



ohmic instruments co.

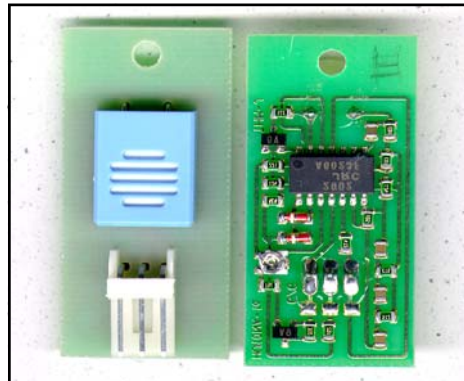
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INDUSTRIAL & ENVIRONMENTAL SENSORS, INSTRUMENTS & CONTROLS SINCE 1969

MODEL SC-600 SIGNAL CONDITIONER WITH UPS-600 HUMIDITY SENSOR COST EFFECTIVE UNIT PROVIDES DIRECT %RH TO VOLTAGE OUTPUT

- **LINEAR VOLTAGE vs. %RH OUTPUT**
- **SENSOR RECOVERS FROM CONDENSATION**
- **HIGH RELIABILITY & REPEATABILITY**
- **NO HYSTERESIS - STABLE OUTPUT**
- **RANGE: 20-90% RH**
- **SET POINT ACCURACY WITHIN $\pm 2\%$**
- **TEMPERATURE COMPENSATED**
- **COST-EFFECTIVE MODULE**
- **OEM DISCOUNTS, OFF-SHELF DELIVERY**



SC-600 Signal Conditioning Cards are manufactured using state-of-the-art surface mount technology. A 3-pin socket (Power, Signal, Ground) enables direct connections.

HUMIDITY SENSOR & SIGNAL CONDITIONER IN A MINIATURE PACKAGE

OHMIC Instruments Model SC-600 Signal Conditioners are cost-effective units for humidity measurement and control. As illustrated in Figure 1, the unit provides a close to linear voltage output over a wide humidity range. The module's small size and simplicity due to its thick film surface mount technology make the SC-600 an ideal choice for OEM applications. Long term accuracy can be maintained within $\pm 2\%$.

Each unit is supplied with an integral %RH condensation tolerant humidity sensor that varies its electrical impedance in an inverse logarithmic function with changes in relative humidity. The SC-600 module uses an RC sine wave oscillator to produce 440 Hz, 150 mV RMS excitation voltage. The circuitry also includes an amplitude stabilizer, logarithmic amplifier, and temperature compensation to produce a voltage output approximately proportional to relative humidity.

SC-600s are ideal for applications such as humidistats, data loggers, environmental and process controllers. Please call for OEM and quantity pricing. Delivery is off-shelf.

VDC Out vs. %RH

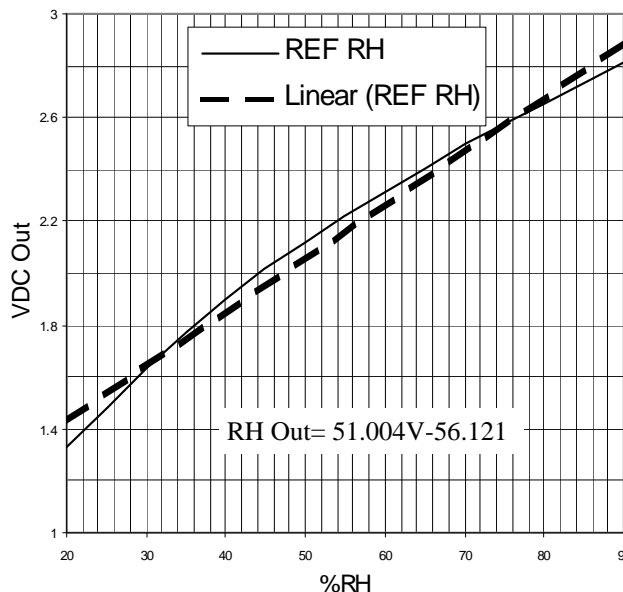


Figure 1

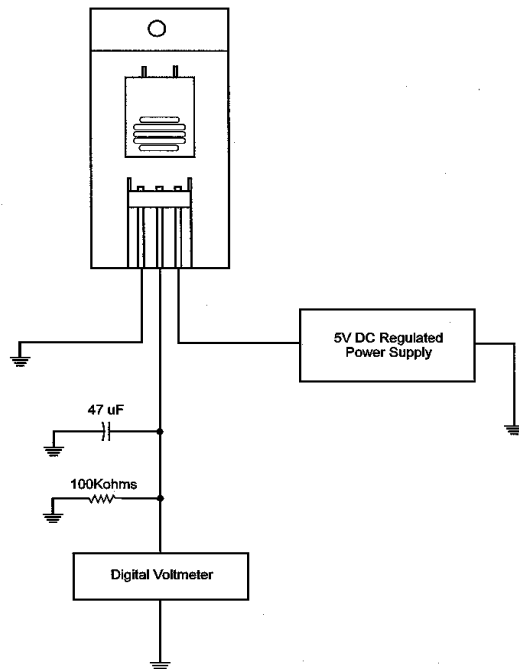
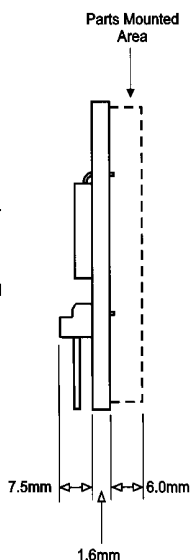
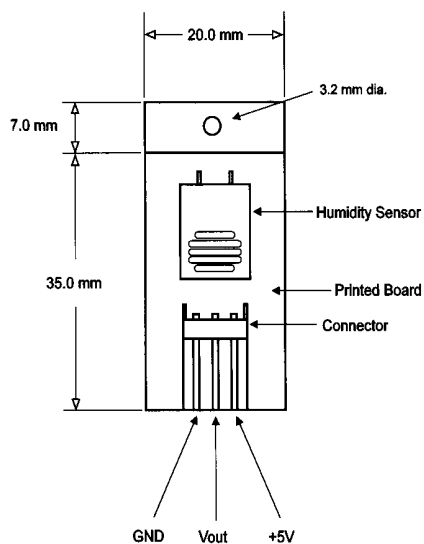
WARRANTY: All products manufactured by OHMIC Co. are warranted to be free of defects in material and workmanship for one year after delivery. Any equipment found to be defective within this period will be repaired or replaced free of charge.

SPECIFICATIONS: SC-600

Range	20- 90% RH
Set Point Accuracy	± 2 %RH
Output Signal	1- 3 Vdc
Operating Temperature	32 to +122 °F
Response Time	15 Seconds for 63% Step Change
Hysteresis	< 0.2%
Long-Term Drift	< 2% RH/5 Years
Sensor Excitation	150 mV @ 440 Hz
Power	5 Vdc, (Regulated), current < 1.5 mA max.
Output Filter	100 KΩ /47μF RC filter
Dimensions	20 x 42 x 17mm

SC-600 Humidity Signal Conditioners recover when exposure to condensation occurs, however, they should not be exposed to highly reactive or corrosive chemical vapors nor should the temperature limits be exceeded. In polluted environments, periodic sensor replacement may be necessary. When used in clean, chemical-free environments, SC-600's will maintain their accuracy specifications for many years.

DIMENSIONS & WIRING CONNECTIONS



ENGINEERING SUPPORT: OHMIC Instruments Co. designs and manufactures a full line of sensors, environmental and bio-medical instruments and controls. Many of our products are custom designed to meet specific requirements. Our engineers will be pleased to discuss your application.



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