

# Chameleon Saturated Hydraulic Conductivity Laboratory System

It's Automated!
Soilmoisture Equipment Corp. is proud to now offer the Chameleon Laboratory, an accurate, versatile, and fully automated laboratory system for measuring saturated hydraulic conductivity (Ksat). Chameleon is capable of performing Ksat measurements according to both the Falling-Head Method and Constant-Head Method. Thanks to the Monitor® Precision Pressure Transducer, and the Chameleon Software Application, both measurement methods are fully automated.

- Components are easy to assemble & use!
- Automated using a dedicated software application!
- Measures Ksat using both the constant and falling head methods!
- Can run up to twenty samples at the same time!
- Components can be used in other types of lab studies!

Soilmoisture Equipment Corp offers all of the items necessary for a thorough & accurate permeability analysis with the Chameleon Laboratory:

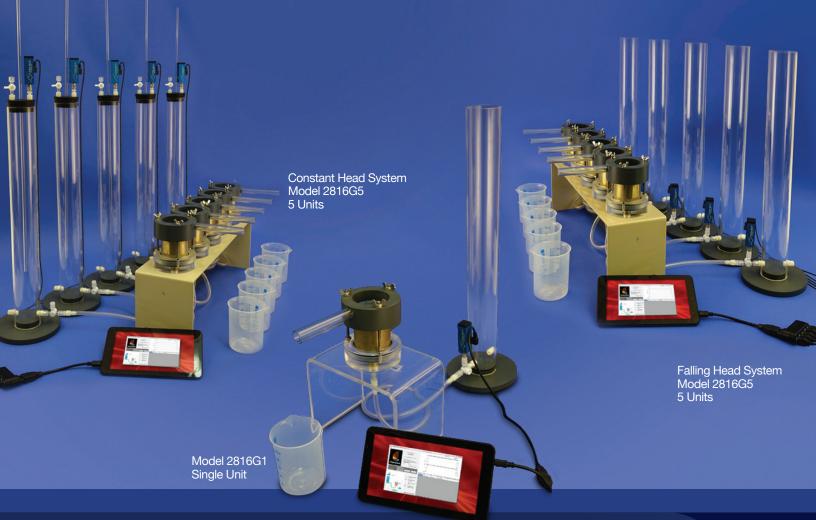
- Soil samplers with cores to fit directly for undisturbed analyses.
- Additional cells, cylinders, and transducers to easily grow the scale of your lab.
- Tempe Cell ceramics and pressure/vacuum regulating set-ups to test soil water retention in addition to permeability with your Chameleon Lab.

Demonstrate to your students how head-height & vacuum relationships can be used to measure Ksat with the highest accuracy!

Measure Ksat from multiple sites for multiple clients in the same few-hour period, with full reports including charts & graphs!

Chameleon offers the least disturbance, largest scale, and highest accuracy for all you permeability testing needs!





## **Fastest Solutions with Complete Software Package**

The Chameleon Permeability Laboratory System allows for automated Ksat calculation in just a few minutes to a couple of hours. The user simply needs to collect samples and connect them into the system. The software will record the data, notify the user of steady state, calculate Ksat, and provide reports including charts and graphs. With both constant head and falling head calculation capabilities, this is the most complete permeability system.

## The Versatile, Scalable, All-In-One Permeability Lab

The Chameleon Permeability Laboratory System is the ideal configuration for calculating Ksat quickly and effectively. Soil cores are installed directly into the system assuring minimal disturbance for maximum accuracy. The automated software, compatible exclusively with Soilmoisture's new Monitor™ Transducer, allows the user to get results with limited labor and error. Constant head and falling head methodology makes this a diverse educational tool and the perfect system for a wide range of research. Furthermore, the components used in Chameleon can be reconfigured to create other types of laboratory systems, such as Soilmoisture's Tempe Cell system, with little or no additional parts. The system includes the complete Monitor™ Precision Pressure Transducer software package so that the transducers can also be used for other applications.

### **Specifications:**

- Minimum Head-height: 1 cm
- Maximum Head-height: 100 cm
- Reservoir Inside Diameter: 5.13 cm (2.02")
- Reservoir Height: 48.26 cm (19.00")
- Reservoir Volume: 1 liter (0.26 gallon)
- Soil Core Inside Diameter: 5.38 cm (2.12")
- · Soil Core Height: 6.0 cm (2.24")
- Pressure Transducer: Monitor Precision Transducer (-15 to +15 psi).

## **System Options**

- · Model 2816G1: Single Unit
- Model 2816G5: Five Independent Units

**0200 Soil Core Sampler** Collect undisturbed soil

Collect undisturbed soil samples to connect right into the Chameleon Lab!



INSTRUCTIONS



