

Well Sounder 2010 PRO

SONIC WATER LEVEL MEASUREMENT

The Well Sounder 2010 PRO is the latest sonic water level meter, designed and manufactured by Eno Scientific, to measure static water level in wells. Using sound waves to measure the distance from the top of the well to the water level, this portable handheld meter eliminates the need to lower anything into the well, preventing well contamination and clean up. Simply place the probe into a well cap vent opening and turn the unit on. Within seconds the static water level measurement is displayed. The simple user interface powers up in distance reading mode, but with the press of a button, the powerful internal processor calculates and displays a variety of other information such as the total water in the well, its rate of change, temperature and battery voltage.

A built-in data logger can record up to 25 million time stamped readings along with the well ID, temperature and other associated measurements. The logger can be set to take measurements automatically at intervals between 1 and 60 minutes or manually by pressing the log button on the keypad. The recorded data can be reviewed on the screen or downloaded to a computer for analysis using the serial RS232 port or the included USB cable. Stored data is formatted for USB access in simple windows compatible text files sorted by well ID which can be easily copied from the well sounder onto the computer and opened with almost any common program such as Word, Excel or Notepad.

With an optional adapter, the Well Sounder 2010 PRO can accept input from most standard pulsed flow meters. The flow meter allows the well sounder to measure the total water pumped and record it with the logged data. With this information the well sounder additionally calculates and displays, flow rate and the rate of recovery of water in the well even while pumping. These features allow the user to perform unsupervised drawdown testing. Set up the test, turn on the logger, and return when the test is complete. If the data won't be downloaded immediately, take advantage of the unit's ability to give each well an ID number to help keep the data organized.



There are many other features included with this advanced instrument such as the power save mode which puts the unit to sleep between measurements when logging and turns off the power after a selected period of inactivity to save battery life. And if there are known defects in the well, such as a rock fissure, simply set the measurement range minimum and maximum to ignore the interference. The multipurpose bidirectional serial communications port can be used to transmit data in real time to a remote readout or logging device or allow remote programming of the well sounder.

The Well Sounder 2010 Pro kit comes complete with everything necessary to measure and record well static water levels, including batteries and a rugged carrying case.



Key Features:

- Automatic temperature compensation
- Calculates drawdown and recovery rates
- Immediate data capture
- Up to 25 million data points in non-volatile memory
- Real time clock/calender to time stamp logged data
- USB port for data download
- RS232 port for remote communication
- Powered by 6 internal batteries for up to 500 hrs of use
- Jack for optional external power
- Auto off function
- Flowmeter input (with optional adapter)

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SPECIFICATIONS

MEASUREMENT:

Units - English (decimal ft or ft & in), Metric
 Resolution - .05 ft (1 cm)
 Accuracy - .1 ft (3 cm)
 Range - 9 to 2000 ft (3 to 600M)
 Update time - ~1 sec @ 500ft (150M), ~4sec @ 2000ft (600M)
 Time to first fix - ~4 sec @ 500ft (150M)

LOGGING:

Memory - nonvolatile flash memory for 13,000 data points in addition to calibration and user data.
 Extended Memory - 2GB nonvolatile flash memory for 25 million data points in a windows compatible file system. USB connection appears as a mass storage device showing ASCII data files sorted by well ID.
 Automatic Logging Rates - 1 sec to 60 minutes per sample.
 Manual Logging - on key press.

POWER:

Internal Power - 6 AA Alkaline batteries
 Battery life - up to 80 hours continuous.
 Up to 21 days in power saver mode.
 External Power (optional) - 6.5 to 12VDC at 80ma max.
 Do not exceed 16V.
 Connector 5.5mm x 2.1mm center post positive.
 Real time clock - Li Ion 3V battery CR2032.

ENVIRONMENTAL:

Temperature - -10 to 110 F (-20 to 45 C)
 Humidity - 10 to 90% non-condensing.

PHYSICAL:

Meter Dimensions - 3.5 x 7.5 x 1.5" (19 x 9 x 4cm)
 Weight - 14 oz (390g)
 Probe Dimensions - 6 x 3 x 3" (16 x 8 x 7cm)
 Probe Tip Diameter - 5/8" (1.7cm)
 Cable length - 70" (1.8M)
 Weight - 13 oz (355g)
 Shipping Dimensions - 13 x 17 x 5" (33 x 44 x 13cm)
 Weight - 5lb (2.3Kg)

FEATURES:

Display - 2x16 character LCD.
 Temperature compensation - in probe.

INPUT/OUTPUT:

Acoustic probe.
 Serial port - bi-directional 300 - 57600 baud , 8 data bits, one stop bit.
 USB port for file system access.
 Flow meter input (with adapter) - pulse counting.
 External Temperature sensor (with adapter).



INCLUDED IN KIT:

- Well Sounder 2010 PRO meter unit
- Remote probe
- User Manual
- Quick Start Guide
- US Groundwater Temperature chart
- USB cable
- Heavy duty carrying case

For more information, contact your local distributor:

