



## Wireless Monitoring & Recording Of Soil Moisture

T&D Corporation announces a new low cost system for recording and remotely monitoring the moisture content of soil. Based on the RTR-5x series of wireless data loggers from T&D Corporation, and the ECH<sub>2</sub>O<sup>®</sup> Soil Moisture Sensors from Decagon Devices, this system offers all the convenience of wireless data collection and direct measurement of the volumetric water content of soil, expressed as a percentage. Completely self contained, with no external power source requirements, the water proof data logger and sensor can be deployed directly in the field, under all weather conditions. This new system offers functionality not previously available in the market, at a very affordable price.



### System Components

#### RVR-52A Data Logger



The RVR-52A is a waterproof, battery powered data logger that can be monitored and downloaded via a 900MHz wireless data link.

- Provides Switched Power to Sensor
- Logs Readings as Direct Percentage
- LCD Shows Current Value
- Upper & Lower Limit Settings
- Sample Rate up to Once per Hour
- Stores 16,000 Samples
- Use With Both ECH<sub>2</sub>O-10 & ECH<sub>2</sub>O-20
- 1 & 2 Point Internal Adjustment Factors
- Up to 2 ½ Year Battery Life ("L" Version)

## ECH<sub>2</sub>O<sup>®</sup> Soil Moisture Sensor

The ECH<sub>2</sub>O<sup>®</sup> Sensor provides a voltage output that is directly proportional to the volumetric water content of the soil into which it is inserted.

- Simple Soil Insertion
- Vertical or Horizontal Orientation
- Accuracy of  $\pm 3\%$
- Calibratable to  $\pm 1\%$
- Range of 0 to Volumetric Saturation
- Usable in Peat Moss & Organic Potting Soil



## RTR-57U Data Collector



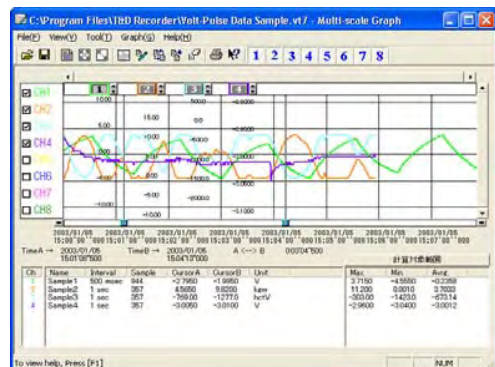
The handheld RTR-57U Data Collector wirelessly monitors and downloads data from the Data Loggers. Data can be displayed in graphical format on device or uploaded to a PC via a USB connection.

- Downloads Logged Data from Loggers
- Graphic Display of Data
- Stores 256,000 Values
- Register up to 60 Groups of 64 Loggers Each
- Upload to PC via USB
- Real-Time Monitor Mode
- Remote Search Function
- 100 Meter Range (Nominal)

## T&D Recorder for Windows Software

Each RTR-57U ships complete with T&D Recorder for Windows software, which includes the Multi-Scale Graph program – at no extra charge.

- Download, View & Archive Data
- Scale, Zoom & Color-Code Sessions
- High, Low & Calculated Average
- View & Print Graphs or Tables
- Export CSV to Excel



## Other System Options

Include TandD's RTR-51, RTR-52 and RTR-53 to monitor and record air temperature, relative humidity and soil temperature, all with the same wireless system.



- Waterproof Housings
- LCD Displays Current Values
- Battery Powered
- Log 16,000 Samples
- Endless Recording Mode
- 1/sec to 1/hr Sample Rate
- Real Time Monitor Mode
- 6 mo to 2 ½ yr Battery Life



## Sensor Options from Decagon Devices



In addition to the 4" length, Decagon Devices manufactures the ECH<sub>2</sub>O<sup>®</sup> in an 8" length for greater sensitivity and for averaging readings over a larger distance. Designed for permanent, long term monitoring the probes can be installed at any depth in the soil profile. The ECH<sub>2</sub>O<sup>®</sup> is a capacitance probe that measures the dielectric permittivity of the surrounding soil, which is directly related to the moisture content. Decagon also offers a Probe Installation Kit, an Auger Kit for deep installation and probe extension cables.

For more information about TandD's unique wireless data logging products visit us online at [www.tandd.com](http://www.tandd.com).

Visit Decagon Devices online at [www.ech2o.com](http://www.ech2o.com) for more information about the ECH<sub>2</sub>O<sup>®</sup> line of soil moisture sensors.

ECH<sub>2</sub>O<sup>®</sup> is a registered trademark of Decagon Devices, Inc., Pullman Wa.

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