

Frequently Asked Questions about 'Smart' or Weather-based Irrigation Controllers

What are 'Smart' or weather-based irrigation controllers?

Weather-based irrigation controllers, also known as 'smart' or ET controllers, are irrigation clocks or timers that automatically adjust irrigation run times in response to weather changes. These smart irrigation controllers use local weather information and/or sensors, such as on-site weather stations to manage watering times and frequency, and turn off sprinklers or drip automatically during rain. ET controllers take the guesswork out of how much to irrigate and automatically make timer adjustments for you.



In contrast, a standard controller requires a person make manual changes to the irrigation schedule throughout the year. Often watering times are not adjusted at all, and excess water and money is wasted from over-irrigation.

How do 'Smart' controllers save water?

Weather, humidity, sunlight, plant type, soil conditions, slope, local climate, method of irrigation and other factors influence how much and how often it is necessary to properly irrigate a landscape. Depending on these factors, it may actually require **less** water than you think to have a beautiful, healthy landscape!

Do 'Smart' controllers really work?

Most 'Smart' controllers will save up to 30% on landscape water use compared to a traditional controller. Typically properties with lawn areas have the greatest potential for savings. Sites where customers don't want the hassle of making adjustments to their timers are also a good match.

ET controllers **will not** compensate for poor irrigation design or efficiency. Irrigation equipment should be in good working order before investing in weather-based controller technology. If you are unsure about the performance of your irrigation system, consult an irrigation specialist and ask for an audit.



Which 'Smart' controller models qualify for City of Chandler rebates?

Smart controllers range from simple to sophisticated and everything in between. Some are tailored to residential properties, while others are meant for large-scale commercial landscapes. Smart controllers can be divided into three categories based on the type of weather data they use: on-site weather monitor, signal-based and historical.

- **On-site sensor-based** - Controllers with an on-site weather station connected directly to the controller gather daily information on-site to make irrigation adjustments. Sensor equipment may include mini-weather stations, rain and temperature gauges, and soil moisture sensors. Wireless sensors are available to simplify the installation process. "Add on" sensors and equipment allow some standard controllers to function like smart controllers.*
- **Signal-based** - These controllers receive current Evapotranspiration (ET) (water lost from soils and plant tissues) data from local weather stations through satellite feeds and often have an annual service fee. Without an activated signal, these controllers operate like a standard controller and will not make any automatic watering schedule adjustments. There is no on-site sensor equipment to maintain or replace. Higher end signal-based controllers offer additional options such as online programming, leak detection, and email alerts.

- **Historical** – Several years of past Evapotranspiration (ET) information is programmed into the controller and accompanied with an active rain shut off and temperature sensor. Timers using historical data do not require a satellite subscription fee.

*Please note: Be sure to contact the Water Conservation office at 480-782-3583 to verify if your add-on sensor qualifies for the Smart controller rebate.

The Irrigation Association has already tested many models through their Smart Water Application Technologies (SWAT) program. All SWAT approved climate controlled timers are eligible for the City of Chandler 'Smart' Irrigation rebate. Click here for a list of controller models that are SWAT approved. http://www.irrigation.org/swat/control_climate/

How expensive are Smart controllers?

That depends. Add on rain sensor/temperature gauge/data module types can be as little as \$130.00 while signal-based 24 station models may run \$600 or more. Commercial style smart controllers that can be operated via the internet may be more expensive.

Where can I buy a qualified 'Smart' controller?

'Smart' controllers are available through your local irrigation supply store, home improvement store or qualified landscape contractor. Visit the City of Chandler Water Conservation rebate web page for a list of retailers in the East Valley. www.chandleraz.gov/water

I already have an irrigation timer--isn't that saving enough water?

Standard irrigation timers are useful for scheduling when and how long your landscape is irrigated. However, unlike weather-based irrigation controllers, they don't self-adjust for seasonal or current weather conditions, nor do they react to leaks or other problems that may exist. These factors often contribute to wasteful over-watering if left unchecked.



Can I install a 'Smart' controller myself? Do I need a qualified landscape contractor to install a 'Smart' controller?

Some models have pop-in modules that are easy to install. For others you may need a contractor who is certified by the Irrigation Association (IA), Arizona Landscape Contractors Association (ALCA), and/or a partner with the U.S. Environmental Protection Agency's (EPA) WaterSense program who has earned the necessary qualifications to properly install water-saving irrigation systems.

Where can I find a qualified landscape contractor?

You can find a list of qualified contractors by visiting any of these organizations' websites:

- Irrigation Association (IA) - <http://www.irrigation.org>
- Arizona Landscape Contractors Association (ALCA) - <http://www.azlca.com/azlca/page.asp?p=1261>
- U.S. Environmental Protection Agency's (EPA) WaterSense program - <http://www.epa.gov/watersense/>