The Importance of Precise Airflow Measurement

Airflow measurement provides the information from which all airflow control evolves. The health of the people within an environment depends on it. The sustainability and economics of the building depend on it. Precise airflow measurement is no longer a desire but a necessity for proper environmental control within all major building structures from office buildings to healthcare facilities, laboratories and life science buildings.

The innovative minds at Accutrol have developed the VorTek^{G3} line of airflow measurement products to meet this important demand. Their duct, fan inlet and fan array airflow measurement products offer precise, digital vortex sensing with simplified application, installation and operation, paired with the free AHR award-winning graphical software.

Digital Technology

The VorTek^{G3} airflow measuring device is the only digital airflow sensing technology in the HVAC market. Using proven vortex shedding technology, the shedder mounted in the air stream creates pressure pulses, which are converted to an electronic frequency. The frequency is directly proportional to the airflow velocity. This linear relationship enables the VorTek^{G3} to maintain high accuracy over a very large range.

Stable and Drift-Free

One of the many advantages of vortex shedding is that the technology is not amplitude based and cannot drift over time. Therefore, no recalibration is required – ever.

Other airflow sensors rely on an amplitude measurement device, which is susceptible to inaccuracies and drift. Only vortex shedding maintains stable sensing over time.

Linear Airflow Measurement

The VorTek^{G3} is the only airflow measurement technology that is linear. The inherent physics of vortex shedding is a linear relationship between frequency and air velocity. That means that as air velocity changes, the frequency of the pulses changes in a linear manner. This eliminates the need for complicated curve matching associated with thermal devices.

Modular Design

The VorTek^{G3} incorporates a unique, modular design enabling you to order only the functions that are required for a specific application. Therefore, you don't pay for features that you don't need. Any unit can be easily changed in the field to add sensors or reconfigure the range using the free Accutrol Insight graphical user interface. Native BACnet® communication is also available on all VorTek^{G3} products.

User Interface

The innovative design of the VorTek^{G3} incorporates the use of the free Accutrol Insight graphical user interface. Gone is the frustration of old style alphanumeric displays and push buttons, which require a large decision tree user manual. The Insight software provides simple intuitive access to the configuration of the transmitter using any PC with a standard USB connection.

For a free live demonstration at your facility please contact us at sales@accutrolllc.com or 203-445-9991.

