



E-Control Systems, Inc.

IntelliSensor™ for Humidity & Temperature

Humidity-11, Humidity-22



Model TempNTC-22 (above)
2 Temperature 2 Door Version

Product Description

The IntelliSensor™ is a cost effective, wireless monitoring system using the Zigbee® standard for communicating humidity, temperature, and dewpoint information, among other features. Combining the key components of the IntelliSense™ network (IntelliSensor™, IntelliGate™, IntelliMesh™, and FusionLive™) allows easy creation of a centrally managed monitoring application.

The IntelliSensor™ transmits sensor data based on time or a change in the value of a sensor reading (ΔT). These parameters are adjustable to allow realistic acquisition of different types of sensor data.

The inputs to the IntelliSensor™ are user selectable allowing you to configure the IntelliSensor™ to your specific application. Applications include, but are not limited to:

- Food Service (HACCP Compliance / NAFEM Data Protocol)
- Medical / Pharmaceutical (FDA 21 CFR Part 11 Compliance)
- Refrigeration (HVAC, Heating, Cooling)
- Industrial

Features

- Humidity, Temperature, and dewpoint readings
- Multiple input combinations available in single package (1 or 2 Humidity/Temperature Combination)
- Completely wireless (No need for power or data cables)
- 2.4 GHz operating frequency for worldwide deployment
- High power radio to 50 mW (+17 dBm)
- Supports Zigbee® Wireless Standard
- Supports meshed networking for increased reliability and range
- Outdoor range up to 1 mile (1.6 km)
- Completely integrated solution with IntelliGate™, IntelliMesh™, and FusionLive™ Software
- Can be configured and managed remotely using the IntelliGate™ gateway
- Battery lasts up to 10 years
- No hardware configuration needed (Sensors automatically join network)
- Firmware can be updated wirelessly (over-the-air)
- User configurable transmission interval (over-the-air)
- Conformal coated board for moisture rich operating environments
- Optional NEMA enclosure for harsher environments

General Specification

Radio	802.15.4 Complaint, 2.4 GHz DSSS (Direct Sequence Spread Spectrum)
Output Power	50 mW (+17 dBm)
Message Transmission	70 mSec
Antennae	Wired Whip
Range	Up to 1 mile (1.6 km) Outdoor Up to 400 ft (120 m) Indoor
Battery Life	Up to 10 years (depending on transmission interval)
Battery Type	AA 3.6V Lithium Thionyl Chloride (two per IntelliSensor)
Operating Temperature	-40°C to 85°C
Operating Humidity	0 to 100%, non-condensing
Dimensions	3.290" x 2.420" x 1.000" 84mm x 61.5mm x 25.4mm
Mounting	2 screws or double-sided tape

Sensor Specifications

Humidity Measurement Range	0-100% RH
Humidity Accuracy	+/- 1.8% RH (20..80% RH)
Humidity Resolution	0.05% RH
Temperature Accuracy	+/- 0.3°C (at 25°C)
Temperature Resolution	0.01°C
Sensor Terminal Connection	12-26 AWG (Wire Size)



HACCP



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