

Product Information Sheet – Humidity Generator and Controller

The Triton Technology **Humidity Generator and Controller** is a unique and flexible solution to deliver an accurate relative humidity for multiple applications.

Gas is pumped through a desiccant built into the instrument. A valve, controlled by a humidity sensor placed at the sample site, is used to divert some gas flow through a water reservoir before being pumped through to the sample. This feedback function ensures that the humidity selected is the real humidity at the sample site.



Features

- Simple software operation through Excel
- Easy tie in with other equipment
- Unique "sample site" humidity feedback control
- Easy portability with compact design
- Heated transfer line to avoid condensation

Applications

- Thermogravimetry
- AFM
- Spectroscopy
- TMA
- Rheometry

Specifications

Humidity Range:	5% to 90% (25°C) 10% to 80% (80°C)		
Temperature Range:	5°C to 85°C Care must be taken regarding dew points for low temperature studies		
Max. sample chamber volume:	200 cc (Approx)		
Instrument Footprint:	178mm depth x 365mm width x 350mm height		
Instrument Weight:	14 kg		
Connections:	Electrical Interface 85 to 264V AC, 150VA 1 USB input		
Conformance:	Low Voltage Directive 73/23/EEC EMC Directive 89/336/EEC Conformity Mark	EN60950 EN50081-1 EN50082-1 CE	1992 1997 1998 2003

Packing List

Humidity Controller and Generator	1kg desiccant
2 x Humidity Sensor Assembly (calibrated)	Software CD
Heated Line	Connection cables
Humidity Sensor Lead	

Examples of Triton Humidity Controller performance

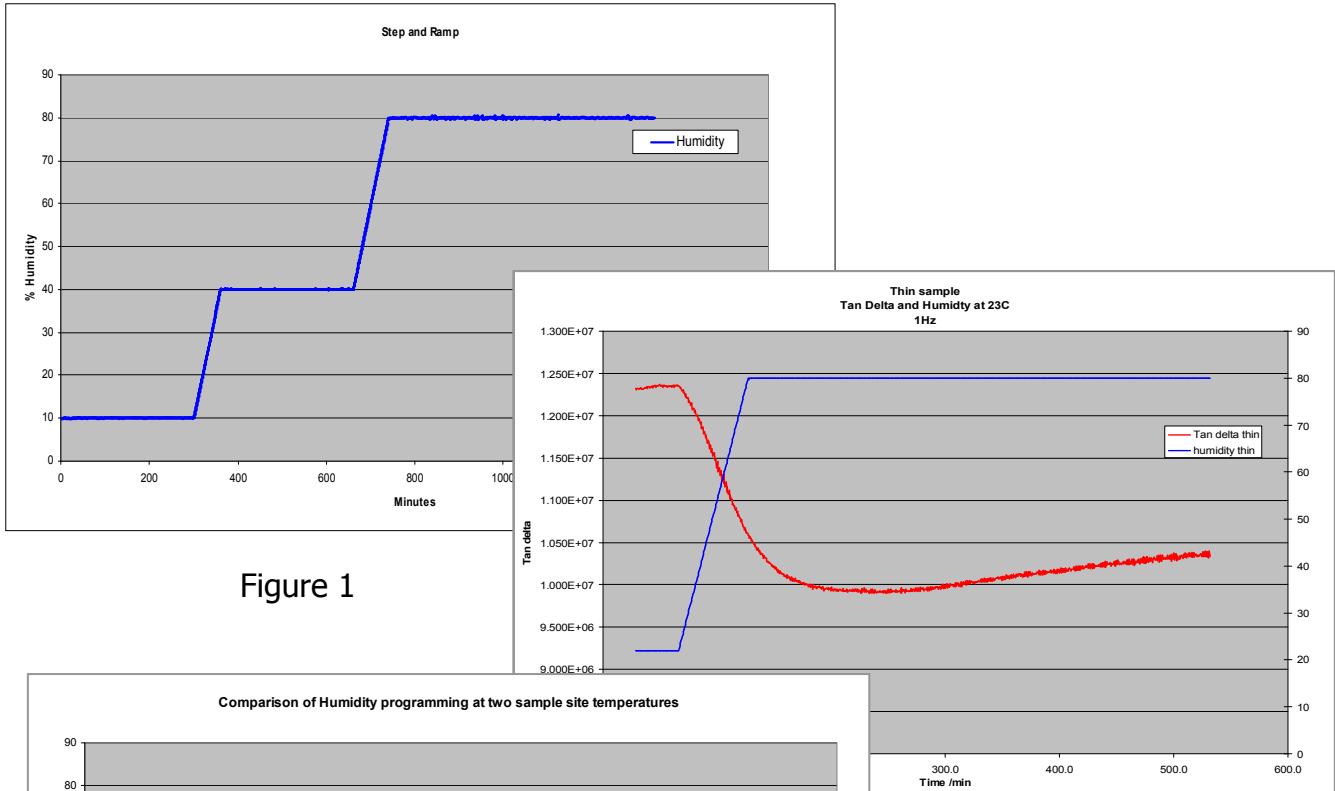


Figure 1

Figure 2

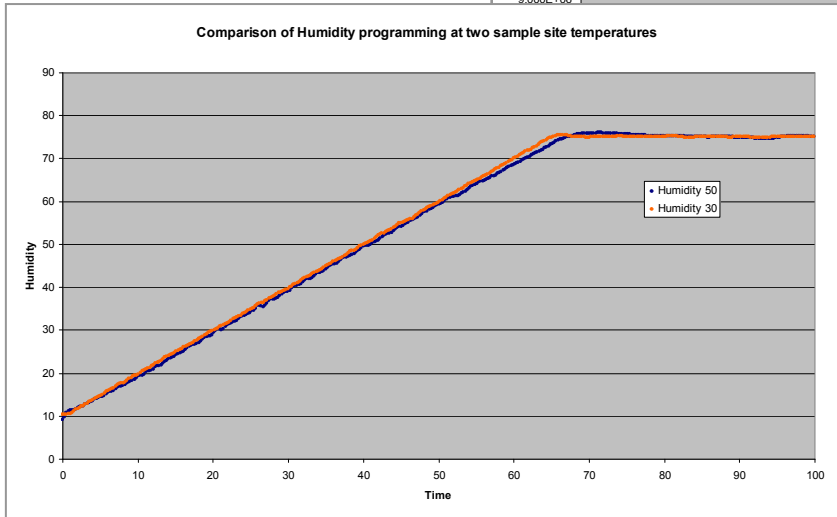


Figure 3

Figure 1 illustrates excellent control and steps from 10% to 80% relative humidity.

Figure 2 shows the effect of increasing humidity on the modulus of a thin polymer film. This example was taken from a Triton humidity generator connected to a Tritec2000 DMA*

Figure 3 is an overlay of two humidity scans at two different chamber temperatures. The chamber was the Fluid Chamber of a Tritec2000 DMA*

* Tritec2000 no longer available from Triton Technology Ltd. This product can be obtained from Perkin Elmer Corporation. Ask for DMA8000.