velocity and tracer gas data may be collected simultaneously on a trend chart.

- 12 VDC to 110 (or 220) VAC power supply. Wall plug style.

ASH10 Data Acquisition System.

The ASH10 Data Acquisition unit provides the basic necessary connection to your gas spectrophotometer as well as a very useful connection to an anemometer with an RS232 connection.

Features

- 1 channel of 16 bit analog to digital (A/D) conversion.
  - The A/D channel is required for connection of the gas spectrophotometer. This connection is provided on a 4 pin DIN connector on the rear of the ASH100 controller. A prefabricated cable is provided with the controller which includes 6 feet of shielded cable. The customer must provide the connection to the spectrophotometer analog output connector.

- 1 Air velocity meter RS232 connection. One RJ45 connection is available on the rear of the ASH100 controller for RS232 connection of an anemometer. This connection allows for bi-directional communication with the meter and will automatically enter all data into the air velocity grids. (Anemometer with polling capability is required for initiation of a sample. Meters without polling capability will still allow for automatic collection but the technician must press the read button to initiate each reading.) Polling capable instruments include TSI models with data logging features and the Shortridge ADM instruments with the 'C' option. Additionally, for air velocity meters will polling capability, the system will provide long term trend graphing capabilities for extremely powerful troubleshooting capabilities. Additionally, when polling equipped meter is connected, air velocity and tracer gas data may be collected simultaneously on a trend chart.
- 12 VDC to 110 (or 220) VAC power supply. Wall plug style.