The SERVAIRE-E100 rack mount bidirectional airflow measurement device can detect very small pressure differentials (as low as 0.0002” H₂O) across containment zones by measuring the airflow bled across a false server. Temperature measurement of the bleed airflow path is also provided.

**Typical Applications**
- Supply Air Fan Control
- Supply Air Deficiency Detection
- Supply Air Over-pressurization Detection
- Containment Aisle Short-circuit Airflow Detection

**Benefits**
- Reduce Fan Energy
- Improve Server Efficiency
- Reduce Server Failures

**Product Highlights**
- Simple Rack Mount Design
- Self-contained Sensing Unit
- Long-term Stability
- Simultaneous BACnet and Modbus Capability
- Supports up to 10 Simultaneous Connections
- Dual Redundant 110 VAC Power Supplies

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SERVAIRE-E100_Overview_r7a
SPECIFICATIONS: SERVAIRE-E100

General
Probe and Sensor Node Configuration
1 bi-directional bleed sensor in a single rack mount housing

Listings and Compliance
FCC: This device complies with Part 15 of the FCC rules
RoHS: This device is RoHS2 compliant

Environmental Limits
Temperature: -20 to 160 °F [-28.9 to 71.1 °C]
Humidity: (non-condensing) 5 to 95%

Bleed Sensor Assembly
Sensing Node Sensors
Self-heated sensor: Two precision, hermetically sealed, bead-in-glass thermistor probes
Temperature sensor: One precision, hermetically sealed, bead-in-glass thermistor probe

Sensing Node Housing
Material: Glass-filled Polypropylene
Sensor Potting Materials: Waterproof marine epoxy

Airflow Measurement
Accuracy: ±2% of reading to NIST traceable-standards airflow standards (includes transmitter uncertainty)
Calibrated Range: -2,000 to 2,000 fpm [-10.16 to 10.16 m/s]
Approximate Pressure Range: -0.5 to +0.5 in. H₂O [-124.54 to +124.54 Pa]
Calibration Points: 9

Temperature Measurement
Accuracy: ±0.15°F [0.08 °C] to NIST-traceable temperature standards (includes transmitter uncertainty)
Calibrated Range: -20 to 160 °F [-28.9 to 71.1 °C]
Calibration Points: 3

Integral Transmitter
Power Requirement: 110 VAC @ 8V-A
Power Redundancy: Dual independent redundant power supplies
User Interface: 16-character LCD display and 4 button interface

B.A.S. Connectivity
SERVAIRE-E100: One isolated Ethernet (simultaneously supported BACnet Ethernet or BACnet IP, Modbus TCP and TCP/IP) network connection - supports up to 10 simultaneous connections

Airflow (or Pressure) Alarm
Type: Low and/or high user defined setpoint alarm
Tolerance: User defined setpoint
Delay: User defined
Reset Method: Manual or automatic
Visual Indication: Yes, LCD display
Network Indication: Yes

System Status Alarm
Type: Sensor diagnostic system trouble indication
Visual Indication: Yes, LCD display
Network Indication: Yes

Rack Mount Assembly
Standard 1U Rack Height Enclosure
1.75H x 19W x 12D in. [44.5 x 482.6 x 304.8 mm]