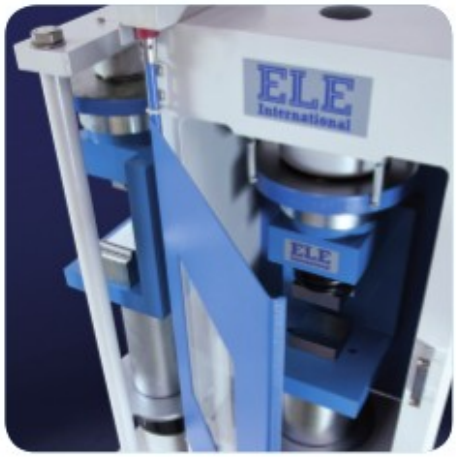
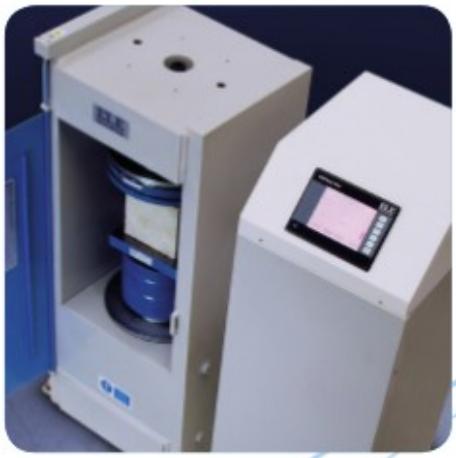


ELE INTERNATIONAL



IF IT'S WORTH BUILDING, IT'S WORTH TESTING

www.ele.com

Contents

This wishlist was generated on 22/05/2020, and contains the following Products:

Soil moisture meter.

Code: 514-126
Product Group: Soil Moisture

This instrument is rugged, hand-held for field derivation of soil moisture.

Buriable soil moisture blocks allow moisture levels to be measured throughout the soil profile.

It is easy to use and battery operated.

This instrument is the ideal companion for the new, slim design moisture blocks, which are placed in the soil and leads connected in turn, to the meter. The measured resistance of the block, in ohms, is converted to a corresponding reading between 0 and 100 on an empirical scale. In practical terms this empirical range covers the soil suction range 0.2 to 15 bar and using the calibration graphs of soil moisture content (dry weight percentage) against soil suction in bars, the soil moisture content may be determined.

In practical situations, resistance blocks are often placed at various depths in the soil to monitor soil moisture content profiles across the root zone. Experience will determine the optimum depth of placement depending on the particular soil type.

The soil moisture blocks are designed for use with this particular meter and give a uniform and quick response, made possible by their slim design (20mm diameter).

Further Information

Specification

Measuring range	0-100 empirical range corresponds to 0.2-15 bar
Power requirements	1 x 9 V battery (supplied)
Weight	0.90

Soil Moisture Block 0.9 m Lead

Code: 514-128
Product Group: Soil Moisture

0.9 Meter Long Lead

Soil Moisture Block 2.7 m Lead

Code: 514-130
Product Group: Soil Moisture

2.7 Metre Long Lead

Soil Moisture Block 4.5 m Lead

Code: 514-132
Product Group: Soil Moisture

4.5 Metre Long Lead

Trase Soil Moisture Analyser

Code: 514-160/01
Product Group: TDR

•Measures volumetric water content of soil.

•Time Doman Reflectometry yields an unsurpassed level of accuracy.

•Direct readout of volumetric water content.

•Rugged, Waterproof and portable.

•Graph display in-depth soil studies physics studies.

The Trase system uses Time Domain Reflectometry (TDR) to measure the volumetric water content of soils and other moist media. Waveguides for depth measurement ranging from 15cm to 70cm are available. The volumetric moisture content is displayed, and the graph of the TDR pulse can also be displayed. The moisture reading and the graph of the TDR pulse can be tagged for identification and stored for later analysis. The Trase system can be programmed to auto log moisture readings. All stored data can be transferred via an RS 232 port to external printer or computer for further processing.

The Trase is designed for rugged field use and is environmentally sealed to prevent damage to Sensitive electronic components.

Specification

Dimensions	53 x 43 x 38 cms
Measuring range	0-100% volumetric moisture content
Measuring accuracy	+/- 2% FS or better
Operating temperature	-5° to +45° Autologging without use of display
Power supply (supplied)	2 x 7 amp hr, sealed electrolyte batteries
Recharge time	12 hours
Auxillary power input	18-24V AC or DC, 1.5 amp, for battery recharge or operation from mains
Operating temperature	0°- 45°C Do not store below -20°C
Memory	256Kb, capacity for 180 graphs/5600 readings
Graphic display	128 x 256 dot, black lit LCD
Weight	11.92 kilos

Minitrase Kit with Bluetooth and Android

Code: 514-190/01
Product Group: TDR

The MiniTrase uses Time Domain Reflectometry (TDR) to measure instantaneously the volumetric water content of soils and other moist media. A variety of connectors and waveguides for depth measurements ranging from 150 mm to 700 mm are available, and can be used in a portable manner or permanently installed for periodic moisture monitoring. The volumetric moisture content is displayed on the Android tablet, and the graph of the TDR pulse can also be tagged for identification and stored for later viewing and analysis on the tablet or a PC. All stored data can be transferred either by hotsyncing the Android to your PC or via an RS 232 port connection from the MiniTrase to the PC. The MiniTrase unit is designed for rugged field use and is environmentally sealed to prevent damage to sensitive electronic components. Kit includes: Multiplexer card, cables, chargers, Android tablet, and software.

KIT INCLUDES:

- MiniTrase with Multiplexer Card
- Android Tablet
- Flash Drive with WinTrase and Android to PC Software
- WinTrase Software on CD
- Standard Waveguide Connector
- Set of 150 mm long Waveguides
- Internal Bluetooth Module
- Connector Cable from MiniTrase to PC RS 232
- Power Supply Unit for MiniTrase
- MiniTrase Backpack
- Set MiniTrase Operating Instructions on Mini CD
- Set of 3-Letter Code Instructions

Specification

Dimensions	540 x 440 x 380
Measuring range	0-100% volumetric moisture content
Measuring Accuracy	+/- 2% FS or better
Operating Temperature	0° to +45°C
Power supply	1.7 amp hr, sealed NiCad battery
Recharge Time (hrs)	12
Auxillary Power Input	18 V DC, 2.2 amp AC
Connecting Ports	BNC (waveguide connection) DB-9 Serial (data transfer) DB-15 Multiplexer (multiplex

	(8-pin DIN)
Memory	256 Kb, capacity for 180 graphs/5610
Measuring Pulse Amplitude	1.6 volt peak
Sampling Resolution	10 picoseconds
Hardware	5 slot card cage: 3 system boards, 1 optional slot, and multiplexing board
Weight (kilos)	7