MEASURE

AIRFLOW

BROCHURE

CRC™

Measure What Matters.

XF5

The CRC Fan Array Monitoring System (XF5) accurately measures and totalizes airflow for up to 12 fans within a single array or across dual supply/return arrays. Featuring a full-color touchscreen interface, it delivers real-time performance insights and enables fast, intuitive commissioning. The XF5 ensures precise, repeatable airflow measurement using CRC's patented Airflow WING Fan Inlet Probes or Fan Piezo Sensors for reliable system monitoring.

KEY FEATURES

- **Monitors Up to 12 Fans:** Measures and totalizes airflow for up to 12 fans within a single or dual fan array, with real-time data displayed on an intuitive touchscreen.
- **Auxiliary Monitoring Inputs:** Supports two additional inputs for outside air measurement, duct temperature sensing, or AHU filter status.
- **Advanced Alarm System:** Provides real-time alerts for totalized airflow deviations and individual fan failures.
- **Streamlined Commissioning:** Intuitive touchscreen interface enables fast setup without specialized software or tools.
- **Seamless BACnet® MS/TP Integration:** Enables network access to individual fan data and total system performance for smooth BMS integration.

AFW

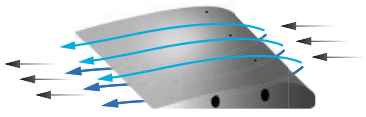
The AFW uses CRC's patented airfoil probe design for precise, repeatable airflow measurement with passive, maintenance-free operation. Leveraging Bernoulli's principle, it resists airborne contaminants and includes a touchscreen transmitter for easy setup, commissioning, and real-time performance monitoring.

KEY FEATURES

- **Multi-Station Capability:** Supports up to four independent airflow measurement stations, reducing hardware and network demands.
- **Efficient Commissioning:** Intuitive touchscreen enables fast setup without external software or tools.
- **Integrated Diagnostics:** Onboard I/O and BACnet® diagnostics simplify configuration, troubleshooting, and system verification.
- **Versatile Communication:** Provides scalable analog outputs and BACnet® MS/TP, configurable via touchscreen.
- **Intuitive Interface:** High-resolution touchscreen delivers real-time airflow data for up to four stations, ensuring clear monitoring and operation.

PATENTED WING

CRC's patented airfoil design generates a precise pressure differential for accurate, natural airflow measurement.



WING KEY FEATURES

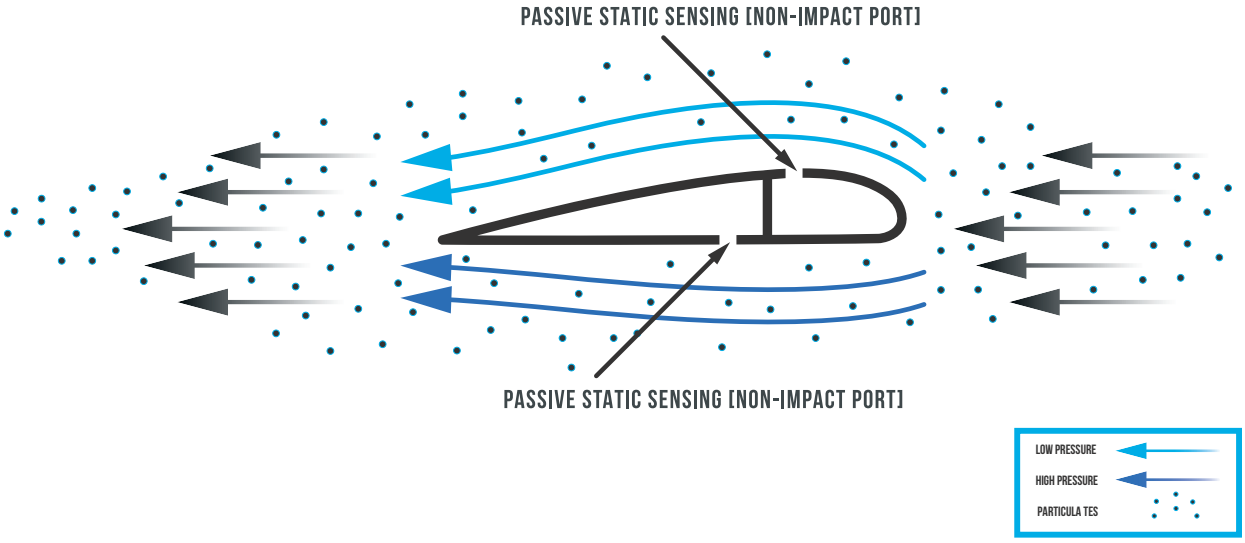
- **Patented Airfoil Design:** CRC's patented design generates a precise pressure differential for accurate, natural airflow measurement.
- **High Accuracy & Maintenance-Free:** Silicon-based, dead-ended sensing prevents contamination, ensuring long-term reliability without maintenance.
- **Debris-Resistant:** Indirect sensing, positioned outside the airflow path, prevents clogging common in pitot and thermal systems.
- **Exceptional Stability:** Provides consistent, repeatable measurements across varying airflow conditions.
- **Contaminant-Resistant:** Static pressure sensing, oriented perpendicular to airflow, eliminates lint, dust, and dirt buildup.
- **Wide Operating Range:** Delivers precise airflow feedback across both high-volume and low-flow applications.

PRODUCT TECHNOLOGY

CRC's patented passive indirect sensing technology delivers reliable and accurate airflow measurement in demanding applications such as outside air intakes, exhaust air streams, and fan arrays within air handling units. Engineered for fast installation and precise performance, CRC's XF5 and AFW products simplify airflow monitoring while supporting optimal system efficiency.

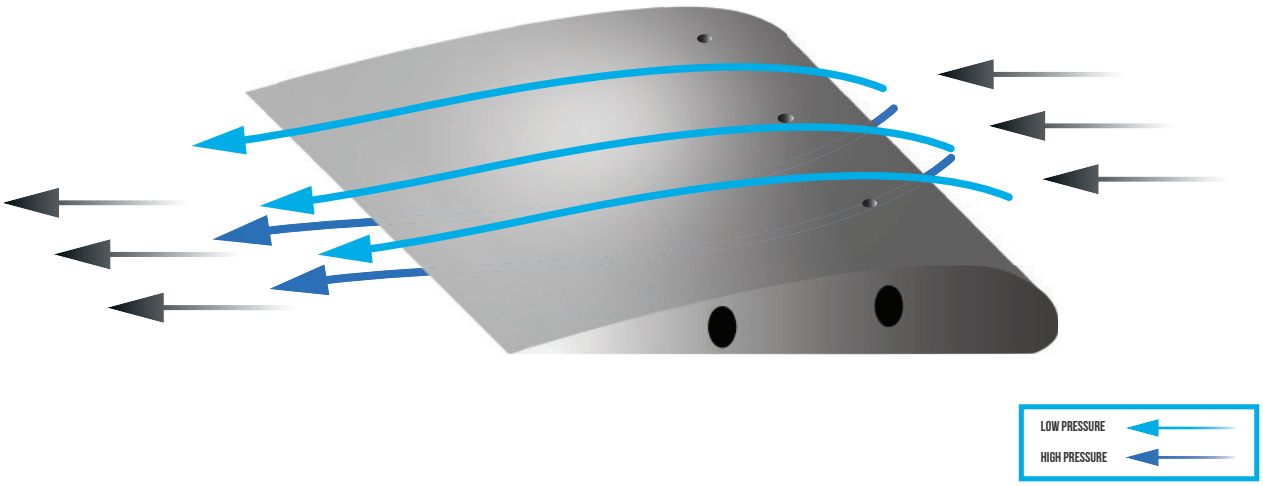
PASSIVE INDIRECT SENSING

CRC's patented airfoil design uses the difference in pressure across its upper and lower surfaces to measure airflow. The sensing arrangement ensures accurate, repeatable, and verified airflow performance.



AIRFLOW WING DESIGN

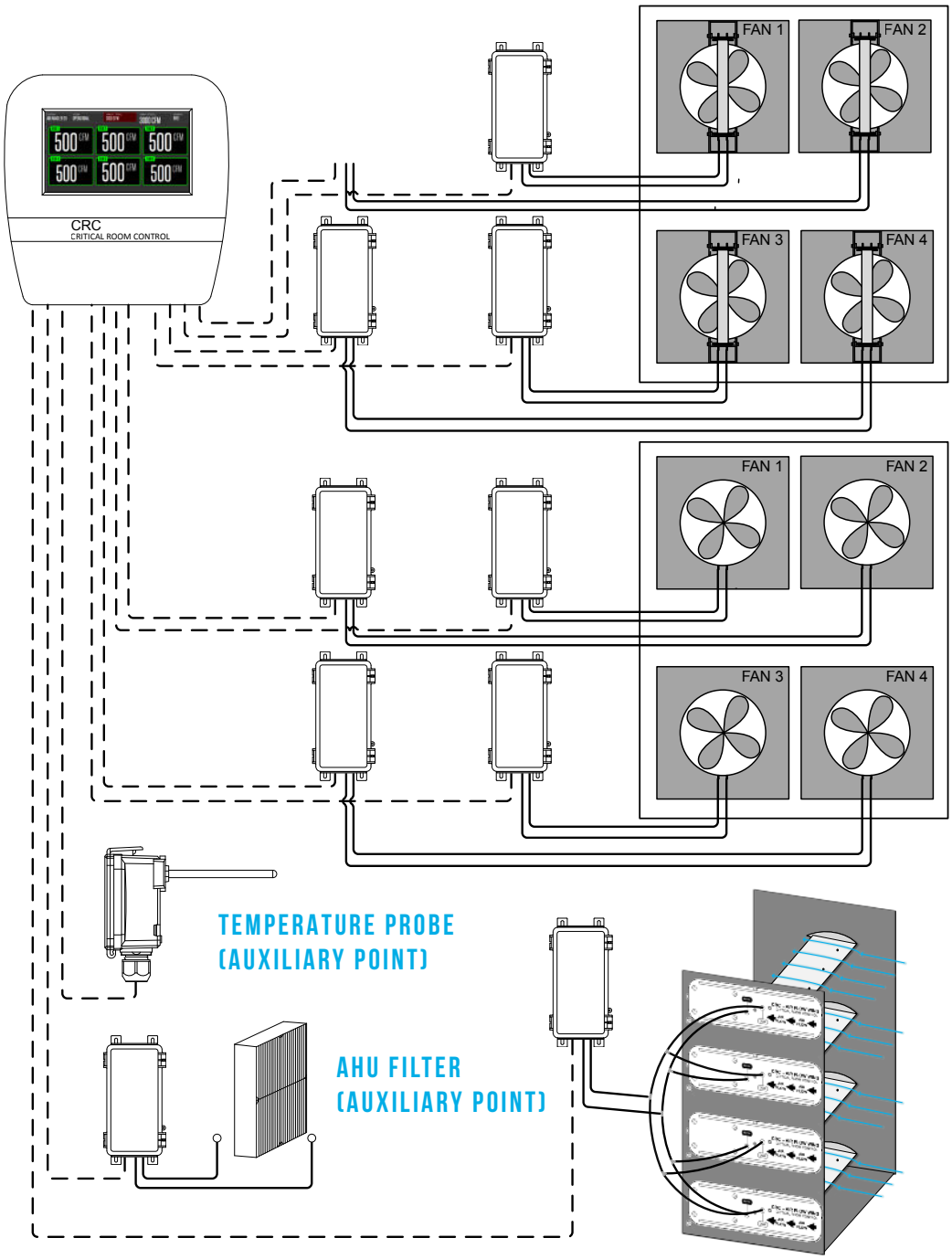
The patented CRC Airflow Wing features static pressure sensing ports precisely oriented perpendicular to the airflow, enabling a passive and indirect sensing mechanism that significantly reduces the risk of clogging from lint, dust, and dirt—challenges that commonly affect other airflow sensing technologies.



EQUIPMENT LAYOUT OPTIONS XF5

SYSTEM CONFIGURATION

The XF5 simplifies installation with its modular design, allowing the transmitter to be positioned in a convenient location while remote sensors can be placed at optimal positions relative to the fan array. When using CRC's patented Airflow WING probes, they can be installed either in the field or at the air handling unit manufacturer. The XF5 also supports Piezo Sensors, enabling field connections to manufacturer-supplied Piezo rings. Additionally, the XF5 offers two extra input channels for connecting additional airflow measurement stations, including outside air monitoring, temperature sensing, or filter monitoring.

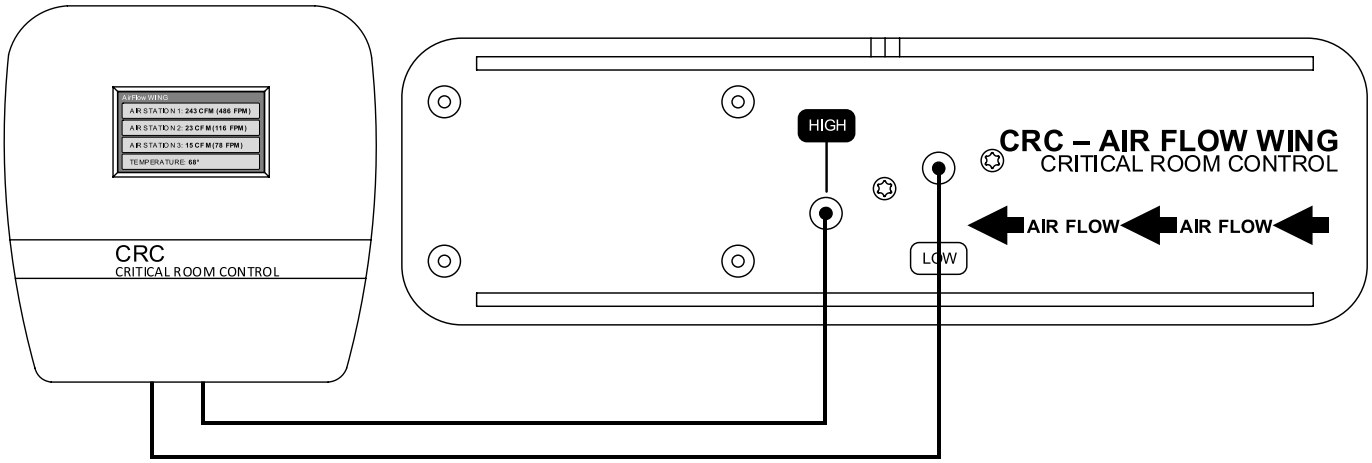


EQUIPMENT LAYOUT OPTIONS AFW

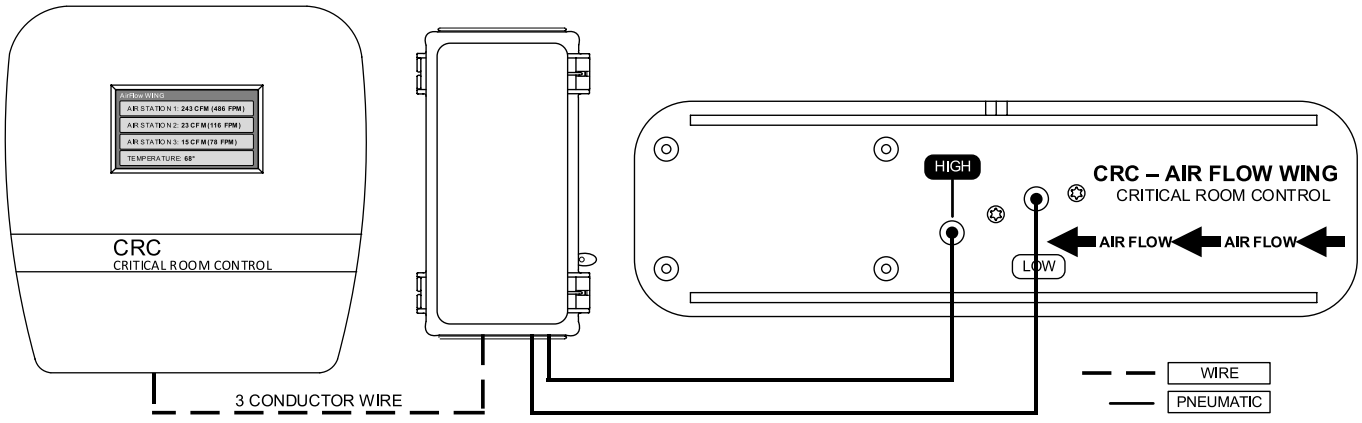
SYSTEM CONFIGURATION

The AFW transmitter and patented Airflow WING (AFW) probes provide a flexible, high-performance solution for applications where accurate airflow measurement is critical. The transmitter supports up to four airflow stations with remote sensors, allowing it to be mounted in an accessible location for ease of maintenance. CRC's patented airfoil probes are designed for versatile installation supporting insertion mount, internal mount, or face mounting on fans, dampers, or louver assemblies. For installations with suboptimal mounting conditions, the AFW offers up to five configurable commissioning offsets to fine-tune airflow readings. All setup and field commissioning are performed through the AFW transmitter's intuitive touchscreen interface, streamlining installation and reducing startup time.

AIRFLOW WING EQUIPMENT LAYOUT WITH REMOTE SENSOR



AIRFLOW WING EQUIPMENT LAYOUT WITH REMOTE SENSOR



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