AIRNEXUS SENSOR EXPANSION (ANX-EXP-TEMP16)

General

The Airnexus Sensor Expansion is designed to enhance your HVAC system by seamlessly integrating with Airnexus discrete temperature sensors. This advanced expansion module provides unparalleled precision and control, ensuring optimal performance and energy efficiency for residential, commercial, and industrial environments.

With the capacity for up to 16 temperature sensors, there is ample room for most applications.

Seamless Integration: Effortlessly connects with Airnexus discrete temperature sensors, expanding their capabilities and providing comprehensive temperature monitoring.

Enhanced Accuracy: Utilizes cutting-edge technology to deliver precise temperature readings, crucial for maintaining optimal HVAC performance.

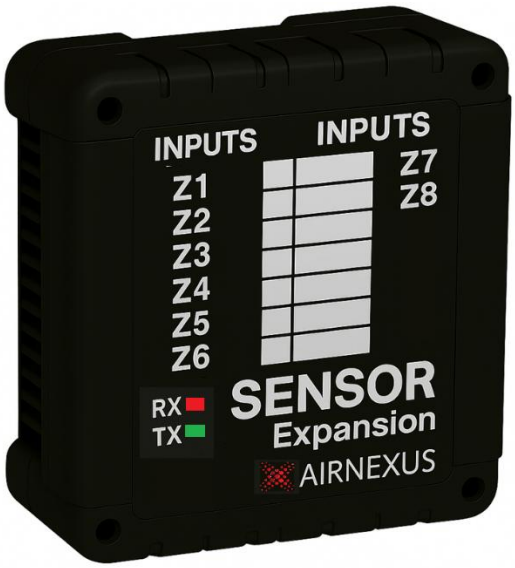
Scalability: Supports multiple sensors, allowing for extensive coverage and monitoring of various zones or areas within a facility.

User-Friendly Interface: Features an intuitive setup and configuration process, ensuring a hassle-free installation and operation.

Real-Time Monitoring: Offers real-time data collection and reporting, enabling quick responses to temperature fluctuations and anomalies.

Energy Efficiency: Optimizes HVAC operations, reducing energy consumption and costs by maintaining precise temperature control.

Robust Design: Built with high-quality materials to withstand diverse environmental conditions, ensuring long-term reliability and performance.



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Installation

Installing the Airnexus Sensor Expansion is straightforward, requiring only a 24VDC power source and a two-wire bus cable for communication with the Airnexus VRV32 controller. All sensor cabling uses a two-wire configuration, with specifications varying based on cable length.

Step-by-Step Installation Guide

1. **Unpacking and Preparation**
    - Ensure you have all the necessary components: the Airnexus Sensor Expansion module, power supply (24VDC), two-wire bus cable, and sensor cables.
    - Verify that the installation site is suitable, with access to a 24VDC power source and proximity to the Airnexus VRV32 controller.
2. **Mounting the Expansion Module**
    - Select a suitable location for the Sensor Expansion module, ensuring it is within the recommended distance from the VRV32 controller.
    - Securely mount the module using appropriate hardware and ensure it is positioned to allow easy access to power and communication connections.
3. **Connecting the Power Supply**
    - Connect the 24VDC power supply to the designated power input terminals on the Sensor Expansion module.
    - Ensure the power supply is securely connected and that the power source is reliable.
4. **Bus Cable Connection**
    - Use a two-wire bus cable to connect the Airnexus Sensor Expansion module to the Airnexus VRV32 controller.
    - Ensure the connections are secure and that the cable is properly routed to avoid any interference or damage.
5. **Sensor Cabling**
    - For sensor cables up to 10 meters in length, use a two-wire 0.5mm² cable.
    - For sensor cables longer than 10 meters (up to a maximum of 50 meters), use a two-wire 0.75mm² cable.
    - Connect each discrete temperature sensor to the Sensor Expansion module using the appropriate cable based on the distance.

Tips for a Successful Installation

- **Cable Management**: Organize and secure all cables to prevent tangling and interference.
- **Connection Verification**: Ensure all connections are tight and correctly placed in their respective terminals.
- **Documentation**: Keep a record of the sensor number / zone name during installation process, including cable lengths and sensor placements, for future reference and maintenance.

Specifications

Specifications Table	
Voltage	24VDC 0.5A +/- 5%
Operating Temperature Range	-5°C ... +55°C
Weight	65g
Plastic	ABS
Standard	IEEE802.3
Processor	**Cortex-M4 Core**: High-performance ARM Cortex-M4 core with FPU, operating at up to 168 MHz. **Memory**: Up to 1 MB Flash memory, 192 KB SRAM
Features	**EMI Protection**: Equipped with protection against electromagnetic interference, ensuring stable and reliable performance. **ADC Channels**: 3 ADCs, 12-bit resolution, up to 16 channels
Dimensions	108 x 90 x 50 mm
Installation	DIN-rail