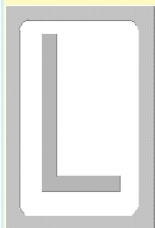
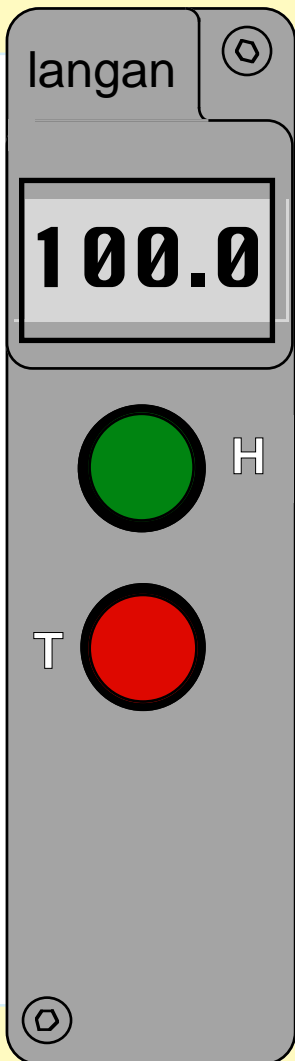


TM



# XerlC READER

langan



actual size

Placing a technical breakthrough  
in the science of  
measuring humidity  
into your hands!



### New Microtechnology

The remarkability and range of the Xeritron™ Relative Humidity Sensor has been captured in a new microelectromechanical sensor designed by Hygrometrix, Inc. The unique strain-gauge technology proven over thirty years of continual use in harsh and critical environments has been reduced to a new design suitable for precise manufacture using semiconductor techniques. The unusual characteristics of the Xeritron are now available in its successor which we call the XerIC™ Sensor.

This new sensor technology was first announced in May 1997. It is based upon widely patented claims which were invented after decades of research and understanding in the production of strain-stress sensors. This new sensor promises to revolutionize the measurement of relative humidity and derivative parameters associated with the measurement of water vapor. Why? Because it is rugged, reliable, precise, fast and simple. Because it is reproducible in quantity. Because it will last.

Strain-gauge hygrometry. What is this? Basically the internal forces within a suitable material respond with adequate force to create a mechanical shift within an attached beam sensitive to strain or stress. In XerIC hygrometry the material is a selected polymer, and the beam is a full-bridge, modified micro electro-mechanical pressure sensor. The added integrated-circuit instrumentation amplifier provides an output signal which is linear and proportional to the full range of relative humidity. A semiconductor temperature sensor is included!

### General Specifications

- Range                    Relative Humidity: 0 to 100% (and a little!)  
                                  Temperature:        0 to 128 °F (-18 to 53 °C)
- Resolution:        0.1%RH, 0.15°F (0.3 °C)
- Response Time:    Full Scale 6 seconds
- Size:                 5 by 1.4 by 1.3 in (8 by 3 by 3 cm)
- Weight:             4 oz (100 grams), includes batteries
- Interfaces:        LCD Digital Display (using momentary buttons)  
                          sensor analog signals available at screw connector
- Electrical:         5 VDC; 0.1 mA (ave), 10 mA (peak)  
                          (normal operating conditions and usage)
- Calibration: uses bottled saturated salts  
                          for known humidity values; a two-salt kit is available
- Model L2 has sensor installed directly.
- Model L2x has modular jack interface with several available  
                          sensor configurations connected by cable or plug.