biSensor
Soil Moisture Sensor

Better Landscape, Less Water, More Savings

Using Baseline’s biSensor™ soil moisture sensors, you can create healthier landscapes and save time, money, and water in the process. Baseline’s biSensor soil moisture sensors use patented technology to water better than any other technology on the market and biSensors save money because they reduce water usage—up to 62 percent or more over traditional irrigation methods. They automatically self-adjust with the season, which means fewer trips to the field to adjust controllers. Simply put, you’ll love the results in your landscape and the savings of time, water, and money.

Patented Reliability

Baseline’s biSensors use patented technology called Time Domain Transmission (or TDT), to measure volumetric soil moisture and provide the most sensitive, repeatable, and accurate readings from the most durable device available.

**Sensitivity.** The biSensor is capable of measuring volumetric soil moisture changes of less than 0.1 percent. biSensors are a powerful tool for natural and engineered soils alike.

**Repeatability.** Always get the right reading, regardless of changes in soil salinity or other factors. biSensors give you unmatched confidence in your irrigation system.

**Accuracy.** Soil moisture readings are within ± 3 percent of the actual volumetric soil moisture content. biSensors allow for the best possible irrigation decisions from an irrigation controller.

**Durability.** The biSensor has a rugged design that will stand up to the toughest conditions. biSensors will give you year after year of dependable service for your irrigation system.

The biSensor should be buried in the top 1/3 of the root zone of the landscape it’s buried in. For turf grass applications, that is 2”-3” below the surface of the soil.
A Thermostat for your Landscape

Baseline's biSensors are as effective at irrigating your landscape as a thermostat is at keeping your home a comfortable temperature. biSensors measure soil moisture levels where it matters, in the root zone of the plant. Other “smart” watering methods, like weather-based ET systems, rely on environmental factors and a complicated mathematical formula to estimate how much water the plants need. Plus, a weather-based system can’t measure the effectiveness of the decisions that were based on the complicated formula. A Baseline biSensor automatically adapts to the effects of evapotranspiration in real-time. The bottom line—biSensors water better than any other irrigation system on the market.

Real-time Feedback

Baseline Soil Moisture Sensors provide realtime feedback to show you what's actually happening in the root zone of your landscape. Baseline Controllers provide the data in graphical form so you always know what's really happening because of Evapotranspiration.

How it Works

Baseline Soil Moisture Sensors work by sending a high frequency pulse of electricity down an embedded wire path. The high frequency of the pulse causes the sphere of influence to move outside the sensor blade and into the soil around it. When the pulse travels through moisture, it slows down. The sensor measures the speed, and then converts this measurement to a moisture content reading.