

Finally....A Humidity Generator that Stabilizes in less than 5 minutes, has the Capacity to Calibrate 12 Probes and can Complete a 3 Point RH Calibration of Chart Recorders with Embedded Sensors in 60 minutes...Automatically!!!

The M2000SP-XR Humidity Generator

One System...Three Functions

High Accuracy Calibration of Instruments Over Full Operational Range

The field proven M2000SP-XR with new solid state electronics for high accuracy and performance over the full operating range of humidity and temperature. The temperature compensated control probe provides higher accuracy over the range of measurement. Newly designed electronics is incorporated within the heat/cool circuitry and a more efficient peltier mechanism, has been incorporated for faster response and temperature stability. The number of ports in the chamber door has been increased to accept 5 probes with diameters of 10mm, 12mm, 15mm and 18mm. NVLAP Accredited calibration of control probe. System tested for performance at ICH guideline parameters to meet accuracy and long term stability requirements. Typical response time is 3 minutes for 70%RH step change.

Production and Volume Calibrations at Ambient Temperature

The chamber size of the M2000SP standard system is 2 liters. For calibrations of multiple data loggers or sensors the chamber capacity must be increased. The M2000SP-XR, using the 12 port external chamber, provides the increased calibration capabilities through the use of a chamber with internal dimensions of :

250mm x 200mm x 100mm (h x w x d). Nine (9) horizontal ports have sufficient separation to prevent interference and to maximize number of transmitters for insertion within the chamber. Three (3) top ports are for instruments with long probes (250mm) or reference standards to verify internal readings. Clear chamber door for visual observation of instruments with digital displays.

Calibration of Chart Recorders with Embedded Sensors Using Programmed Procedures

For fast, accurate calibration of battery operated chart recorders having the RH/T sensors embedded within the recorder housing. The internal blower of the M2000SP has been modified for a more efficient air flow, both within the internal chamber and the external chambers. The large external chamber has internal dimensions of 300mm x 250mm x 150mm (h x w x d). Accurate RH calibrations over the range of 10-90%RH, at ambient temperature, can be done more quickly than when using larger chambers. A typical 3 point RH calibration can be done in less than 1 hour after temperature has stabilization. The internal chamber conditions are verified using a reference instrument calibrated by an NVLAP Accredited laboratory according to ISO/IEC guidelines and 17025 procedures. Through the use of pre-programmed calibration procedures , the required calibration cycle can be done automatically.