

Základní vlastnosti

- Kombinovaný porometr a fluorometr
- Přístroj měří stomatální vodivost a fluorescenci chlorofylu na stejném vzorku listu
- Měření adaptace listu na světlo („light adapted“) a tmu („dark adapted“)
- Velmi rychlé měření v řádu jednotek sekund
- Kompaktní přenosný přístroj, hmotnost pouze 0,73 Kg
- Integrovaná čtečka čárových kódů pro snadnou identifikaci vzorku
- Interní Li-ion baterie pro až 8 hodin provozu



LI-COR®



Technická specifikace

Measurement time:

Porometer: 5 to 15 seconds typically, depending on species, leaf surface characteristics, and leaf conditions

Fluorometer: 1 second

Operating conditions:

Temperature: 0 to 50 °C

Pressure: 50 to 110 kPa

Humidity: 0 to 85%; non-condensing

Weight: 0.68 kg (porometer only); 0.73 kg with fluorometer

Dimensions: 32.4 cm x 16.9 cm x 6.2 cm (L x W x H)

Display:

Dimensions: 6.8 cm diagonally

Resolution: 400 x 200 pixels; sunlight readable monochrome

Keypad: 5-button membrane pad

Battery:

Built-in Li-ion

Operating hours: 8 hours typically

Capacity: 5200 mAh

Recharging time: 3.5 hours typically; 2 hours with Qualcomm® Quick Charge™ 2.0 or 3.0

Data storage: 128 MB

USB specifications: Communication/charging interface: Micro-B Qualcomm® Quick Charge™ 2.0 or 3.0 for rapid charging

Universal charging adapter:

Input: 90 to 264 VAC; 50 to 60 Hz

Output: 5 VDC; 1 Amp

Configuration software: Windows® and macOS® applications

Data files: Plain text data compatible with any spreadsheet application or data analysis program

Output: .CSV format

Barcode scanner: 1-D and 2-D, including Code 39, Code 128, PDF417, 100% UPC, Data Matrix, QR Code

Photosynthetically Active Radiation (PAR) measurement:

Units: Photosynthetic Photon Flux Density (PPDF); $\mu\text{mol s}^{-1} \text{m}^{-2}$

Calibration Accuracy: $\pm 10\%$ of reading; traceable to NIST

Cosine correction: Cosine corrected up to 60° angle of incidence

Porometer

Aperture: 0.75 cm diameter

Flow rates:

Low: 75 $\mu\text{mol s}^{-1}$

Medium: 115 $\mu\text{mol s}^{-1}$

High: 150 $\mu\text{mol s}^{-1}$ *

RH sensor accuracy: $\pm 2\%$ RH

Reference temperature: ± 0.2 °C

Leaf temperature sensor accuracy: ± 0.5 °C

Inlet flow measurement: $\pm 1\%$ of reading from 75 $\mu\text{mol s}^{-1}$ to 150 $\mu\text{mol s}^{-1}$

Exhaust flow measurement: $\pm 5\%$ of full scale up to 150 $\mu\text{mol s}^{-1}$

Parameters computed:

g_{sw} mol $\text{m}^{-2} \text{s}^{-1}$; g_{bw} mol $\text{m}^{-2} \text{s}^{-1}$; g_{tw} mol $\text{m}^{-2} \text{s}^{-1}$;
E mmol $\text{m}^{-2} \text{s}^{-1}$

VP_{cham} kPa; VP_{ref} kPa; VP_{leaf} kPa; VPD_{leaf} kPa

H_2O_{ref} mmol mol^{-1} ; H_2O_{samp} mmol mol^{-1} ;

H_2O_{leaf} mmol mol^{-1}

Fluorometer

Flash types: User configurable Rectangular and Multi-phase Flash™ (MPF)

Measuring light peak wavelengths: 625 nm

Peak light intensity: 0 to 10,000 $\mu\text{mol m}^{-2} \text{s}^{-1}$

Flash intensity: 0 to 7500 $\mu\text{mol m}^{-2} \text{s}^{-1}$

Parameters computed:

$F_{o'}$, $F_{m'}$, $F_{v'}$, $F_v/F_{m'}$, F_s , $F_{m'}$, Φ_{PSII} , ETR

**High flow may not be achievable at higher altitude
Specifications subject to change without notice*