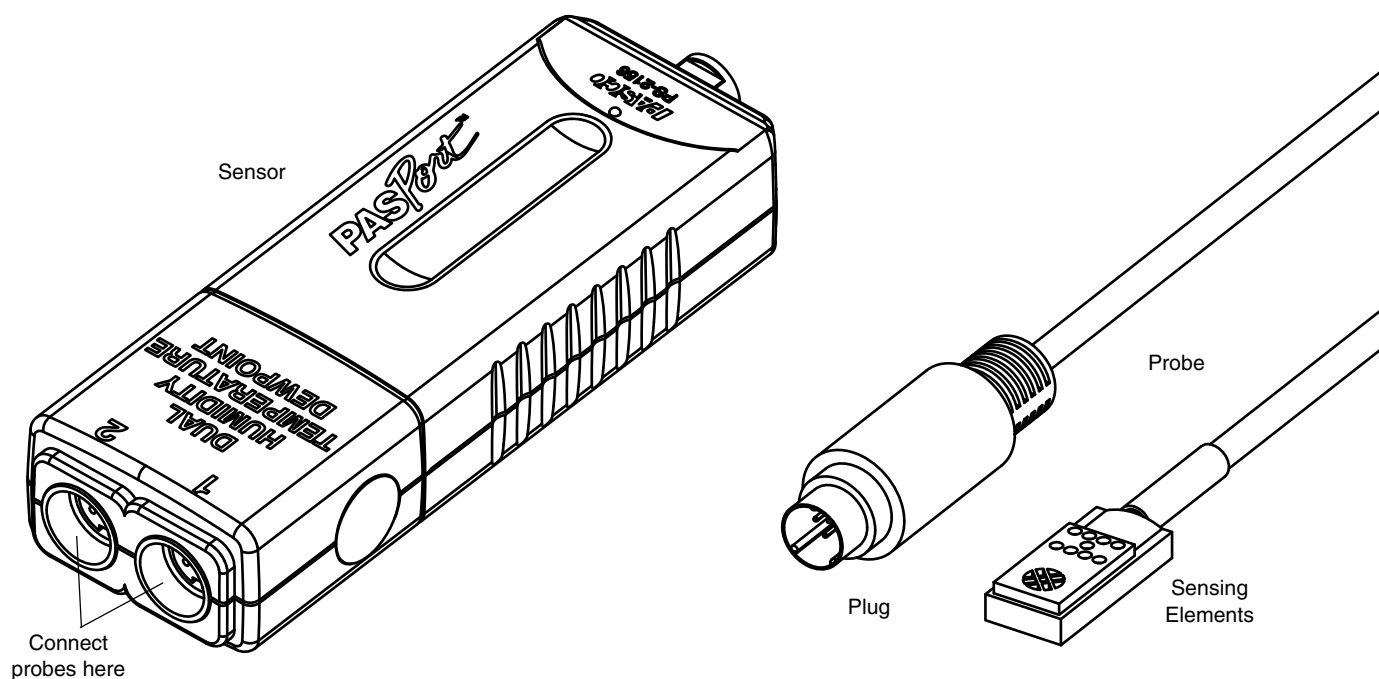




Dual Humidity/Temperature/Dew Point Sensor

PS-2156



Included Equipment	Part Number
Dual Humidity/Temperature/Dew Point Sensor	PS-2156
Humidity/Temperature Probe (2)	514-10699
Required Equipment	Part Number
PASPORT Interface and Software	see the PASCO catalog or www.pasco.com
Recommended Equipment	Part Number
EcoZone™ System	ME-6668

Quick Start

1. Plug one or two probes into the Dual Humidity/Temperature/Dew Point Sensor. Connect the sensor to your PASCO interface. If you are using a computer, connect the interface to it.
2. Start the PASCO data acquisition software.
3. Press, click, or tap the start button to begin recording data.

Introduction

The Dual Humidity/Temperature/Dew Point Sensor measures relative humidity (in units of percent (%) RH) and air temperature (in °C and °F). From these measurements, it calculates absolute humidity (in units of g/cm^3) and dew point (in °C and °F).

Since the sensor comes with two probes, it is possible to measure humidity and temperature in two locations at the same time. The probes are about 1 m (40 inches) in length.

All of the sensor's measurements are recorded by the PASCO interface and data acquisition software. By default, data is recorded at 1 sample/s. The maximum rate is 2 samples/s.

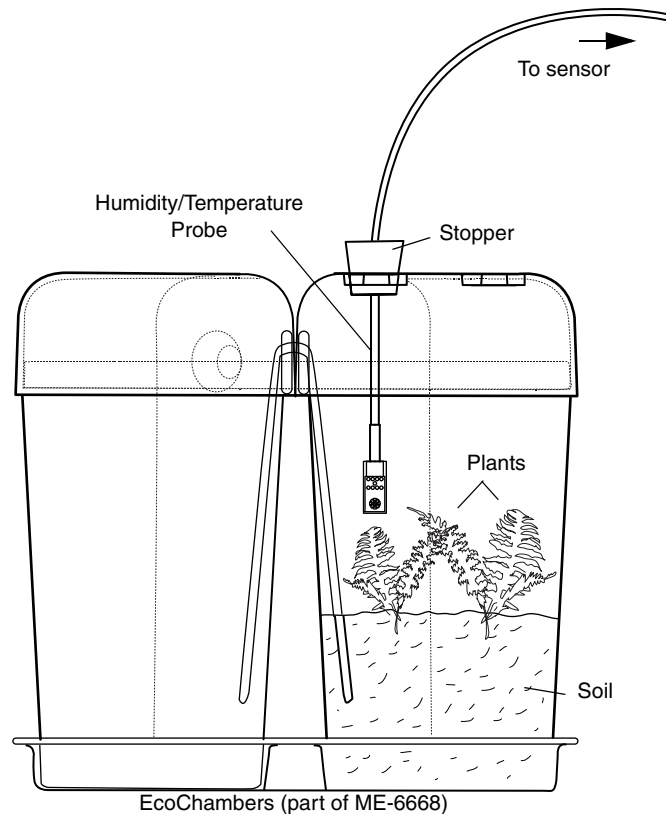
For Best Results

- Keep the probes out of direct sunlight when making measurements because direct sunlight will heat the probe and make the temperature reading too high.
- If the probes will be in a still environment, such as a terrarium, a small fan may be used to maintain air flow across the probes. (This will improve the response time of the probes.)

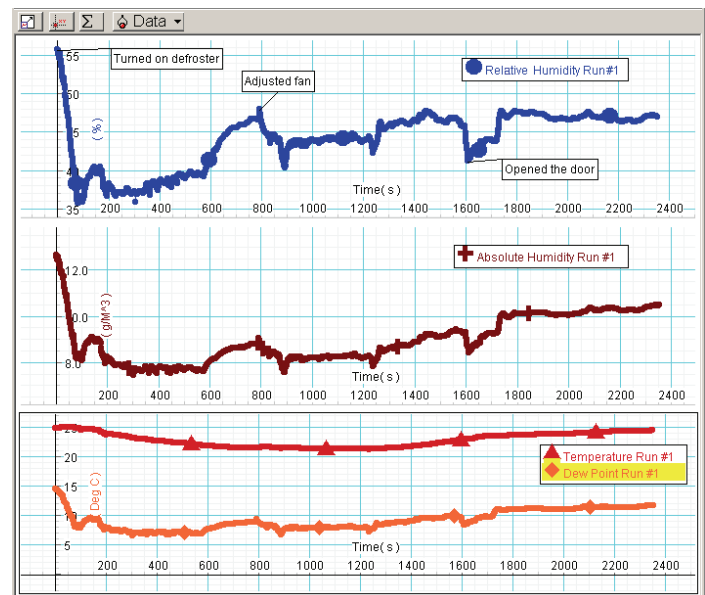
Important: Do not immerse the sensor in liquid or allow it to get wet. If the probes get wet, they will dry out and not be damaged.

Suggested Uses

- Compare weather in different environments in an EcoZone™ System (see the PASCO catalog).
- Compare humidity, temperature, and dew point as they change over time.
- Compare humidity and temperature at various locations.
- Measure humidity at various locations on a plant.
- Monitor greenhouse conditions.



Sample Data: Humidity in a Car



Specifications

Humidity ^{1,2}	
Range³	0% to 100% (RH), 0 g/m ³ to 50 g/m ³ (AH)
Accuracy⁴	from 10% to 95%, $\pm 3\%$ to $\pm 5\%$ (RH), 10% of reading (AH)
Resolution	1% or better (RH), 0.1 g/m ³ or better (AH)
Repeatability	0.5% or better (RH), 0.1 g/m ³ or better (AH)
Temperature ²	
Range	-20° C to 55° C
Accuracy⁴	$\pm 0.5^\circ$ C
Resolution	0.1° C or better
Repeatability	0.1° C or better
Dew Point	
Range	-50° C to 55° C
Accuracy⁴	$\pm 2^\circ$ C
Resolution	0.1° C or better
Repeatability	0.1° C or better

¹RH = relative humidity; AH = absolute humidity

²Time constant for temperature and humidity: 5 to 10 seconds to 63% of final value at 1 m/s air flow

³Excursion out of this range (including condensation) does not affect the reliability of the probe.

⁴Accuracy specified for typical temperature and humidity conditions

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.)

Fax: (916) 786-7565

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 (below) and on the product or its packaging indicates that this product **must not** be disposed of in a standard waste container.

