

PEM2® Specifications

Environmental

Enclosure material: ABS plastic
Dimensions: (h x w x d): 7.3 cm (2.875") x 9.5 cm (3.75") x 3.8 cm (1.5")
Mounting: Shelf or wall mount; secure mounting possible

Weight

200g (7 oz.)

Display

Outputs temperature and humidity alternating in a 15-second cycle

Operating Range

-40C to 65C (-40F to 150F)

Temperature

Sensor type: Texas Instruments TMP123 Digital Temperature
Sensor Accuracy: 0.5C (1F) across operating range
Resolution: 0.1C (0.1F)

Humidity

Sensor type: Thin film polymer capacitance sensor, Sensirion SHT75
Operating range: 0% to 100% RH, non-condensing
Accuracy: 2% RH (10% to 90%), 3.5% RH (0% to 10% and 90% to 100%) across operating temperature range

Calibration

Certificate of NIST-traceable calibration provided from Thunder Scientific Model 2500 Humidity Generator

Memory

Holds more than 20 years worth of data at a fixed sample rate of 30 minutes (each 30-minute data point is an average of six readings taken at 5-minute intervals)

Data Retrieval

Via standard USB flash drive (USB 1.0, 2.0 supported; USB flash drive not supplied)
Data written as text file readable in PC or Mac

Battery

Uses AA lithium (supplied) or alkaline batteries
Battery life is typically +/- 5 years

Certifications

CE, FCC
RoHS compliance (reduction of hazardous substances)

Warranty

The PEM2 is guaranteed against defects in manufacturing for a period of three years from date of purchase. Units that fail under reasonable conditions of use during that time will be repaired or replaced free of charge. A fee will apply to repairs made after the three year warranty period.

Recalibration

Recalibration for temperature and RH accuracy is recommended every three years. Recalibration service includes sensor recalibration or replacement, battery replacement, firmware upgrade if applicable, and issuance of a new certificate of calibration.