

CircuitWerkes Temperature Sensor Brief Instructions

The CircuitWerkes temperature sensor is an accessory for the Sicon-8 that can be placed in your facility to monitor the air temperature. It requires only 5V power, ground and one free metering input, all of which can be found on the back panel of your Sicon-8. A length of shielded wire, equivalent to Belden 8451, is recommended if the wire will be more than 6 inches. Simply attach the appropriate connections to your Sicon-8 and then calibrate the Sicon-8 for the correct current temperature. The sensor will monitor the changes within a few degrees across its operating range.

Cautions:

The temperature sensor is not intended for outside use, nor in high voltage locations. The temperature sensor is available as a bare board only so care should be taken not to short out the circuit board traces. There are several holes on the board that can be used to mount the PCB, preferably using a nylon standoff, or similar support device. A keyhole cutout is also available if you want to suspend your sensor in free air using a tie-wrap or similar device. The sensor has an operating range of 30 degrees to 140 degrees Fahrenheit. It may be possible to use the device beyond this range, but components can fail without warning if the board is exposed to extremes, including excessive vibration.

Care should always be taken so that a failure of the board will not expose other equipment to danger. For instance, suspending the sensor directly over the outlet of a transmitter PA could result in arcing if a part were to fail and fall into the PA. While this is unlikely, good engineering practice suggests placing the sensor slightly out of the main airflow so as to avoid the possibility.

