

INDOOR TEMPERATURE / RELATIVE HUMIDITY TRANSMITTER

- Low cost transmitter for indoor temperature, and relative humidity monitoring.
- 0.5 degrees C accuracy
- RH sensor is digitally calibrated for 2% accuracy
- Mounts on any standard single-gang wiring conduit box.
- Compact, thin and stylish design. Only 2.8" W x 4.55" H x 0.79" D
- Sensing element is isolated from electronics for more accurate air temperature measurement.
- Open communication standard using LONWORKS® Protocol
- All outputs available using Standard Network Variables (SNVT)
- Multiple sensors multiplexed on same wires

DESCRIPTION

The Model 1250 is an indoor temperature and relative humidity transmitter that is self-contained. It contains the temperature sensor, humidity sensor, microprocessor, measurement electronics, and network communication interface.

The temperature and humidity sensors are located away from the electronics in a separate compartment. This allows a more accurate measurement of air temperature and humidity for two reasons. One, it isolates the sensors from temperature generated by the electronics. Two, it provides excellent airflow around the sensors.

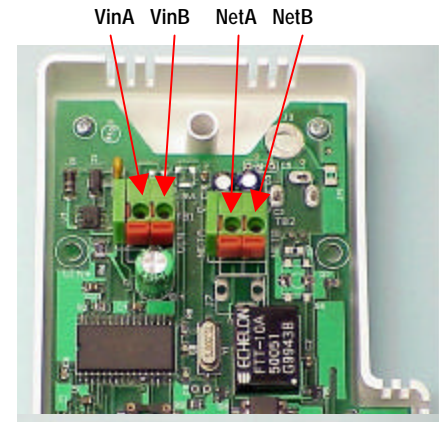
The sensor and configuration information is communicated to other devices via the LONWORKS communication protocol. This allows multiple sensors to be used over a simple four-wire bus installation.

WIRING AND INSTALLATION

The Model 1250 is supplied with two two-position terminal blocks. The first terminal block is used to connect power. The second is used to connect the network communication channel. For convenience, the Model 1250 accepts either low voltage AC or DC power. The input power and network wiring pairs are not polarity sensitive and the wiring can be reversed.

The on-board Service switch and LED allows installation on to the LONWORKS network. A 3.5 mm jack allows installers to connect to the network for configuration or local monitoring without disturbing the main wiring.

The entire unit mounts directly to any standard single-gang wiring conduit box.

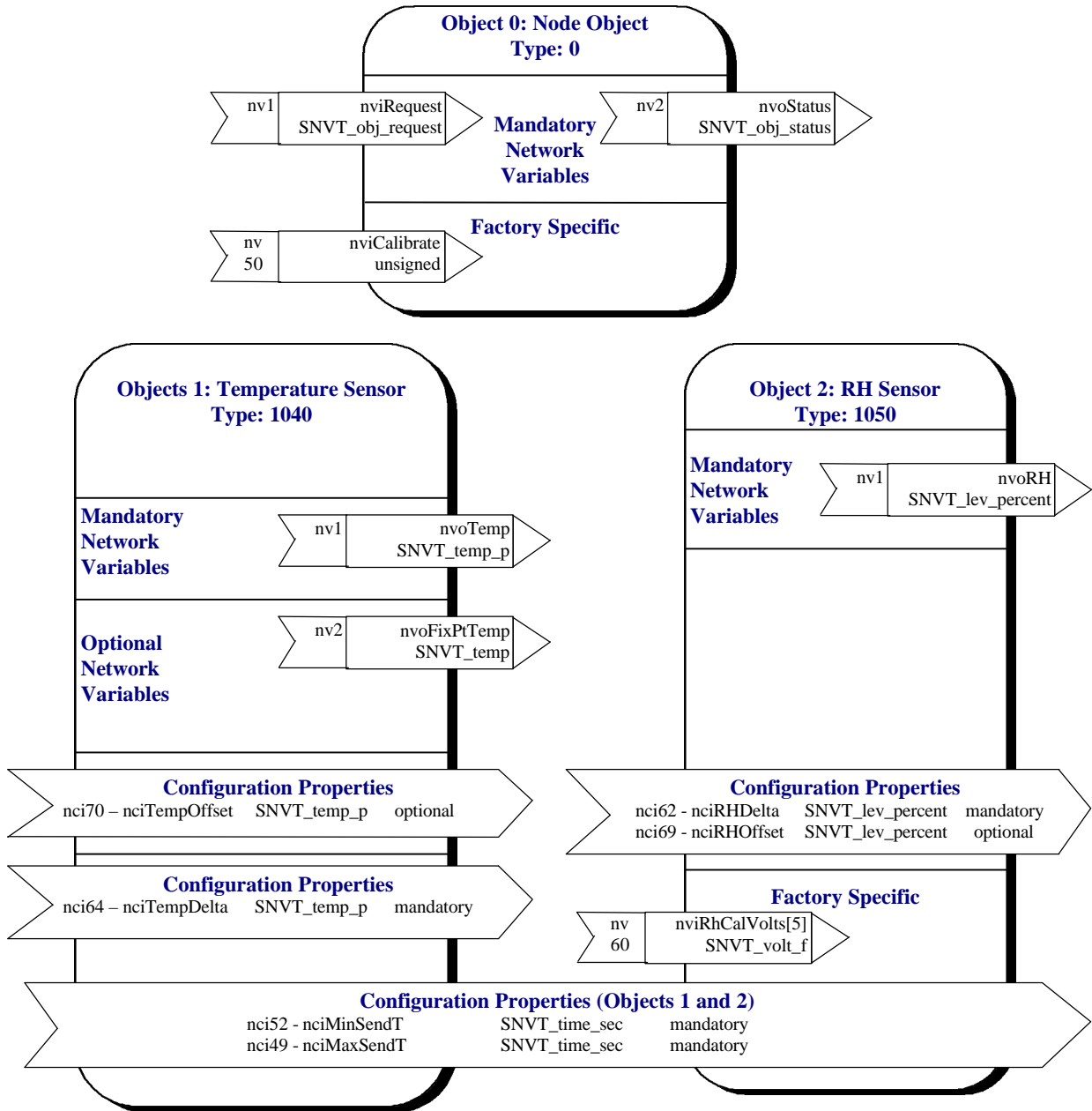
**APPLICATION AREAS**

- Grouped Sensor Inputs for Wiring Reduction
- Indoor Air Quality Control
- Distributed HVAC Monitoring and Control
- High Tech Manufacturing Environments
- Integration with other LONWORKS HVAC Products

MODEL 1250

NETWORK OBJECTS

The Model 1250 contains three LONMARK objects: One Node Object, one Temperature Sensor Object type 1040, and one Relative Humidity Sensor Object type 1050. Note, the output data is available in multiple formats for convenience.



GENERAL SPECIFICATIONS

Temperature

Sensing Element	Solid State
Accuracy	+/- 0.5 C typical 15 C to 55 C : +/- 1.0 C typical entire operating range
Temperature Range	0 to 70 C
Resolution	0.1 C

Relative Humidity

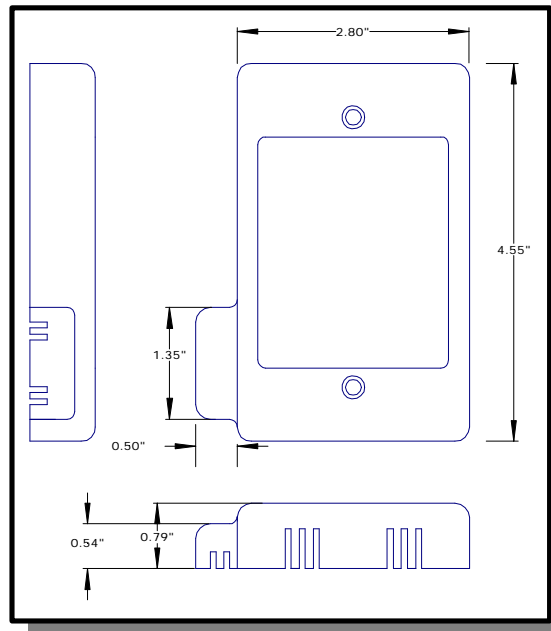
Sensing Element	Honeywell HIH-3605
Accuracy / Resolution	+/- 2% RH, 5-95% RH, 0-50C - +/-3% RH 0 to 70C - Resolution is 0.04%
Maintenance	No routine maintenance required
Sensor Stability	+/-1% RH typical at 50% RH in 5 years

Electronics

Operating Environment	0 to 70C, 0-95% RH non-condensing
CPU	3120 Neuron
Input Power	10 to 28 VDC or 9 to 24 VAC
Input Power Protection	Input power is fused and transient voltage protected. (Fuses do not need to be replaced)
Current Consumption	25 mA Typical with Service LED off 30 mA Typical with Service LED on
Network Transceiver Type	Echelon FTT-10A transceiver at 78 kbps. DC blocking capacitors for LPT10 network.
Input Power and Network Wiring	Wire clamp screw-less terminal blocks. Accepts up to 16 GA wire. Input power is polarity insensitive. Network wiring is polarity insensitive.

Dimension and Materials

Electronics Compartment	2.8" W x 4.55" L x 0.79" H
Sensor Compartment	0.5" W x 1.35" L x 0.54" H
Housing Material	ABS Plastic



MODEL 1250

ORDERING INFORMATION

1250	Model 1250 Indoor Temperature / Relative Humidity Network Transmitter		
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Code	Network Transceiver Option		
-0	TP/FTT-10A		

Code	Configuration Options		
-0	Basic Unit		

Code	Housing Color		
-0	White ABS Plastic Housing		

1250	-0	-0	-0	Model 1250 with FTT-10A transceiver, white ABS housing
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