



QUICK START GUIDE



ENVIRONMENTAL SENSORS

VP-4 | ECT | SRS | LWS | ES-2 | RT-1

we measure the world / ENVIRONMENTAL PRODUCTS





Read First

***This guide describes how to start using your sensor immediately.
If you read nothing else, read this guide.***



For detailed information, download the user manual:
[DECAGON.COM/EN/EM](https://www.decagon.com/en/em)

All decagon products have a 30-day satisfaction guarantee and a one-year warranty. Incorrect sensor installation can void your sensor warranty.

If you are using the sensors in lightning-prone areas, follow our directions for providing protection for the sensors at: **[DECAGON.COM/LIGHTNING](https://www.decagon.com/lightning)**

Pre-Installation

Before installing your sensors in the field, set up and test your system (sensors and data loggers) in your lab or office. Make sure that you are using the most up-to-date software and firmware with Decagon data loggers. Visit the individual Decagon data logger product page for the most up-to-date software and firmware.

Sensor Overview



VP-4

*Barometric Pressure,
Humidity, Temperature,
Vapor Pressure*



ECT

Air Temperature



SRS

*Measures NDVI or PRI
Spectral Vegetation
Indices*



LWS

Duration of Leaf Wetness



ES-2

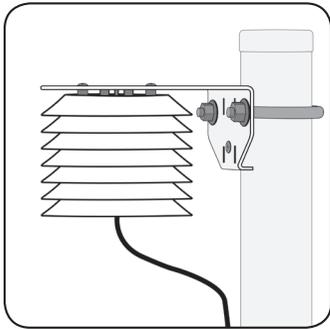
*Electrical Conductivity,
Temperature*



RT-1

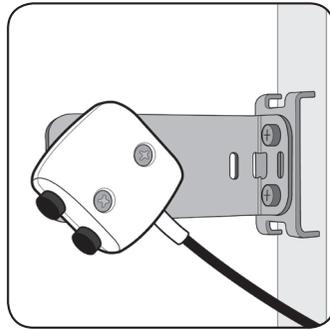
Rugged Temperature

Installing Sensor



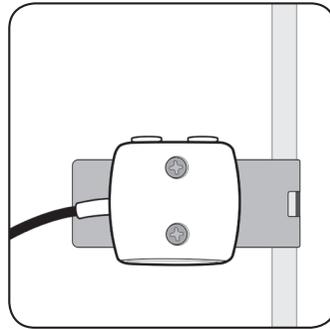
ECT / VP-4

Securely mount and level the sensor as necessary.



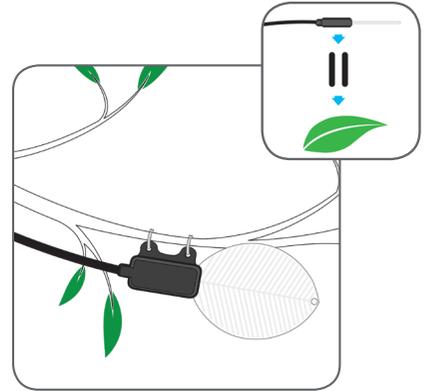
SRS Field Stop

Securely mount and level the sensor as necessary.



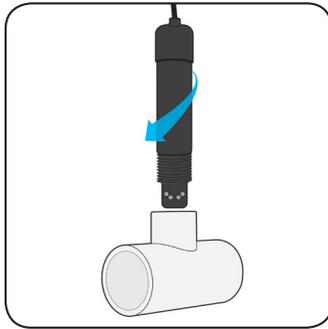
SRS Teflon® Diffuser

Securely mount and level the sensor as necessary.



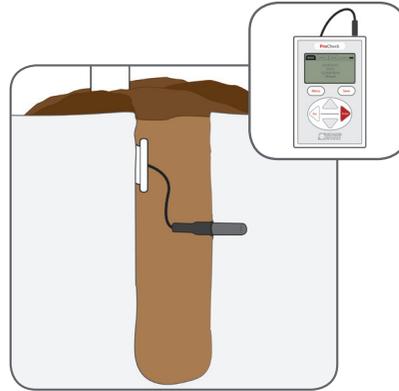
LWS

Secure sensor to plant ensuring the sensor face is parallel with the adjacent leaf surfaces.



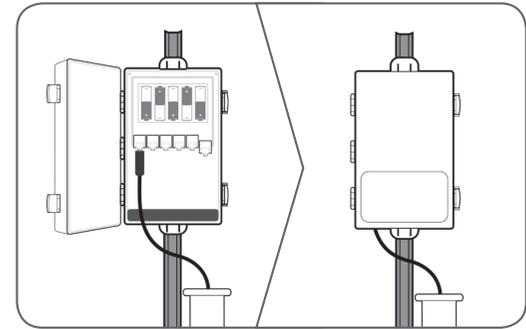
ES-2

Screw sensor into threaded pipe fitting.



RT-1

Insert the sensor into undisturbed soil and use the optional ProCheck to make sure your sensor reads accurately.



Plug in Sensor and Configure Logger

Always protect the cables with PVC casing above the ground surface. See next page for more details about configuring your sensor.

Logger Configuration

Configuring your logger in ECH20 Utility

Connected to Em50R:
EM6784
5/22/2014 8:35:01 AM

Connect Via:
Direct on COM3 Decag

Disconnect Download Scan

Em50R Identity
Name: EM6784
Device ID: EM6784
Firmware Version: Em50 2.18

Device Location
Site Name:
Latitude: ° ' "
Longitude: ° ' "
Time Zone: UTC-07

Communication Hardware Options
Communications configured with these settings
Radio Mode: Radio Off
Channel: 0
Sub Channel: 0
Radio Firmware Version: 5000

Sensor Measurement
Measurement Interval: Off (not logging)
Data Storage: 0% in use

Port 1 Sensor: GS3 Moisture/Temp/EC
Port 2 Sensor: GS1 Soil and Media Moisture
Port 3 Sensor: STM Moisture/Temp
Port 4 Sensor: None Selected
Port 5 Sensor: None Selected
Power Noise Filter: 60 Hz

Revert Apply

1 Pick your measurement interval

2 Select the sensor plugged into each port

3 Select "Apply" to save settings

Configuring your logger in DataTrac 3

1 Select the sensor plugged into each port

2 Pick measurement intervals by selecting "Sensors and Measurements"

The screenshot shows the DataTrac 3 software interface. A 'Configure Device' dialog box is open, showing the following settings:

- Device Type: G63 Moisture/Temp/EC
- Location: G63
- Sensor Description: G63
- Sensors and Measurements:
 - Part 1: G63
 - Part 2: SITE
 - Part 3: SITE
 - Part 4: MS-C2
 - Part 5: PS-1
 - Virtual Port
- Chart Axis:
 - Volume Water Content (v) Water Potential (kPa)
 - Electrical Conductivity (dS/m) Temperature (C)
 - Target Range

Below the dialog, a table displays sensor data for various parameters:

	P1 - m³/m³ VWC	P1 - dS/m EC	P1 - °C Temp	P2 - m³/m³ VWC	P2 - dS/m EC	P2 - °C Temp	P3 - m³/m³ VWC	P3 - dS/m EC	P3 - °C Temp	P4 - kPa Potential	P4 - °C Temp	P5 - min Switch on PS 1
Avg	0.214	0.185	16.5	0.206	0.13	21.2	0.211	0.41	15.9	172.5	16.3	N/A
Min	-1.053	0.000	16.7	-0.284	0.01	9.8	-0.020	0.00	7.8	1376.3	15.7	N/A
Max	1.011	1.100	25.0	1.011	1.04	38.2	0.398	1.04	31.4	-5.5	21.6	N/A
Total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2168
Event	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	796

**FREE
30 DAY
TRIAL**

DECAGON.COM/DATATRAC3



Related Products



GS1

GS3

5TE

5TM

10TM

EC-5

Electrical Conductivity Temperature Volumetric Water Content



MPS-2

Soil Matric Potential
Temperature



MPS-6

Most Accurate



CTD Sensor

Water Depth, Temperature,
Electrical Conductivity



Drain Gauge

Deep Drainage Monitor



ECRN-50

Low-Resolution
Rain Gauge



ECRN-100

High-Resolution
Rain Gauge



Cup Anemometer
Wind Speed, Direction



DS-2
Sonic Anemometer, Wind
Speed, Direction



PYR/QSO-S
Total Solar Radiation,
PAR Photon Flux



EM50 Logger Series
Radio, Cellular, or Direct
Connect Logger



ProCheck
Sensor Read-Out and
Storage System

Environmental Sensors Quick Start Guide | Printed in USA

Seller warrants new equipment of its own manufacture against defective workmanship and materials for a period of one year from date of receipt of equipment (the results of ordinary wear and tear, neglect, misuse, accident and excessive deterioration due to corrosion from any cause are not to be considered a defect); but Seller's liability for defective parts shall in no event exceed the furnishing of replacement parts F.O.B. the factory where originally manufactured. Material and equipment covered hereby which is not manufactured by Seller shall be covered only by the warranty of its manufacturer. Seller shall not be liable to Buyer for loss, damage or injuries to persons (including death), or to property or things of whatsoever kind (including, but not without limitation, loss of anticipated profits), occasioned by or arising out of the installation, operation, use, misuse, non use, repair, or replacement of said material and equipment, or out of the use of any method or process for which the same may be employed. The use of this equipment constitutes Buyer's acceptance of the terms set forth in this

warranty. There are no understandings, representations, or warranties of any kind, express, implied, statutory or otherwise (including, but without limitation, the implied warranties of merchantability and fitness for a particular purpose), not expressly set forth herein.

Application of Council Directive: 89/336/EE6 Standards to which conformity EN61326: 1998 is declared: EN51022: 1998

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