



ohmic instruments co.

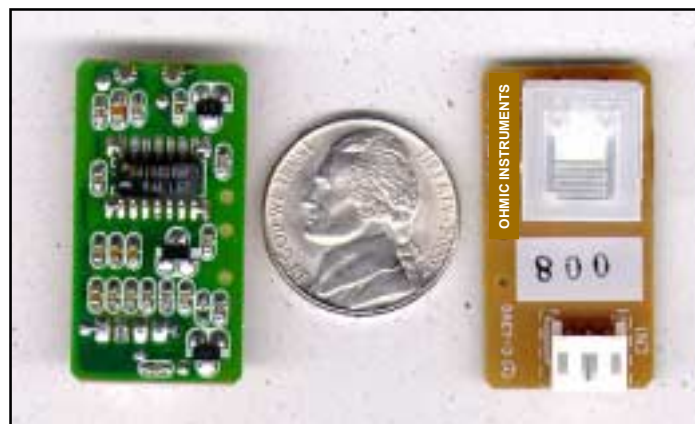
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INDUSTRIAL & ENVIRONMENTAL SENSORS, INSTRUMENTS & CONTROLS SINCE 1969

MODEL SC-500 SIGNAL CONDITIONER WITH UPS-500 HUMIDITY SENSOR COST EFFECTIVE UNIT PROVIDES DIRECT %RH TO VOLTAGE OUTPUT

- **LINEAR VOLTAGE VS. %RH OUTPUT**
- **RANGE: 20-90% RH**
- **ACCURACY ±2%**
- **HIGH RELIABILITY & REPEATABILITY**
- **NO HYSTERESIS - STABLE OUTPUT**
- **TEMPERATURE COMPENSATED**
- **COST-EFFECTIVE MODULE**
- **SIMPLE CIRCUIT DESIGN**



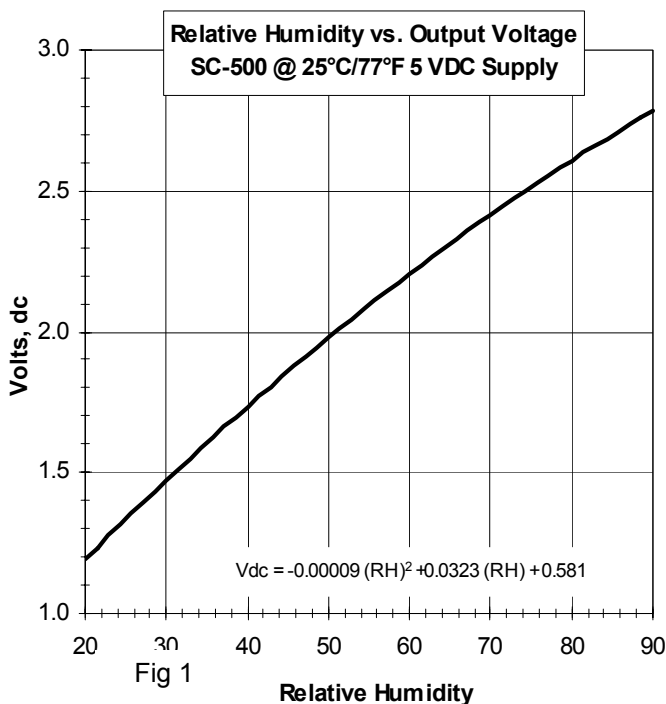
SC-500 Signal Conditioning Cards are manufactured using state-of-the-art surface mount technology. A 3-pin socket (Power, Signal, Ground) enables direct connections.

HUMIDITY SENSOR & SIGNAL CONDITIONER IN A MINIATURE PACKAGE

OHMIC Instruments SC-500 Signal Conditioners are cost-effective modules 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 allows incorporation with electronic systems. Model SC-500 is an ideal choice for OEM applications.

Each unit includes an integral UPS-500 humidity sensor that varies its electrical impedance in an inverse logarithmic function with changes in relative humidity. The SC-500 module uses a R-C sine wave oscillator to give a 3.8 KHz, 150 mV RMS excitation voltage. The circuitry also includes an amplitude stabilizer, logarithmic amplifier, and circuit temperature compensation to produce a voltage output directly proportional to relative humidity.

SC-500's are ideal for applications such as humidistats, environmental controllers, transmitters and data loggers which do not require condensation tolerance. Request application notes. Call for OEM pricing. Off-shelf delivery.



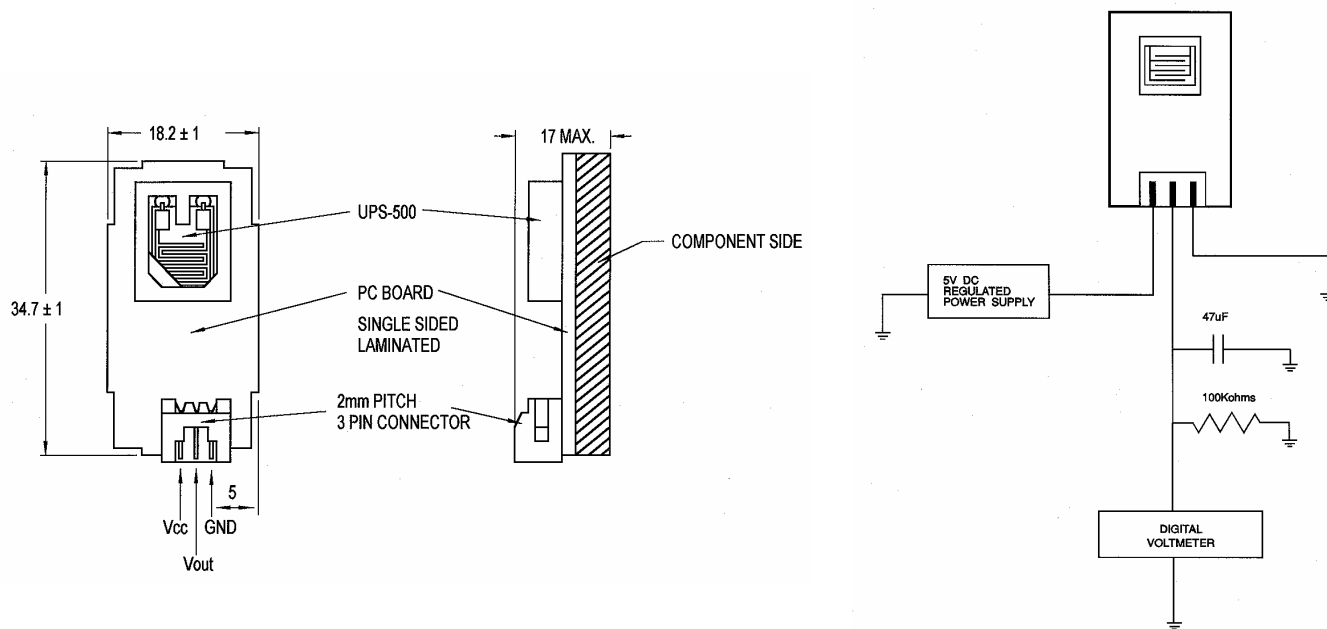
WARRANTY: All products manufactured by OHMIC Co. are warranted to be free of defects in material and workmanship for one year after delivery. Any equipment found to be defective within this period will be repaired or replaced free of charge.

SPECIFICATIONS - SC-500

Range	20-90% RH (Non-condensing)
Set Point Accuracy	±2 %RH
Output Signal	1 to 3 Vdc
Operating Temperature	-4 to +140°F
Hysteresis	+/-1% RH
Long-Term Drift	< 2% RH/5 Years
Sensor Excitation	150mVac RMS @ 3.8 kHz
Power	5 Vdc (Regulated) current < 1.5 mA max.
Output Filter	100KΩ/47μF RC filter
Dimensions	0.71 x 1.38 x 0.67 in. (18 x 35 x 17mm)

SC-500 Signal Conditioners are recommended for environments where exposure to condensation, reactive and corrosive chemical vapors do not occur. Exposure to these conditions may cause an irreversible shift in calibration, necessitating periodic replacement. When used in clean, non-condensing, chemical-free environments, SC-500's will maintain their accuracy 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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