

Solar Light's **Model PMA2170 Digital Humidity Probe** is an accurate professional-grade instrument for measuring relative humidity, dew point, and ambient temperature. A memory chip is embedded into the probe to store its signal processing, dew point calculator, and unit conversion program.

The relative humidity is the ratio of the actual vapor pressure to the saturation vapor pressure at a given air temperature, expressed in percent. Relative humidity displays an inverse relationship with absolute temperature when the vapor pressure is held constant. Dew point is the temperature the air would have if it were cooled (at constant pressure and water vapor content) until saturation (or condensation) occurred.



Applications

- Laboratory and Industrial Measurements
- Environmental Monitoring
- Museum Monitoring
- Heating and Air-Conditioning
- Agriculture

Features and Benefits

- Wide Temperature & Humidity Range
- Instantaneous Dewpoint Reading
- High Accuracy
- Excellent Long-Term Stability
- Selectable Units
- Fast Response
- Interchangeable Sensor

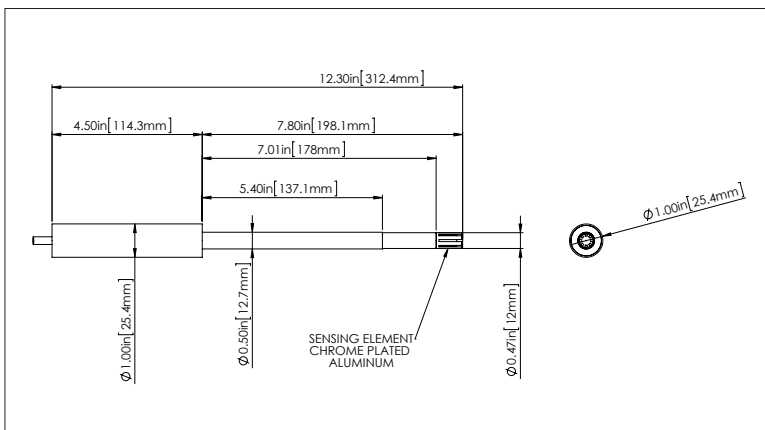
| SPECIFICATIONS | |
|--|----------------------------|
| Humidity Range | 0 to 100% RH |
| Temperature Range | -40 to +60°C |
| Display Resolution | 0.1°F, 0.1°C, 0.1K, 0.1%RH |
| Humidity Accuracy | ±3% RH |
| Stability | Better than 1% / Year |
| Display Resolution | 0.1°F, 0.1°C, 0.1K, 0.1%RH |
| Cable | 6ft (1.82m) Straight Cable |
| Diameter | Handle - 1" (25.4mm) |
| | Sensor - 0.47" (12mm) |
| Dimensions and Weight | *See Outline Drawing |
| REFERENCES | |
| Fraden J., "AIP Handbook of Modern Sensors Physics, Design and Applications" | |

Part Number: 210025

Revision Level: B

Specifications subject to change without notice.

PMA2170 Temperature Sensor



Est. Weight: 0.05lbs. (23g)

Since 1967, Solar Light Company, LLC has been recognized worldwide as America's premier manufacturer of Precision Solar Simulators and Light Sources, Light Measurement Instrumentation, UV Transmittance Analyzers, Meteorological Instrumentation, and Digital and Analog Sensors. Our advanced line of UV, visible, and IR radiometers and light meters measure laboratory, industrial, environmental, and health related light levels with NIST traceable accuracy. Column ozone, aerosol, and water vapor thickness measurements, in addition to long-term global ultraviolet radiation studies all over the world are performed using our atmospheric line of instrumentation. Solar Light also provides NIST traceable spectroradiometric analyses, calibrations for light meters and light sources, accelerated ultraviolet radiation degradation testing of materials, and OEM instrumentation and monitors. Please visit our website for more details, specifications, and pictures!



State Of The Art Solar Simulators available in 150-1000+ watt UV or AM variations for a variety of applications including PV Cell Testing, Materials Testing, Pre-Irradiation for In Vitro Broad Spectrum Sunscreen Testing, SPF Testing, and much more.



Multi-Functional Professional Grade Radiometers available with and without data logging, and compatible with over 130 Solar Light PMA-Series Sensors to measure UV, Visible and IR wavelengths. Specialty Meters also available to measure UV Radiation, SUV/UVA, Scotopic/Photopic Spectra, and much more.



Advanced NIST-Traceable Sensors for accurate measurement of UVA, UVB, UVA+B, UVC, Visible, IR, Photostability, Temperature, and Custom Wavelength – well over 130 models in both digital and analog configurations, all compatible with our Radiometers.



Ultraviolet Transmittance Analyzers available as complete integrated turnkey systems to meet the latest ISO24443 requirements.



Handheld Ozonometers and Sunphotometers for fast and dependable Column Ozone, Aerosol, and Water Vapor Thickness measurements, in addition to long-term global ultraviolet radiation studies.