



# SC-1 Leaf Porometer: Stomatal Conductance

## DESCRIPTION

the SC-1 is designed to provide you with a simple solution to a complex problem. By measuring vapor flux from the leaf through the stomates, it enables you to tell the difference between transpiring leaves and ones that have shut down. High-speed results, ease of use, and a low cost mean more measurements in less time without blowing your budget.

Not only can you make accurate leaf conductance measurements in only thirty seconds, but you can calibrate the SC-1 in just a few minutes. After calibrating, simply clip it on the leaves you are interested in and start measuring stomatal conductance. The SC-1 is simpler to use for a variety of reasons. It's lightweight, so you won't get fatigued carrying it around in the field (or around your neck, for that matter). What's more, breakthrough steady-state technology means it doesn't have any moving parts, making it easy and reliable to use.



## SC-1 Leaf Porometer

### FEATURES

- Accurate
- High speed results (readings in 30 seconds)
- Straightforward calibration
- Affordable
- No moving parts
- Lightweight, easy to carry
- Save and download data (USB cable and download utility software included)

Most measurements in the soil-plant-atmosphere continuum are fairly straightforward. Measuring stomatal conductance is not. And since stomatal conductance can't be predicted from theory and must be measured, you need an instrument that's easy to use. Presenting the SC-1.

# PHYTOS 31: Stomatal Conductance

There's low cost, and then there's lifetime low cost. The SC-1 is affordable to begin with. And because it's also low maintenance, you won't have to keep dipping into your budget to get it repaired when the pump breaks or a seal goes bad.

These combine to save you money in both the short and long term.

Quick measurements. Easy-to-use. Low cost in the short and the long run.

## Contact info



## Monitoring MENA

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SPECIFICATIONS	
Stomatal conductance	<b>Range:</b> 0 to 1,000 mmol/(m <sup>2</sup> s) <b>Resolution:</b> 0.1 mmol/(m <sup>2</sup> s) <b>Accuracy:</b> ±10% of measurement from 0 to 500 mmol/(m <sup>2</sup> s)  <b>NOTE: The SC-1 can measure higher than 500 mmol/(m<sup>2</sup>s) and detect relative stomatal conductance change in the high range, but absolute accuracy becomes unverifiable past 500 mmol/(m<sup>2</sup>s).</b>
Measurement time	30 s
PHYSICAL SPECIFICATIONS	
Controller dimensions	Length: 15.8 cm (6.2 in) Width: 9.5 cm (3.8 in) Height: 3.3 cm (1.3 in)
Sensor head dimensions	Length: 12.0 cm (4.7 in) Width: 2.5 cm (1.0 in) Height: 5.5 cm (2.2 in)
Sensor aperture diameter	6.35 mm (0.25 in)
Sensor cable length	1.2 m (4 ft)
Operating temperature range	Minimum: 5 °C Maximum: 40 °C
Operating relative humidity range	Minimum: 1% Maximum: 100%, with desiccant chamber
Power	4 AA batteries (not included)
Battery life	2 years (battery drain in sleep mode is <50 µA)
Data storage	4,095 measurements in flash memory
Connector type	Serial-to-USB
COMPLIANCE	Manufactured under ISO 9001:2015 EM ISO/IEC 17050:2010 (CE Mark)

## ACCESSORIES

- **SC-1 Porometer Spare Agitation Beads**
- **SC-1 Leaf Porometer Spare Pads for Leaf Clip**
- **SC-1 Leaf Porometer Spare Filter Pack**
- **SC-1 Leaf Porometer Replacement Leaf Clip**
- **Extra Filter Paper for Calibration (Whatman #3)**
- **Desiccant (2 oz. Bottle)**

This Instrument is manufactured by our principle company

**METER Environment - USA**