Product
2WT-B Smoke Detector

Architectural and Engineering Specifications
Smoke detector shall be a System Sensor i3 Series model number 2WT-B, listed to Underwriters Laboratories UL 268 for Fire Protection Signaling Systems. The detector shall be a combination photoelectric/thermal type detector with thermal sensor rated at 135°F (57.2°C). The detector shall include a mounting base for mounting to 3½-inch and 4-inch octagonal, single gang, and 4-inch square back boxes with a plaster ring, or direct mount to the ceiling using drywall anchors. Wiring connections shall be made by means of SEMS screws. The detector shall allow pre-wiring of the base and the head shall be a plug-in type. The detector shall have a nominal sensitivity of 2.5 percent-per-foot nominal as measured in the UL smoke box. The detector shall be capable of automatically adjusting its sensitivity by means of drift compensation and smoothing algorithms. The detector shall provide dual color LED indication which blinks to indicate power up, normal standby, out of sensitivity, alarm and freeze trouble conditions. When used in conjunction with the 2W-MOD2 module, the 2WT-B detector shall include a maintenance signal to indicate the need for maintenance at the alarm control panel, and shall provide a loop testing capability to verify the circuit without testing each detector individually.

Electrical Specifications
The 2WT-B Operating Voltage shall be; Nominal: 12/24V non-polarized, Minimum: 8.5V, Maximum: 35V. The Maximum Ripple Voltage shall be 30% peak to peak of applied voltage. The Standby Current shall be 50 μA maximum average. The Maximum Alarm Current shall be 130 mA limited by control panel. The Peak Standby Current shall be 100 μA.

Physical Specifications
The 2WT-B dimensions (including base) shall be 5.3 inches (134 mm) diameter; 2.0 inches (51 mm) height. The 2WT-B detector weight shall be 6.3 oz. (178 grams). The 2WT-B detector Operating Temperature Range shall be 32°F–100°F (0°C–37.8°C). The 2WT-B Operating Humidity Range shall be 0 to 95% RH non-condensing. The 2WT-B Thermal Sensor shall be 135°F (57.2°C) fixed. The 2WT-B Freeze Trouble shall be 41°F (5°C). The 2WT-B Sensitivity shall be 2.5%/ft. nominal. The 2WT-B Input Terminals shall be 14–22 AWG.

Mounting options for the 2WT-B detector include; 3½-inch octagonal back box, 4-inch octagonal back box, Single gang back box, 4-inch square back box with a plaster ring, or direct mount to ceiling.

LED Modes
At Power up, the Green LED shall blink every 10 seconds; the Red LED shall blink every 10 seconds. In Normal (standby) mode, the Green LED shall blink every 5 seconds; the Red LED shall be off. In Out of sensitivity mode, the Green LED shall be off; the Red LED shall blink every 5 seconds. In Freeze trouble mode, the Green LED shall be off; the Red LED shall blink every 10 seconds. In Alarm mode, the Green LED shall be off; the Red LED shall be solid.