SATURO
DUAL-HEAD INFILTROMETER

METER

SATURO QUICK START

Preparation

Confirm that SATURO components are intact. Depending on the research goals, SATURO will need access to water from the site or to water of similar ionic strength for more representative soil–water interactions.

Read the SATURO User Manual at metergroup.com/en/meter-environment/products/saturo/saturo-support. All products have a 30-day satisfaction guarantee.

Downloading Data

Install the downloader software at metergroup.com/saturo-support.

After the test is completed, connect the control unit to a computer via the USB cable and start the downloader software. Select the proper COM port and click Download. The data can be formatted as either an .xlsx or a .csv file.

Recommended measurement settings

Soil Type	Soak Time (min)	Low Pressure Head (cm)	High Pressure Head (cm)	Hold Time at Pressure (min)	Pressure Cycles (count)	Total Run Time (min)
Dry loamy sand	25	5	10	15	3	115
Wet loamy sand	15	5	10	15	2	75
Dry silt loam	30	5	15	20	3	150
Wet silt loam	15	5	15	20	2	95
Dry clay (poor structure)	30	5	20	25	3	180
Wet clay (poor structure)	15	5	20	25	2	115
Dry clay (strong structure)	25	5	10	20	3	145

NOTE: These settings are only a recommendation and should be altered depending on site conditions. If flux rates exceed 90 cm/h, decrease the low- and high-pressure heads to decrease flow rates.

Installation

1. Install Insertion Ring

Place the insertion ring on the soil and fit the driving plate on the top. Hammer on the inner circle of the driving plate until the insertion ring is flush with the top of the soil, ensuring there are no gaps between the soil and ring side walls. Remove the driving plate.
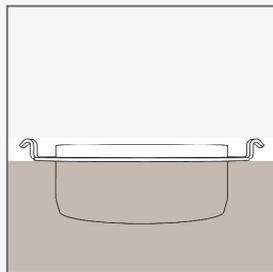
2. Set Up Infiltrometer Head

Install bottom gasket. Fit the infiltrometer head to the insertion ring, fasten the clamps to form a seal, and connect the hoses to the corresponding ports on the infiltrometer head and control unit. Connect the sensor cable from infiltrometer head to the control unit. Fill the water tank and connect it to the control unit.

NOTE: Avoid water intrusion into the air hose as this can cause water to enter the air pump.


3. Set Up and Start Test

Power on the control unit. Press **Enter**, create a unique test name, and select Done. Input the appropriate settings. Press **BACK**, scroll to Start, and press **Enter**. Confirm everything is properly connected and select OK to begin the test.


```
Test Setup
  Name: COOK FARM
  Settings
  Run Time: 140 min
  Start
```

4. Reach and Maintain Steady State

SATURO should reach quasi-steady-state flow during the test. If the test has reached steady state, the flux remains constant as the pressure is maintained and changes as the pressure head rises and falls. If the test does not reach steady state, rerun the test with different settings. For more information, please refer to the SATURO User Manual.
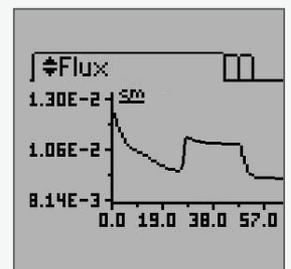
SUPPORT

Have a question or problem? Our support team can help.

We manufacture, test, calibrate, and repair every instrument in house. Our scientists and technicians use the instruments every day in our product testing lab. No matter what your question is, we have someone who can help you answer it.

NORTH AMERICA

Email: support.environment@metergroup.com
Phone: +1.509.332.5600

EUROPE

Email: support.europe@metergroup.com
Phone: +49 89 12 66 52 0