

EM50 Data Logger

<p>EM50</p>	<p>The sensors are plugged into the 5 channels and measured as directed by the user. Housed in a weatherproof enclosure with an O-ring seal, the Em50 is ideal for long-term outdoor use. With minimal battery usage, the Em50 can take readings as often as once per minute for over a year. Any combination of the listed sensors can be used.</p> <p>www.ictinternational.com/products/em50/em50-data-logger/</p>	
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Available Sensors for the EM50

<p>GS3 Water Content, Temperature & EC</p>	<p>A moisture sensor for soilless substrates such as rockwool, potting soil, peat, and perlite. The GS3 measures water content, temperature, and bulk electrical conductivity. Its stainless steel needles have an extended surface area to optimize EC measurements and minimize substrate disturbance during insertion. The GS3 comes standard with both serial and SDI-12 communication; you can plug and log with Decagon data loggers or integrate with other systems.</p> <p>www.ictinternational.com/products/g3/decagon-gs3-vwc-temp-ec/</p>	
<p>5TE Water Content, Temperature & EC</p>	<p>The 5TE lets you monitor bulk electrical conductivity (EC), in addition to volumetric water content (VWC) and soil temperature. Measures volumetric water content, temperature, and electrical conductivity in soil. This three-pronged, 5 cm long sensor is for use in soil only. High frequency oscillation and patented signal filtering deliver excellent accuracy with minimal textural effects. Serial or SDI-12 communication options come standard with each 5TE, giving lots of options for integrating into systems manufactured by other companies.</p> <p>www.ictinternational.com/products/5te/decagon-5te-vwc-temp-ec/</p>	
<p>5TM Water Content & Temperature</p>	<p>The 5TM determines volumetric water content (VWC) by measuring the dielectric constant of the soil (or other media) using capacitance/frequency domain technology. Signal filtering minimizes salinity and textural effects, making the 5TM accurate in most soils and soilless media. Factory calibrations are included for mineral soils, potting soils, rockwool, and perlite.</p> <p>www.ictinternational.com/products/5tm/decagon-5tm-vwc-temp/</p>	
<p>GS1 Water Content</p>	<p>The GS1 is a ruggedized version of our basic, no-frills soil moisture sensor. It accurately measures volumetric water content in soil or soilless media. This sensor is built to last longer in the field under warmer, wetter conditions. The epoxy body withstands harsh environments and water intrusion. Two stainless steel needles cut through the soil for better soil-sensor contact and easier installation. Needles are also much more durable than our standard sensor blades.</p> <p>www.ictinternational.com/products/g1-rugged-vwc/decagon-gs1-rugged-vwc/</p>	
<p>EC-5 Water Content</p>	<p>The EC-5 determines volumetric water content (VWC) by measuring the dielectric constant of the media using capacitance/frequency domain technology. Its 70 MHz frequency minimizes salinity and textural effects, making this sensor accurate in almost any soil or soilless media. Factory calibrations are included for mineral soils, potting soils, rockwool, and perlite.</p> <p>www.ictinternational.com/products/ec-5/decagon-ec-5-moisture/</p>	



<p>10HS Water Content</p>	<p>The 10HS measures volumetric water content via the dielectric constant of the soil using capacitance technology. The sensor uses a 70 MHz frequency, which minimises salinity and textural effects, making it an ideal sensor in agricultural and standard scientific projects.</p> <p>www.ictinternational.com/products/10hs/decagon-10hs-moisture/</p>	
<p>MPS-6 Water Potential</p>	<p>The MPS-6 is a matrix water potential sensor that provides long term, maintenance-free soil water potential and temperature readings at any depth without sensitivity to salts. The range of the MPS-6 goes from field capacity to air dry. Lab and field tests indicate that it can make accurate measurements at water potentials at least as dry as permanent wilting point.</p> <p>www.ictinternational.com/products/mps-6/mps-6-matrix-water-potential-sensor/</p>	
<p>VP-3 Temperature & Humidity</p>	<p>The VP-3 has a unique teflon screen which protects the sensor from liquid water and dust without limiting the diffusion of water vapour. Relative Humidity, Air Temperature, and Vapor Pressure measurements without a passive radiation shield.</p> <p>www.ictinternational.com/products/vp-3/decagon-vp-3-temp-humidity/</p>	
<p>PASS VP-3 Temperature & Humidity</p>	<p>Relative Humidity, Air Temperature, and Vapour Pressure measurements with a passive radiation shield. This shield is designed to improve air temperature readings by minimising radiation and maximizing airflow over the surface of the sensor. Especially designed to preserve the correlation between actual air temperature and sensor air temperature.</p> <p>www.ictinternational.com/products/vp-3/decagon-vp-3-temp-humidity/</p>	
<p>ECT Temperature</p>	<p>The simple ECT air or soil temperature sensor is an easy-to-use sensor for measuring the temperature of air, soil or other materials. The sensor is completely water proof, submersible, and designed for continuous outdoor use.</p> <p>www.ictinternational.com/products/ect/decagon-ect-sensor/</p>	
<p>PASS ECT Temperature & Humidity</p>	<p>The ECT with PASS, passive radiation shield.</p> <p>www.ictinternational.com/products/ect/decagon-ect-sensor/</p>	
<p>Decagon RT-1 Rugged Sensor Temperature</p>	<p>The rugged RT-1 soil temperature sensor is an easy-to-use sensor for measuring the temperature of soil or other materials. The sensor is stainless steel, completely water proof, submersible, and designed for continuous outdoor use.</p> <p>www.ictinternational.com/products/rt-1/decagon-rt-1-rugged-sensor/?from=/supplier/decagon/environment/temperature-humidity/</p>	



<p>PYR Solar Radiation Sensor, with levelling plate</p>	<p>The PYR Pyranometer measures solar radiation between 380 and 1120nm and has a leveling plate. The PYR sensor is supported by the Decagon Em50 Data Logger, or Procheck Hand Held Meter. It is a simple, low cost yet highly accurate pyranometer for global solar radiation monitoring. The PYR measures the solar radiation flux density (in watts per meter squared) from a field of view of 180 degrees.</p> <p>www.ictinternational.com/products/pyr/pyr-pyranometer/</p>	
<p>QSO-S PAR Photosynthetic Active Radiation Sensor, with levelling plate</p>	<p>The model QSO-S PAR Photon Flux sensor measures the Photosynthetic Photon Flux (PPF) in $\mu\text{mol m}^{-2} \text{s}^{-1}$ from a field of view of 180 degrees. The diffusion disk is composed of characterised pigments for good spectral response. The sensor is designed for continuous outdoor use, and is completely water proof and submersible. The QSO-S is supported by Decagon's Em50 data logger or Procheck hand held meter.</p> <p>www.ictinternational.com/products/qso-s/qso-s-par-sensor/?from=/supplier/decagon/plants/light/</p>	
<p>AL-100 Solar Sensor Leveling Plate</p>	<p>Proper sensor installation requires that the sensor be mounted as level as possible for most applications. This leveling plate is designed for use with all solar radiation sensors and facilitates attaching sensors to a mounting bracket. The plate includes an integrated bubble level.</p> <p>www.ictinternational.com/products/al-100-solar-sensor-leveling-plate/al-100-solar-sensor-leveling-plate/</p>	
<p>AM-110 Solar Sensor Mounting Bracket</p>	<p>The AM-110 accommodates the AL-100 leveling plate and can be mounted to a mast or pipe with an outer diameter of 1.3 to 2.1 inches.</p> <p>www.ictinternational.com/products/am-110-solar-sensor-mounting-bracket/am-110-solar-sensor-mounting-bracket/</p>	
<p>ECRN-100 Precipitation & Leaf Wetness</p>	<p>The ECRN-100 is best used in research studies or for measuring precipitation. Plug-and-log capabilities with the Em50 series data loggers. Resolution: 0.2 mm (0.01 in); collector surface 200 q/cm.</p> <p>www.ictinternational.com/products/ecrn-100/high-resolution-rain-gauge/</p>	
<p>LWS Precipitation & Leaf Wetness</p>	<p>The LWS leaf wetness sensor is standardised, calibrated and designed to detect wetness (presence and duration) and ice formation right out of the box. No painting, baking or user calibration required.</p> <p>www.ictinternational.com/products/lws/decagon-leaf-wetness-sensor/?from=/supplier/decagon/plants/disease-monitoring/</p>	
<p>ES-2 Sensor Water Depth & EC</p>	<p>The ES-2 Electrical Conductivity Sensor is designed to measure the electrical conductivity of water in a pipe or tank. When you pair the new ES-2 with a GS3 or 5TE in the soil, you'll begin to develop a complete picture of the salts that are going into your system as well as the salts remaining in your soil or substrate.</p> <p>www.ictinternational.com/products/es-2/decagon-es-2-sensor/</p>	
<p>CTD Sensor Depth, Temperature & EC</p>	<p>The CTD sensor is a low cost, accurate tool for monitoring of water level, electrical conductivity, and temperature in both ground water and surface water. The sensor utilizes a vented pressure transducer to obtain accurate water level measurements from 0 to 10 m while removing the effects of barometric pressure. With a range of 0 to 120 dS/m, the CTD sensor has the ability to make accurate electrical conductivity measurements in a broad range of applications.</p> <p>www.ictinternational.com/products/ctd/decagon-ctd-sensor/</p>	

