Compact Portable Hand-Held Soil Moisture System

Campbell Scientific HYDROSENSE II

www.campbellsci.com.au/soil-moisture-hs2





www.campbellsci.com.au 16 Somer Street Hyde Park QLD 4812 tel +61 7 4772 0444 fax +61 7 4772 0555

Hydrosense II Compact Portable Hand-Held Soil Moisture System

The Hydrosense II consists of a hand held display and portable soil moisture sensor and has been designed to replace the original Hydrosense soil moisture system. It features a new hand-held display and a new easy insertion probe design.

New Hand Held Display

The Hydrosense II hand held has been designed to be compact and portable with the layout of the buttons allowing for operation with one hand. A 3 inch LCD display and four navigation buttons have been added to make changing settings and taking measurements as easy as possible. An integrated GPS tags each measurement with a latitude and longitude. Zones can be created on the unit which group measurements together so that average soil moisture can be calculated for an area. The current position and zone are shown on the display so that measurements can be taken in the same zone. Data storage has been added to allow up to 1500 measurements to be stored on the device. The data can then be downloaded to a PC via Bluetooth for viewing and archiving.

New Soil Moisture Probe

The new soil moisture probe uses the same accurate measurement technique as the old probe, but the probe housing has been redesigned to aid insertion into and removal from hard soils. The probe rods are secured to the probe housing with ferrule nuts to provide extra stability during insertion. A moulded plastic grip connects the sensor cable to housing to provide better grip.

New PC software has been developed to make the most of the data storage capability of the Hydrosense II. The software connects to the hand held via Bluetooth to avoid the need for extra cables.

The software will allow the user to:

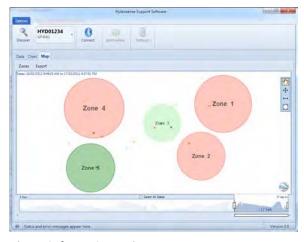
- · View data in table and chart views
- Edit zone positions and sizes
- Change device settings
- Export data to CSV to interface with 3rd party software
- View zones and measurements in Google Earth

Benefits / Features

- Compact, highly portable soil measurement
- · Large LCD display for easy operation
- Onboard data storage for up to 1500 points
- Onboard GPS for geotagging measurements
- Bluetooth connection to PC software
- Export to Google Earth, GPX and CSV
- Probe redesign for easy insertion and removal from soil

Components

- CD660 Hydrosense II Hand Held Display
- CS658/CS659 Water Content Probe
- Blow Mould Case



Above: Software Screenshot

Hydrosense II Specifications

Model CD660

Hydrosense II Hand-Held Display

Measurement: Soil Moisture (%)

Housing: Splash Resistant

Display: 2.9' LCD display. 128px(W) x 64px(H)

Keypad: Seven-button keypad.

Power, Measure, Store and 4x Navigation Buttons

Power Supply: 6 Vdc - 4 x AA batteries

Battery Life: Approximately 12 months typical usage Dimensions: 200mm (H) x 100mm (W) x 77mm (D)

Weight: 350g

Reading Time: < 3 seconds

GPS accuracy: 5 metres



Model CS658/CS659

Water Content Probe

Accuracy: 3% typical (solution electrical conductivity < 3 dS/m)

Resolution: < 0.05%

Range: 5% to 50% VWC

Body Dimensions: 145mm (H) x 100mm (W) x 40mm (D)

Rod Dimensions: 5 mm diameter, 32 mm spacing

120 mm or 200 mm length

Cable: Spiral cable, 250 cm extended

Weight: 420g

Ordering Info

The Hydrosense II ships with:

- 1 x CD660 Hydrosense 11 display (with 4 x AA batteries & 1 wrench, 1 x loctite)
- 1 x Battery holder inserted in carry case
- 1 x Phillips screwdriver
- 1 x CS658/CS659 12cm or 20cm probe (with 2 x rods, 1 x wrench, 1 x loctite)
- 1 x Carry case
- 1 x Hydrosoft data collection and display software (CD)



Above: Blow Mould Case

Scientific, environmental and industrial instrumentation for a range of applications including:

- meteorology
- hydrology
- research
- education
- © communications
- agriculture
- mining & utilities
- clean energies
- automotive development
- aquaculture
- marine biology
- geotechnical monitoring
- process control

