



NEW

# SoloFlux

Automated Digital Permeameter





## WATER MOVEMENT IN THE SOIL

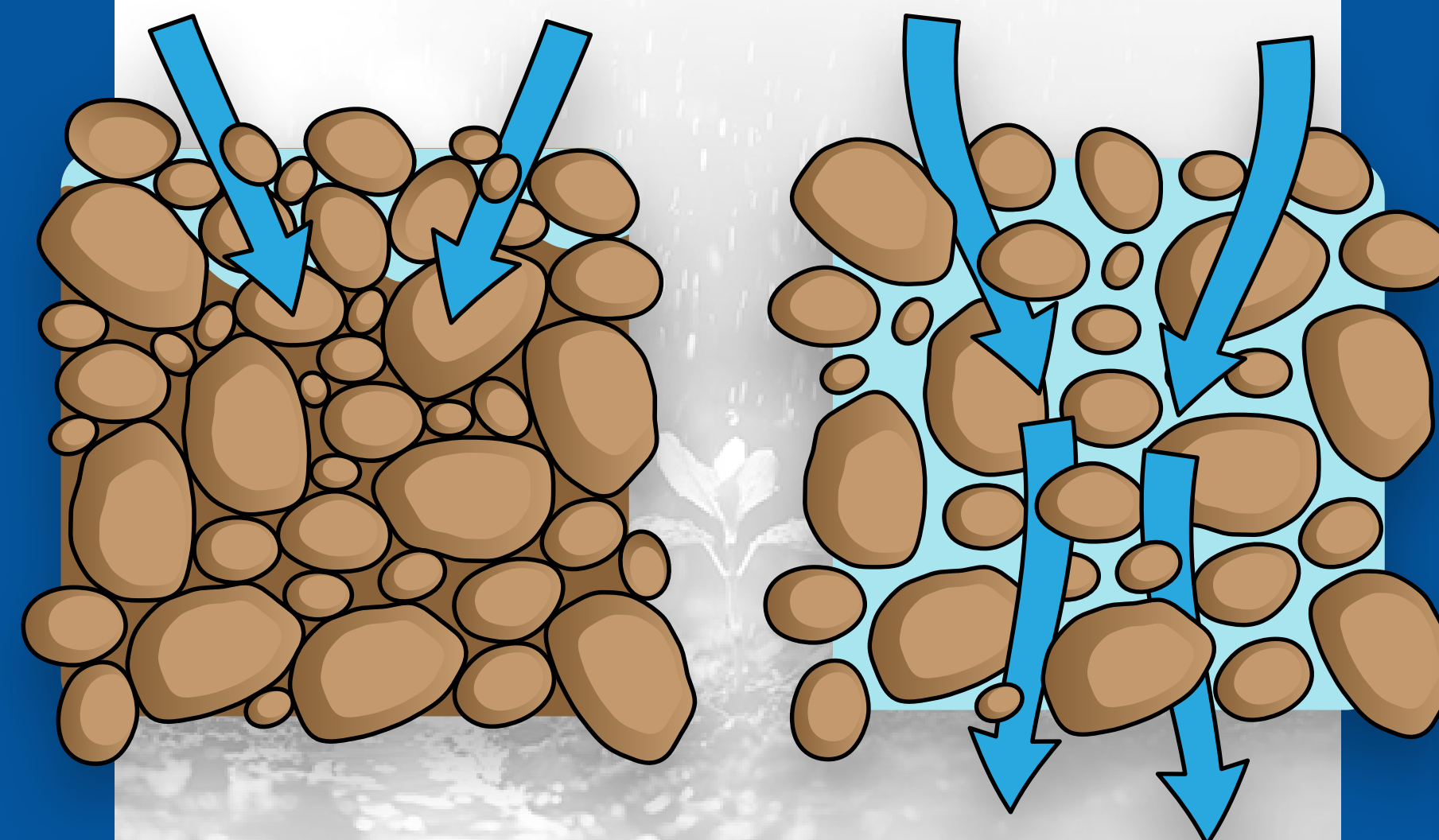
Hydraulic conductivity is a variable associated with the ease with which water moves, expressing the soil's physical structural quality. **The movement of water in the soil is directly influenced by macroporosity**, varying according to the volume, size, continuity, tortuosity and interconnection of the soil's porous system.

### HYDRAULIC CONDUCTIVITY X COMPACTION

Hydraulic conductivity is inversely proportional to penetration resistance. Soil compaction rearranges the particles, increasing density as a result of the reduction in soil volume and the expulsion of air from the pores.

Soil compaction reduces the volume of macropores. With this reduction, the soil's microporosity increases, leading to greater water storage in the soil.

In this way, soil hydraulic conductivity can be used to characterize abrupt changes in macroporosity.



## WHY MEASURE SOIL WATER PERMEABILITY?

TO DESCRIBE THE CAPACITY OF A SOIL TO **STORE**, **DRAIN** AND **DISTRIBUTE** WATER.

### ESSENTIAL INFORMATION FOR:

- THE MANAGEMENT AND USE OF IRRIGATION WATER.
- THE SIZING OF HYDRAULIC PROJECTS.
- PREDICT SOIL BEHAVIOR IN THE FACE OF ADVERSE CLIMATIC EVENTS.

## ASSESSING PERMEABILITY HAS NEVER BEEN SO SIMPLE:

- 🕒 TIME-SAVING
- ⚙️ MORE PRACTICAL
- 📊 AUTOMATED RECORDS

### SoloFlux



# SoloFlux

- BUILT-IN GPS
- BLUETOOTH
- USB

EASY DATA EXPORT AND STORAGE

SOFTWARE FOR DATA VISUALIZATION



- AVAILABLE FOR ANDROID AND iOS -

**CALCULATES SATURATED HYDRAULIC CONDUCTIVITY (Ksat)**

**NO NEED FOR CONTINUOUS MONITORING BY AN OPERATOR**

WITH MORE PRECISE RESULTS

**COMPARE THE EVOLUTION OF MEASUREMENTS AT EACH COLLECTION POINT**

\* SYNCHRONIZATION WITH THE WEB VERSION

PROTECTION BACKPACK



EASY TO ASSEMBLE ROBUST STRUCTURE



INCLUDES ACCESSORIES FOR OPENING THE WELL



DEVELOPED IN PARTNERSHIP WITH:



# Technical information

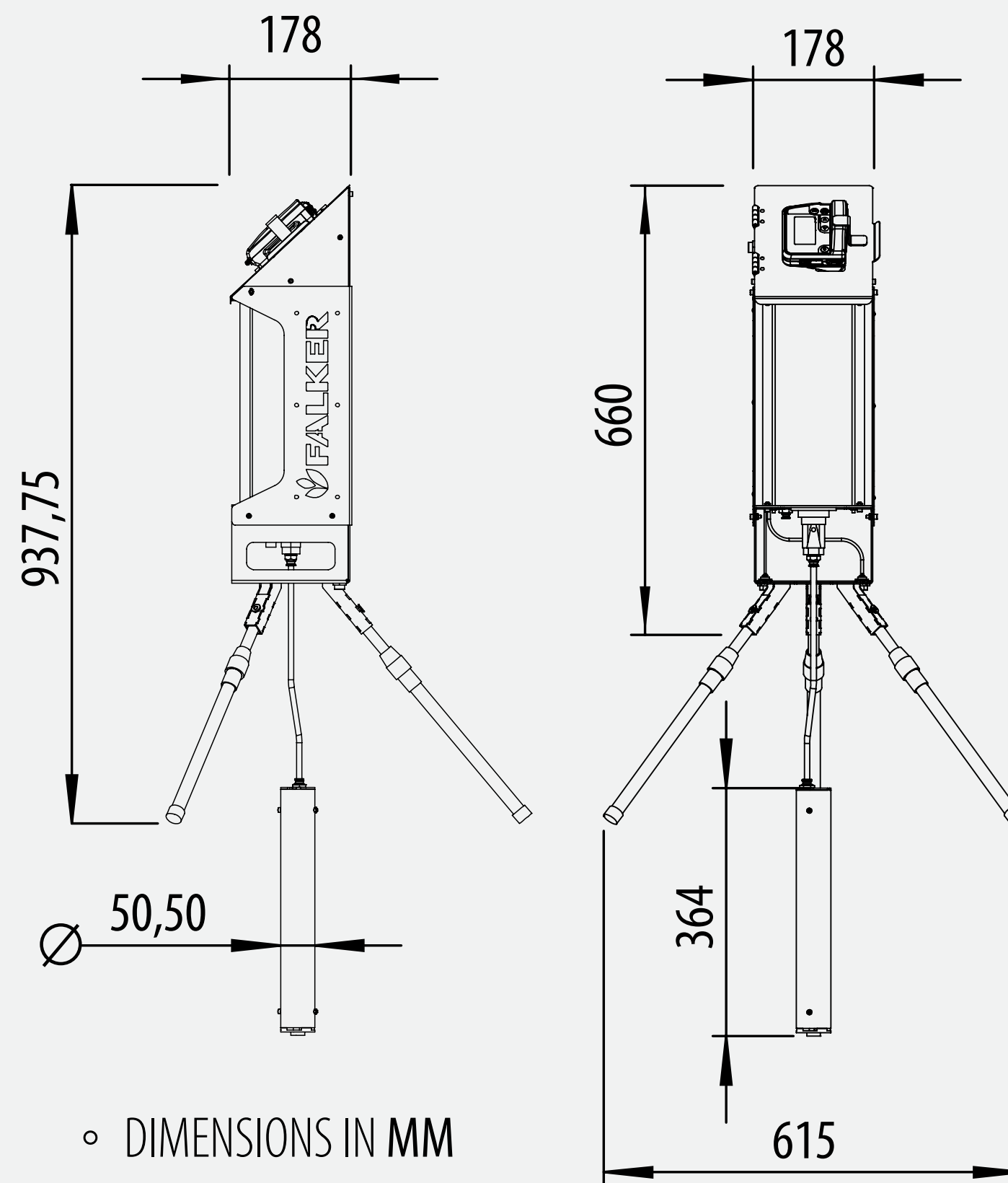
## SFX1050

|                           |   |
|---------------------------|---|
| Reservoir volume          | 150 oz / 4,6 L  |
| Maximum measuring depth   | 60 cm<br>For greater depths,<br>contact the sales team  |
| Applicable hydraulic load | 5 and 10 cm   |
| Measurement resolution    | 0.1mm of water  |
| Precision                 | +/- 0.5mm of water                                      |
| Power Supply              | Internal rechargeable battery<br>USB-C connector        |
| Indications for users     | Graphic LCD screen with BackLight<br>+ Sound indication |
| Weight                    | 15 lb/7 kg (33 lb/ 15kg accounting for all items)       |
| Receptor GPS receiver     | Built-in  |
| Communication             | USB and Bluetooth                                       |
| App/Web                   | Falker Flow   |



### ITENS INCLUSOS

- ① SoloFlux SFX1050
- ② Datalogger SFX1050
- ③ Measuring Set
- ④ General fixing rod
- ⑤ Dutch Auger
- ⑥ Mug Auger
- ⑦ Well Brush
- ⑧ Cleaning Accessories
- ⑨ Collapsible water container
- ⑩ USB-A/USB-C cable



 **FALKER**

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Data acquisition for  
precision farming