



NEW

SoloFlux

Automated Digital Permeameter



 **FALKER**



WATER MOVEMENT IN THE SOIL

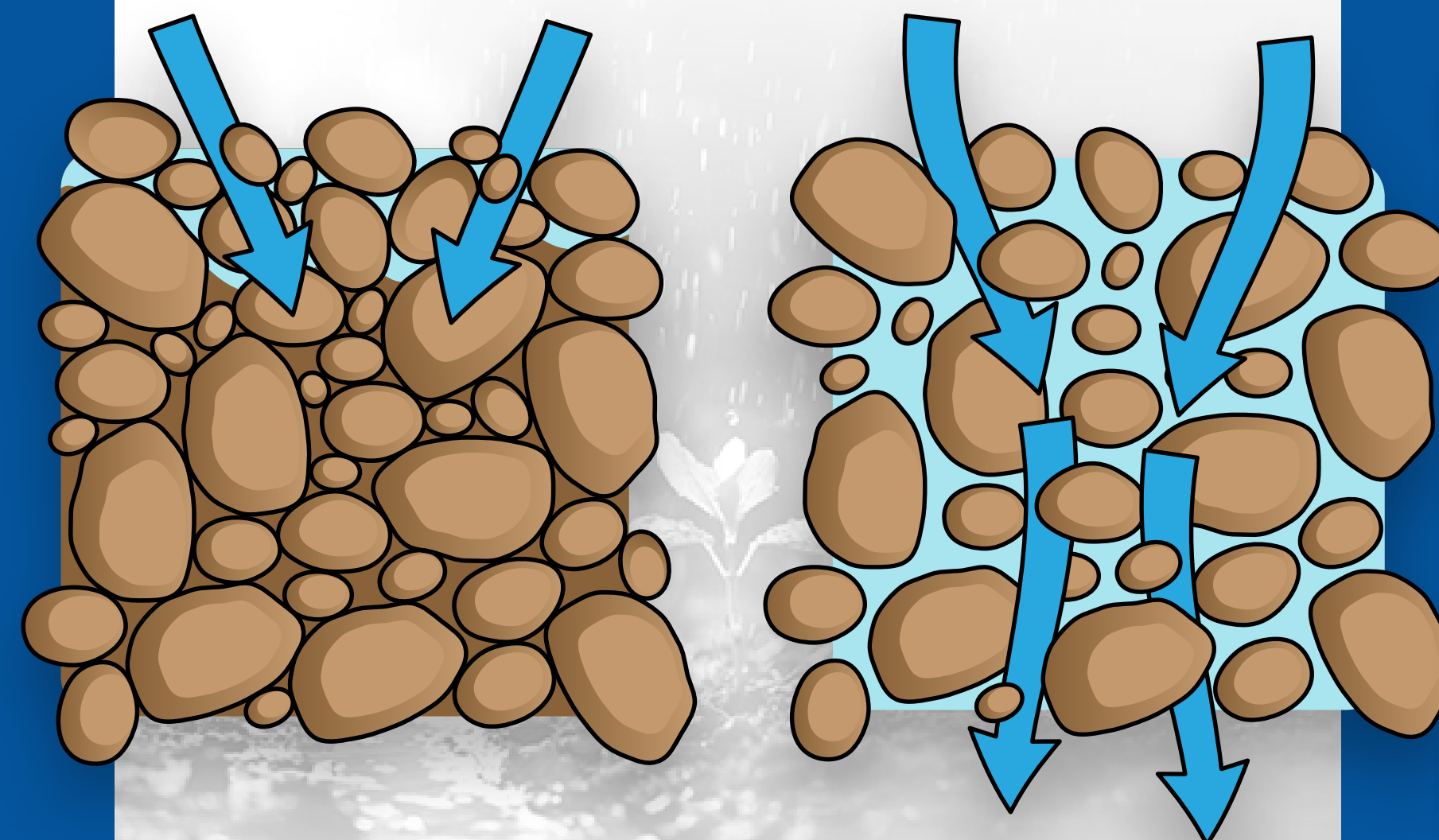
Hydraulic conductivity is a variable associated with the ease with which water moves, expressing the soil's physical structural quality. **The movement of water in the soil is directly influenced by macroporosity**, varying according to the volume, size, continuity, tortuosity and interconnection of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

SoloFlux



1 Preparing the measurement well



2 Assembling the equipment



3 Definition of parameters



4 Automated measurement
 Export data via *app*

SoloFlux

PROTECTION
BACKPACK

EASY TO ASSEMBLE
ROBUST STRUCTURE

INCLUDES ACCESSORIES
FOR OPENING THE WELL

BUILT-IN GPS

BLUETOOTH

USB

EASY DATA EXPORT AND STORAGE

SOFTWARE FOR DATA VISUALIZATION



- AVAILABLE FOR ANDROID AND iOS -

COMPARE THE EVOLUTION
OF MEASUREMENTS AT
EACH COLLECTION POINT

* SYNCHRONIZATION WITH THE WEB VERSION

CALCULATES SATURATED
HYDRAULIC CONDUCTIVITY (Ksat)

NO NEED FOR CONTINUOUS
MONITORING BY AN OPERATOR

WITH MORE PRECISE RESULTS

DEVELOPED IN
PARTNERSHIP WITH:



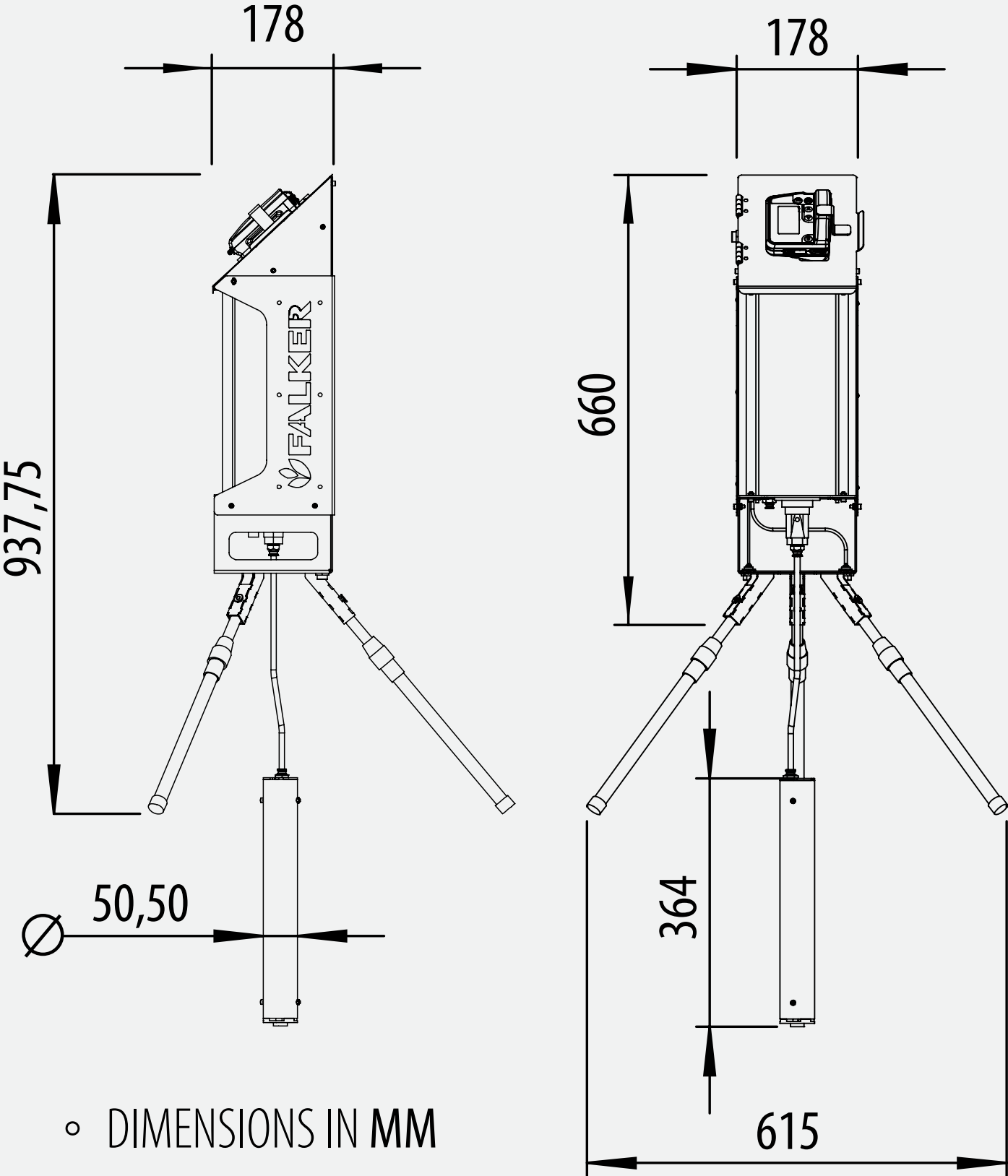
Technical information

SFX1050	
Reservoir volume	150 oz / 4,6 L
Maximum measuring depth	60 cm For greater depths, 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 USB-C connector
Indications for users	Graphic LCD screen with BackLight + 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



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Data acquisition for precision farming