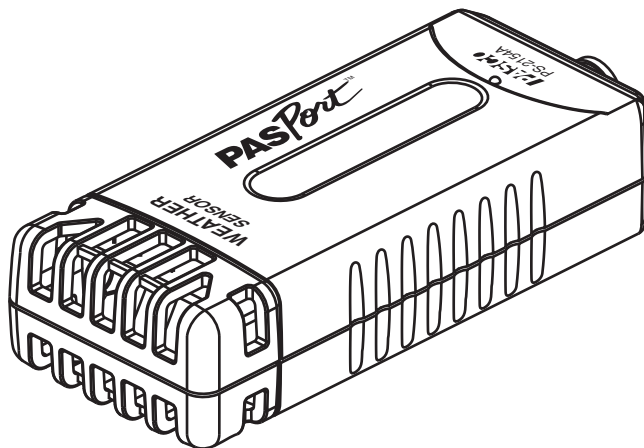


Weather Sensor

PS-2154A



Included Equipment	Part Number
Weather Sensor	PS-2154A
Additional Equipment Required	
PASCO Interface and Data Acquisition Software	See www.pasco.com or PASCO catalog
Recommended	Part Number
PASPORT Sensor Extension Cable	PS-2500

Quick Start

1. Connect the Weather Sensor to your PASPORT-compatible interface.
2. If you are using a computer, connect the interface to it and start the PASCO data acquisition software.
3. Touch or click “Record” or “Start” to begin recording data.

Introduction

The Weather Sensor measures

- barometric pressure (in inches of Hg, hPa, or mbar),
- absolute humidity (g/m^3),
- and air temperature ($^{\circ}\text{C}$, $^{\circ}\text{F}$, or K).

From these measurements, the sensor calculates

- relative altitude,
- relative humidity, and
- dew point.

All of these measurements are recorded by your PASPORT interface and the PASCO software. By default, data is recorded at the rate of 1 sample/s. The maximum rate is 5 samples/s.

For Best Results

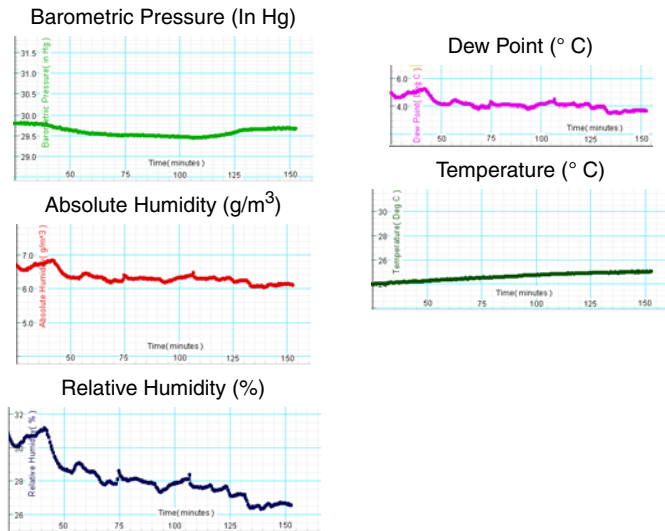
- Keep the sensor out of direct sunlight when making measurements.
- If you intend to leave the sensor outdoors, place it at least 1 m above the ground and be sure that it will remain shaded and dry.
- If the sensor will be in a still environment, such as a terrarium, use a small fan to maintain air flow through the sensor.

Important: Do not immerse the sensor in liquid or allow it to get wet.

Suggested Uses

- Compare pressure, humidity, temperature, and dew point as they change over time.
- Compare pressure, humidity and temperature at various locations.
- Monitor weather conditions.
- Monitor greenhouse conditions.

Sample Data: Short-term Study of Weather Parameters



Specifications

Barometric Pressure	
Range	800 to 1150 hectopascals (hPa) 800 to 1090 millibars (mbar) 24 to 34 inches \pm 0.03 inches Mercury (in Hg)
Resolution	0.001 in Hg
Relative Altitude ¹	
Range	0 m to 7000 m \pm 5%
Resolution	0.3048 m
Humidity ²	
Range	0% to 100% \pm 2% (RH) (from 0 to 60%) 0 g/m ³ to 50 g/m ³ \pm 10% (AH)
Resolution	1% or better (RH) 0.1 g/m ³ or better (AH)
Temperature	
Range	-20° C to 55° C \pm 0.5° C
Resolution	0.1° C or better
Dew Point	
Range	-50° C to 55° C \pm 2%
Resolution	0.1° C or better

¹Altitude (m) = 7000 ln(29.92/pressure (in Hg))

²RH = relative humidity; AH = absolute humidity

Technical Support

For assistance with any PASCO product, contact PASCO at:

Address: PASCO scientific
10101 Foothills Blvd.
Roseville, CA 95747-7100

Phone: 916-786-3800 (worldwide)
800-772-8700 (U.S.)

Web: www.pasco.com

Email: support@pasco.com

Limited Warranty For a description of the product warranty, see the PASCO catalog.

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Product End of Life Disposal Instructions:

This electronic product is subject to disposal and recycling regulations that vary by country and region. It is your responsibility to recycle your electronic equipment per your local environmental laws and regulations to ensure that it will be recycled in a manner that protects human health and the environment. To find out where you can drop off your waste equipment for recycling, please contact your local waste recycle/disposal service, or the place where you purchased the product.

The European Union WEEE (Waste Electronic and Electrical Equipment) symbol (to the right) and on the product or its packaging indicates that this product must not be disposed of in a standard waste container.

