iWorx®
by Taco Electronic Solutions

Submittal Data Information

501-008

ASM2 Auxiliary Sensor Module
Self-Contained Interoperable Controller Model UCP-1

SUPERSEDES: November 12, 2010　　　　　　　　　　　　　　　　EFFECTIVE: June 11, 2012

Job: _____　　　Engineer: _____

Contractor: _____　　　Rep: _____

Date: _____　　　Tag/Item #: _____

ASM2

The Auxiliary Sensor Module is a stand-alone microprocessor based controller for monitoring auxiliary sensors. The application would include unitary heating, ventilating, and air conditioning (HVAC) equipment.

Overview

Analog inputs are provided for outdoor air temperature, outdoor air humidity, indoor air humidity, and supply water temperature. A "unit enable" digital input is provided for confirmation to water dependant systems. For energy monitoring, digital inputs for meter pulses and end-of-interval signals are also provided.

The controller is based on the LONWORKS® networking technology. The controller can be networked to a higher-level control system for monitoring and control applications.

Features

- Outside air temperature measurement
- Outside air humidity measurement
- Supply water temperature measurement
- Indoor humidity measurement
- Energy meter digital input for pulse counting
- Energy monitoring "end of period" digital input
- Network outputs to LCI for load shedding functions
- Current energy measurement
- Current daily energy consumption measurement
- Log of daily energy consumption (previous 30 days)
- Log of interval energy usage (previous 96 intervals)
- "Unit Enable" digital input
- LONWORKS interface to building automation systems.
- Automatic configuration with the LCI

Specifications
Electrical
Inputs
- Cabling: twisted shielded pair, 18 AWG recommended—500 feet max. (152 meters)
- Resolution: 10 bit
Outdoor Humidity
- 0-10 Volts DC

Outdoor Air, Supply Water Temperature
• Precon Type III 10K thermistor

Indoor Humidity
• 0-10 Volts DC

Energy Monitor, End of Interval
• Normally open
• Dry contact
• 5 Volts DC Max

Unit Enable
• Normally open (closed when active)
• Dry contact
• 5 Volts DC Max

Recommended Sensor Wire

Cable Type	Pairs	Details	Taco Catalog No.
18AWG	1	Stranded Twisted Shielded Pair, Plenum	WIR-018

FTT-10A Network

• Speed: 78KBPS
• Cabling: Maximum node-to-node distance: 1312 feet (400 meters)
• Maximum total distance: 1640 feet (500 meters)

Cable Type	Pairs	Details	Taco Catalog No.
Level 4 22AWG (0.65mm)	1	Unshielded, Plenum, U.L. Type CMP	WIR-022

For detailed specifications, refer to the *FTT-10A Free-Topology Transceiver User's Guide* published by Echelon Corporation (www.echelon.com/support/documentation/manuals/transceivers).

Power

Power Requirements
• 24VAC (20VAC to 28VAC), requires an external Class 2 supply

Power Consumption
• 7.2W with no external loads, maximum limited by the Class 2 supply rating

Mechanical

Housing
• Dimensions: 5.55" (141mm) high, 6.54" (166 mm) wide, 1.75" deep (44 mm)
• ABS

Weight
• Controller Weight: 0.70 pounds (0.32 kilograms)
• Shipping Weight: 1.0 pounds (0.46 kilograms)

Electronics
• Processor: 3150 Neuron 10 MHz
• Flash: 48 Kilobytes
• SRAM: 8 Kilobytes
• Termination: 0.197" (5.0 mm) Pluggable Terminal Blocks, 14-22 AWG

Environmental
- Temperature: 32 °F to 140 °F (0 °C to 60 °C)
- Humidity: 0 to 90%, non-condensing

Agency Listings
- UL Listed for US and Canada, Energy Management Equipment PAZX and PAZX7.

Agency Compliances
- FCC Part 15 Class A

CONTROLS MADE EASY®

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