

Can photosynthesis and respiration happen at the same time?

The CO₂ data proves that plants are multi-taskers.

By collecting and graphing data, students have evidence that plants have two metabolic pathways. Photosynthesis and respiration take place simultaneously in the right conditions. Log data for several days to show how light and other environmental factors impact CO₂ levels.

Save time and money in your science lab with PASCO wireless solutions. No additional hardware or interface is required.

Wireless CO₂ Sensor

PS-3208



www.pasco.com/biology



PASCO

PASCO Wireless CO₂ Sensor

Wireless CO₂ Sensor

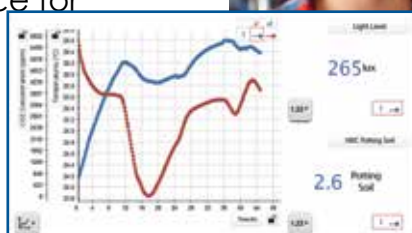
PS-3208

Includes 250-ml sampling bottle and USB charging cable.



Use this wireless sensor to measure the concentration of CO₂ gas in a closed system or open air environment. Study core topics (including photosynthesis, respiration, human breath analysis, and carbon cycling) with this versatile sensor. CO₂ data can be logged directly on the device for long-term monitoring or experiments.

- ▶ Simplicity: just pair and go
- ▶ Includes variable sampling rate for capturing small fast changes or experiments that run for hours, days, or weeks.
- ▶ Features convenient Bluetooth® wireless connectivity and long-lasting rechargeable battery
- ▶ Logs data directly onto the sensor for long-term experiments



Students observe carbon cycling in the EcoZone, which is taking place through photosynthesis, decomposition, and respiration.



Specifications

Range 0 to 100,000 ppm

Resolution 2 ppm

Connection Bluetooth® 4.0 or USB

Battery life ≥18 hours of continuous use

Accuracy 0 to 1k: ±100ppm
1 to 10k: ±5% of reading ±100 ppm
10k to 50k: ±10% of reading
50k to 100k: ±15% of reading

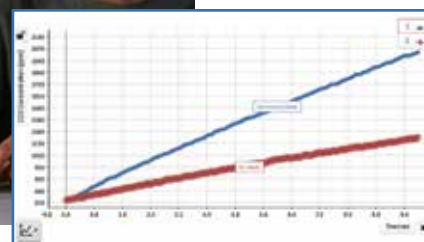
Warm-up time 3 min

Response time 90% in 30 sec

(See pasco.com for the latest specifications.)



Directly compare separate controlled environments during respiration of germinating seeds.



NEW

Dissolved CO₂ Waterproof Sleeve

PS-3545 Includes 5 sleeves and 5 O-rings

The Wireless CO₂ Sensor can be equipped for aqueous measurements using this semipermeable sleeve. The sleeve is waterproof but allows CO₂ gas to pass through the membrane, creating a headspace around the sensor. Monitor photosynthesis and respiration of aquatic plants or animals with the sample bottle or with other chambers.

(Please note: Improper use will void sensor warranty.)



(shown with Wireless CO₂ Sensor; sold separately)

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Note: PASCO wireless sensors are Bluetooth accessories and require Bluetooth 4.0 devices or our USB Bluetooth adapter. Bluetooth is a registered trademark of Bluetooth SIG.

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