

# **XLlogger**

## **Relative Humidity Sensor XLS1008**



### **Technical Specifications**

Relative Humidity Range: 0 – 100% RH, non-condensing

Resolution: 0.0375% RH

Response Time (90%): 15s in slowly moving air at 25°C

RH Accuracy:  $\pm 2\%$  RH at 25°C

RH Interchangeability:  $\pm 5\%$  RH at 0-60% RH;  $\pm 8\%$  RH at 90% RH typical

RH Linearity:  $\pm 0.5\%$  RH typical

RH Hysteresis:  $\pm 1.2\%$  RH span maximum

RH Repeatability:  $\pm 0.5\%$  RH

RH Stability:  $\pm 1\%$  RH typical at 50% RH in 5 years

### **Instructions**

- For best results shield the sensor from bright light.

### **Operation**

The Relative Humidity Sensor measures relative humidity in a range of 0 - 100%. The sensor consists of an integrated circuit (Honeywell HIH 3610), which uses a thermoset capacitive polymer to sense humidity. The integrated circuit then produces an output voltage, which varies with relative humidity. The sensor is placed in a plastic box with holes, which provide air circulation. The typical response time of the unit is 15 seconds in slowly moving air at 25°C. The box not only protects the sensor, but also shields it from light. The sensor is slightly light sensitive if the light strikes it in just the right way. For best results, shield the sensor from bright light.