

m

# HG-10

## Humidity Calibrator

From the Calibration Range

A fully automated, turnkey humidity and temperature test and calibration system with profiling capability



*HG-10  
Humidity Calibrator*

### Importance of Calibration

Calibration integrity in the field of humidity has never been more important than today. Product quality, process effectiveness, system maintenance and even human safety are all dependent on the knowledge that humidity is measured correctly - whether you are using low cost relative humidity probes to monitor manufacturing or storage facilities, or providing a high level trace moisture calibration service to a nationally accredited level. Our history of traceability goes back to 1982 when our systems were first compared with the NIST standard in Washington USA, and to 1986 when we became the first laboratory to be granted accreditation by the National Physical Laboratory, London under the United Kingdom Accreditation Service (UKAS). UKAS is the United Kingdom member of European Co-operation on Accreditation (EA), the International Laboratory Accreditation Cooperation (ILAC) and the International Accreditation Forum (IAF).

The Michell HG-10 Humidity Calibration System is a computer controlled, automatic rh calibration system. It is capable of repeatable generation of humidity levels over the range 1 to 95 % rh (-50 to +50 °C dew point) with excellent stability and traceability directly to National Standards, and is suitable for use in high level calibration laboratories.

The HG-10 comprises three main components - humidity generator, test chamber and reference hygrometer. Each perform a critical function in allowing the user to calibrate a wide range of humidity sensors and instruments.

### Features

- Automatic System with Reference Hygrometer
- Traceable to National Standards
- Temperature and Humidity Profiling
- Wide Range
- Operates under Windows™ environment

### Humidity Generator

The Automatic Humidity Generator operates by dividing a source of dry air or inert gas into two streams, each of which is regulated by mass flow controllers. One gas stream is saturated to 100 % relative humidity by passing through a high efficiency water saturator unit. The two gas streams are then re-combined to give an output flow at a stable and precisely controlled humidity. The generated sample gas can then be passed from the generator to the test chamber, using a heated sample line, directly to hygrometers under test.

Selection of different humidity levels and temperature control is made using a sophisticated, yet easy to use PC-based control software package. Three digital displays are available on the front panel of the generator for local setpoint indication of the generator chamber temperature, heat traced sample line temperature and % rh setpoints.

### Test Chamber

We will specify and supply a test chamber suited to your specific needs, whatever the type and size of hygrometer you wish to test and calibrate. The standard HG-10 chamber has internal dimensions of 550 x 550 x 320 mm, W x H x D and can be controlled and operated at temperatures from -10 to +50 °C.



The Dew Point Specialists

