ROOM HUMIDITY/TEMPERATURE TRANSMITTER w/ SETPOINT CONTROL

SPC Series

The SPC Temperature/Humidity transmitter incorporates two sensors in one attractive wall mount enclosure for the most efficient environmental monitoring and control system. It uses a field-proven RH senor to monitor relative humidity and a curve-matched thermistor to measure temperature. Two setpoint controls are also available for temperature and humidity adjustment. The device may also include an occupancy override button and an external communication jack. Both measurements and setpoint signals are available on separate outputs as linear 4-20 mA, 0-5 or 0-10 Vdc signals. Several configurations of the device are available with one to four outputs as required. An LCD is included for configuration and local indication of all parameters. Several operating parameters can be programmed using a keypad for specific applications including four temperature ranges and °C / °F display.

PRODUCT HIGHLIGHTS

* Humidity Range: 0 to 100%
* Accuracies available: 2%, 3% & 5%
* Attractive, low profile enclosure
* Custom branding available

SPECIFICATIONS

|  |  |
| --- | --- |
| SPECIFICATIONS |  |
| TEMPERATURE  | **Sensor:** Curve-matched thermistor**Accuracy:** ±0.2°C (±0.4°F)**Range:** 0 to 35°C (32 to 95°F) or 0 to 50°C (32 to 122°F), programmable**Offset:** ±5.0°C programmable**Display Units:** °C or °F programmable**Display Resolution:** 0.1° < 100°, 1° > 100° |
| TEMPERATURE SETPOINT | **Midpoint:** 18 to 27°C (65 to 80°F) programmable**Range:** ±2 to ±10°C (±5 to ±20°F) of the midpoint, programmable**Resolution:** 0.5 or 1.0°C and 1.0 or 2°F programmable |
| HUMIDITY | **RH Sensor:** Thermoset polymer based capacitive**Accuracy:** ±2, 3, or 5 %RH from 5 to 95 %RH**Range:** 0 to 100 %RH non-condensing**Temperature Compensation:** 0 to 50°C (32 to 122°F)**Hysteresis:** ±3 %RH**Response Time:** 15 seconds typical**Stability:** ±1.2 %RH typical @ 50 %RH in 5 years**Offset:** ±20 %RH, programmable |
| HUMIDITY SETPOINT | **Midpoint:** 20 to 70 %RH programmable **Range:** ±5, ±10 or ±20 %RH of the midpoint, programmable **Resolution:** 1 %RH |
| POWER SUPPLY | 24 Vac/dc ±10% (non-isolated half-wave rectified) |
| CONSUMPTION | 20 mA + (20 mA x number of outputs) max @ 24 Vdc |
| INPUT VOLTAGE EFFECT | Negligible over specified operating range |
| PROTECTION CIRCUITRY | Reverse voltage protected and output limited |
| OUTPUT SIGNAL | 4-20 mA active (sourcing), 0-5 Vdc or 0-10 Vdc (specify when ordering) |
| OUTPUT RESOLUTION | 10 bit for all signals |
| OUTPUT DRIVE @ 24 VDC | **Current:** 550 Ω maximum**Voltage:** 10K Ω minimum |
| PROGRAMMING/SELECTION | Via internal push buttons and on-screen menu |
| OPERATING CONDITIONS | 0 to 50°C (32 to 122°F), 0 to 95 %RH non-condensing |
| WIRING CONNECTIONS | Screw terminal block (14 to 22 AWG) |
| ENCLOSURE | White ABS - IP30 (NEMA 1) 84mm W x 119mm H x 29mm D (3.3” x 4.7” x 1.15”) |
| OPTIONAL LCD DISPLAY | **Range:** 00.0 to 99.9, 3 digit**Symbols:** °C, °F %RH, OCC**Display Size:** 38.1mm x 16.5mm (1.5” x 0.65”)**Digit Height:** 11.43mm (0.45”)**Backlight:** Enable/disable via menu |
| OPTIONAL OVERRIDE | **Type:** Front panel, momentary push button, 2 wire dry contact**Switch Ratings:** N.O., SPST, 50 mA @ 12 Vdc |
| OPTIONAL OCCUPIED INPUT(INCLUDED WITH OVERRIDE OPTION) | **Type:** Digital input, 0-5 Vdc or dry contact to common**Logic:** Active low or active high, programmable**Action:** Causes “OCC” segment to light in display |
| OPTIONAL FAN SPEED SWITCH | **Type:** Side panel mount, 5 position switch**Range:** Off, Auto, Low, Medium, High**Signal:** Resistance: 0, 2, 4, 6, 8 KΩ, 2 wire output (custom ranges avail.) |
| OPTIONAL NETWORK COMM. | **3.5mm Phono Jack:** Ring/Mid/Tip connections to a 3 pin terminal block |
| COUNTRY OF ORIGIN | Canada |