

Duct mounted airflow measuring station shall consist of one or more airflow/temperature measuring devices based on size of duct and all required electronics. The complete system shall be factory tested prior to shipment. The airflow measuring station shall not require calibration over the life of the equipment.

Each sensing point shall measure both airflow and temperature using a pair of instrument grade, hermitically sealed, glass encapsulated thermistors. Airflow rate sensing device shall utilize thermal dispersion technology. Thermistors resistance/temperature characteristics shall be traceable to NIST calibration standards. Sensors will read and system will compensate for air temperature and impact on velocity or CFM.

Each measurement location shall produce a single, linear analog output signal for airflow and temperature where indicated, both of which can be measured at the front end of the DDC control system. The system shall have the ability to perform self-diagnostics and produce an alarm, which can identify the source of malfunction. In the event of a sensor failure, the system shall ignore failed sensor(s), average remaining sensors and shall continue to operate.

Sensor range shall be minimum and maximum system airflow rates with an accuracy of $\pm 2\%$. Sensors and electronics shall operate over a temperature range of -20° F and a relative F to 160° humidity range of 0% to 99% (non-condensing).

The number of independent sensing points shall be per manufacturer's recommendations for the specified application as shown on drawings. The probe body shall be constructed of extruded aluminum alloy.

Provide airflow straitening devices as per manufacturer's recommendations.

Vortex shedding arrays, pitot tubes and differential pressure sensing arrays are not acceptable.

Provide air flow measuring station transmitter including any 24 VAC transformer to interface with the BAS. Air flow measuring station will provide discrete temperature output and is acceptable for temperature measurement and control as required by specification.

Provide required length of cable to install the transmitter inside of the rooftop air-handling unit service vestibule.

Prior to start-up, a factory trained representative shall visit the site to inspect installation of air flow measuring devices and wiring. A written report shall be submitted to the Engineer for the start-up services.

Ebtron Model GTA116-PC or approved equivalent.