

Humidity Calibration System Model EP-2000SP



- **Digital electronics for precise control**
- **High uniformity and stability assures accurate calibration**
- **Fast response of 3 minutes for 50 % change**
- **All purpose**
- **Easy to use**



Specifications

Humidity - Range 10 - 28 °C	7 - 95 % RH (controlled area)
Humidity - Range 30 °C	7 - 90 % RH ± 2 % RH (controlled humidity)
Humidity - Range 35 °C	7 - 80 % RH ± 2 % RH (controlled humidity)
Humidity - Range 40 °C	7 - 70 % RH ± 2 % RH (controlled humidity)
Humidity - Range 50 °C	7 - 60 % RH ± 2 % RH (controlled humidity)
Temperature Range	7 - 55 °C * (controlled area)
Dew point:	- 25 °C to + 45 °C
Accuracy, 10 - 80 % (RH at 25 °C)	± 1.0 % RH **
Accuracy, 80 - 95 % (RH at 25 °C)	± 1.25 % RH **
Accuracy (NVLAP)	± 0.5 % RH and ± 0.05 °C
Temperature accuracy at 25 °C	≤ ± 0.1 °K
Chamber - Humidity – Stability at 25 °C	± 0.2 % RH of reading
Chamber - Humidity – Stability at 25 °C	± 0.1 °K of reading
Chamber – Humidity - Gradient at 50 %	± 0.2 % RH of reading
Chamber – Humidity - Gradient	± 0.1 °K of reading
Response Time at 25 °C	3 - 5 minutes (typical over the entire range)***
Temperature Modification per time (<<<)	1,0 °K/minute (typical)
Temperature Modification per time (>>>)	3,0 °K/minute (typical)
Power Supply System	110/220 VAC, 50 / 60 Hz
Net-weight	14 Kg
Dimensions	w x h x d (450 x 210 x 360 mm)
Chamber Reference Transducer	calibrated to the Two- Pressure- Principle
Chamber Reference –	
Temperature- Compensation	-40 to 60 °C
Calibration- Certificate	NVLAP****

* Specificity, minimum temperature 10 °C ± 2 K, typical 8 - 10 °C ambient temperature

** Concerning primary reference to NVLAP Two – Pressure Method

*** Soon the chamber reaches the temperature compensation

**** Accredited certificate by the American institute NVLAP

Operating mode

Due to constant monitoring the system generates accurate humidity coefficients with its internal reference transducer. The transducer gauges relative humidity and pressure. These information were converted by a microprocessor. The humidity inside the chamber is controlled by two pump systems. One for dry air, the second for moisture air. The microprocessor controls reference transducer and the air supply within a closed loop. A turbo axial exhauster inside the chamber guarantees a constant temperature and humidity allocation.