

Zephyr 4 Touchscreen Monitoring

Overview

AirCare Automation's **Zephyr 4** – Field Configure Monitoring Console intelligently MONITORS and CONTROLS clean room and facility environments. The console provides communication (MODBUS-RTU platform), system monitoring (and FFU control) in one easy-to-use package.

The **Zephyr 4** console supports cleanroom monitoring up to 16 rooms – with ability to add FFU control for up to a total of 200 FFU addresses. Plug-and Play, the Console is field configurable to match your facility layout needs

The **Zephyr 4** Console is supplied in a White Steel enclosure (ACPNL08 with SMPS) to easily wall mount. Ethernet Access provides remote access to the console, e-mail alarm notification and data-log download for the sensor readings.

OPTION – BMS Exchange (MODBUS TCP, OPC or BACNET)

OPTION – FFU Control for up to 16 rooms (200 FFU)

OPTION – Digital I/O for FFU set-back, shut-down



Specifications for Touchscreen Console

Power Supply

- Input Voltage: 24 VDC
- Max Current Consumption: 500mA@24V

Display Screen

- TFT, LCD Display, White LED backlit
- Viewing Area: 7.0"
- Display resolution: 800 x 480 pixels

Keyboard

- Virtual Keyboard when Data entry needed.

Communication

- One Isolated RS485 Serial Port (PORT 1)
 - Voltage limits -7 to +12VDC differential maximum
 - Baud rate: 9600
 - Supports up to 6 Sensor Modules & 100 FFU addresses
 - Cable type: Twisted pair (cat5e)

Functions/ Features

- Monitor Diff. Pressure, Temp, RH
- Set Hi/Lo alarm limits
- Adjust read-out to match certifier measurements
- 16 rooms
- Data-Log of results
- E-mail Alarm notification
- Menu driven configuration options
- 3 levels of user control: View, User and Master

Environment

- Panel mounted console
- Operational temperature: 0 to 50°C (32 to 122°F)
- Storage temperature: -20 to 60°C (-4 to 140°F)
- Relative Humidity (RH): 5% to 95% (non-condensing)

Enclosure (ACPNL10 - 18 x 18 x 6 inches)

Formed and spot welded from 16-gauge steel.
 Formed steel covers - slotted quarter turn latch.
 Full swing door using butt hinges.
 Through holes in back for wall mounting.
 Bonding stud is provided on the door and a grounding stud is provided on the box.
 Includes 14-gauge steel inner panel.
 UL-50 Type 1 CSA Type 1
 NEMA Type 1 IEC 60529, IP20

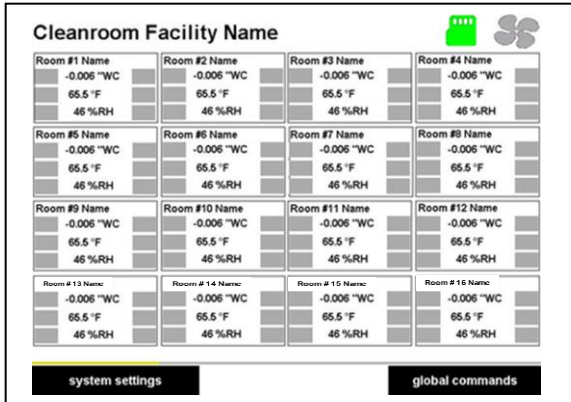


enclosure (ACPNL10)

EXAMPLE SCREENS

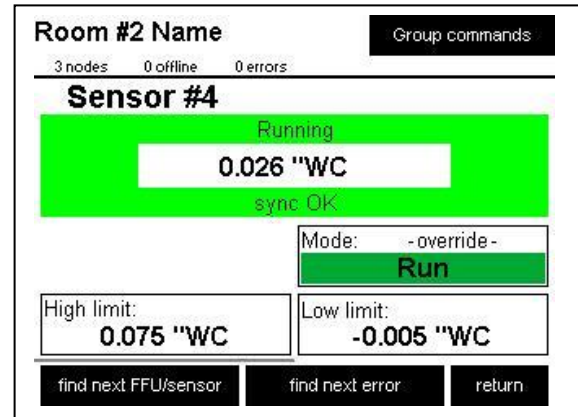
Main screen/Facility Control

The main screen shows the assigned groups (in this example 16 rooms) with measured P, T, RH. Each group has identified number of fans and identified



SENSOR SCREENS

Pressure, Temperature and Relative Humidity Screens provide individual sensor access .. providing high/low limit control and allowing sensors to be turned on/off.



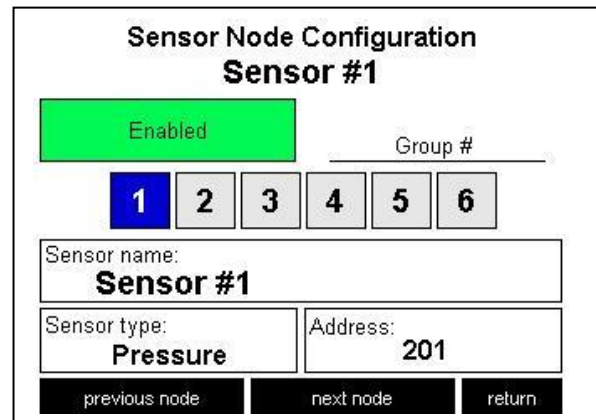
Fan/unit group control

With FFU control added, the 16 rooms have room identification noting the number of fans in the room and error notification for the room. Tapping on the room gets you to the individual Fan information.

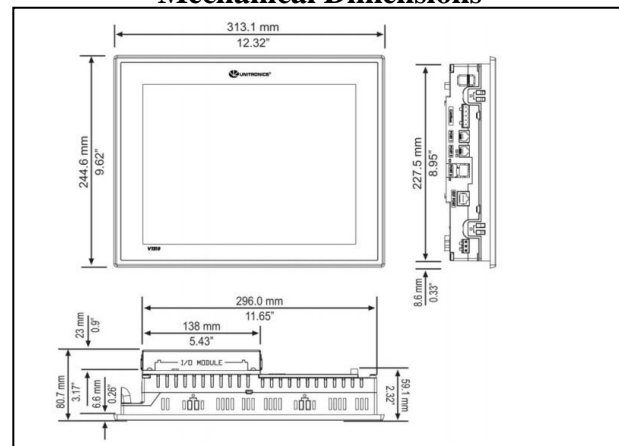


Sensor Node Set-Up

Sensor Nodes are easily set-up and assigned to rooms. DSM units are preassigned MODBUS addresses to easily assign up to the 12 rooms designated



Mechanical Dimensions



Fan/unit Global Commands

FFU set-up is easy and trouble free. Set-up screens, global commands, hi/low limits.

