

## ESP-SMTe Controller

### ESP-SMTe Series Controllers

Rain Bird's powerful ET based controller now has a capacity of up to 22 zones and an enhanced feature set that provides contractors with one of the most accurate ET based controllers in the industry.

The ESP-SMTe is available in outdoor and indoor models, can be expanded in 3 or 6 zone increments and is one of the only ET controllers on the market to measure site rainfall to ensure accurate ET adjustments.

### Applications

The 22 zone capacity of the ESP-SMTe allows the controller to meet the needs of both residential and light-commercial irrigation systems. Programming flexibility and onsite weather monitoring help meet even the strictest of watering restrictions or local regulations.

### Easy to Use

The ESP-SMTe Controller was designed with ease of use in mind. The programming sequence walks the installer through the required information to accurately program the controller. The controller allows zone features to be copied to other zones with only a few pushes of a button.

### Easy to Install

The ESP-SMTe Controller requires four mounting screws (included). A guide for 1/2" or 3/4" conduit allows for professional installation of field wires into the cabinet. For larger field wire needs, remove the 1" diameter knockout opening.

### Now with Simple Smart Option

In Simple Smart mode the ESP-SMTe can be programmed like a traditional time-based controller. Watering is scheduled on specific days, with fixed start times and run times.

### Controller Features

- EPA WaterSense labeled
- Expandable to 22 zones
- English/Spanish Button easily switches the display text between languages
- Weather Sensor sends rainfall and temperature data to the controller
- Large LCD display with easy to use interface
- Non-Volatile (100- year) program memory
- Remotely Programmable under 9V battery power (not included)

### Scheduling Features

- Programming tutorial assures efficient and accurate scheduling
- Watering occurs only as needed and can be restricted to selected days of the week, odd or even calendar days or at set intervals (cyclic)
- Grow-in watering option allows a time based schedule for new plants for a programmed period of time
- Cycle+Soak™ feature for each zone prevents runoff based on soil type, precipitation rate and landscape slope
- Any zone can be switched to Time Based (for example, to operate a pond pump)
- Copy Zone to Zone feature allows the contractor to copy a zone program from one zone to another

### Advanced Features

- Event Days Off allows you to select up to four specific dates to block watering
- Rainfall Shutdown suspends all irrigation if the measured rainfall exceeds a user set threshold
- Cold Weather Shutdown suspends all irrigation to prevent potential freeze damage
- Contractor Default™ allows the controller zone settings to be saved/restored
- Next Irrigation Estimate shows an estimated schedule up to three weeks in advance
- Weather Log holds historical weather data for 30 days
- Event Log shows irrigation status for each zone for the past 30 days
- Manual Watering allows immediate watering of a selected zone or all zones
- Enable or disable Master Valve by zone
- Advanced diagnostics and short circuit detection

### Operating Specifications

- 2 Watering Windows per zone
- Fine Tune watering adjustment -60% to +60% by zone
- Programmable delay between zones (default set to 3 seconds)



### Electrical Specifications

- Input required: 120 VAC ± 10%, 60Hz
- Output: 25.5 VAC 1A
- IP 24
- 3 zone valve capacity (two 24VAC, 7VA solenoids plus a master valve)
- Nonvolatile memory saves programming
- 10 year life lithium battery maintains the controller's time and date
- Master Valve/Pump Start Relay:
  - Operating Voltage: 24VAC 50/60Hz
  - Max Coil Inrush: 11VA
  - Max Coil Holding: 5VA
- Idle/Off power draw 0.06 amps at 120VAC

### Certifications

- WaterSense approved, meets EPA criteria for high-performing, water efficient products
- UL, cUL, FCC Part 15b



### Dimensions

- Width: 10.7 in. (27,2 cm)
- Height: 7.7 in. (19,5 cm)
- Depth: 4.4 in. (11,2 cm)

### How To Specify:

#### ESP-SMTe Controller

##### 120V 4-Zone Base Controller

**ESP4SMTEI** Indoor Model

**ESP4SMTE** Outdoor Model

**ESP4SMTEUPG** Upgrade kit for ESP-M and ESP-Me

#### Expansion Modules

**ESP5M3** 3-Zone Expansion Module

**ESP5M6** 6-Zone Expansion Module

\* 6-Zone Module compatible with ESP-Me/SMTe series controllers only. Not compatible with prior models.

## Specifications

- The ESP-SMTe Controller shall be capable of fully automatic or manual operation. The controller shall be housed in a wall-mountable, weather resistant plastic cabinet with a key-locking cabinet door (outdoor models only). Only the outdoor model is suitable for outdoor installation.
- The controller shall include a base unit module with 4 zones as well as three expansion slots capable of receiving expansion modules of either three or six zones to achieve total capacity of up to 22 zones. The controller shall accept the modules in any configuration and shall not require the installation of a three zone module in order to install a six zone module.
- The controller shall be capable of operating two 24 VAC solenoid valves per zone plus a master valve or remote pump start relay. The controller shall operate on 120 VAC $\pm$  10% at 60Hz.\
- The controller shall have two programming modes:
  - a. Simple Smart Mode; Enabling programming like time-based controllers with automatic adjustment of run times based on weather.
  - b. Advanced ET Mode; Enabling adjustment of both irrigation frequency and duration based on onsite weather data.
- Watering day cycles shall be: No Restrictions, By Day of the Week, Odd, Even and Cyclic (Every # day). No Restrictions, Odd, Even, and Cyclic shall support a Block Day of the Week. A day set to "Block" shall override the normal schedule.
- The controller shall have an LCD display that is capable of displaying each zone's irrigation scheduled start days and watering windows in the same screen with an active watering notification that is displayed during irrigation.
- The controller shall have a 12-hour AM/ PM or 24 hour clock with a midnight day change over. The controller shall have a 365-day calendar backed up against power interruptions by an internal lithium battery that will maintain date and time for approximately 10 years.
- The controller shall communicate with an onsite weather sensor that measures site temperature and rainfall. The controller shall contain a programmable rain shut off threshold, which will suspend irrigation when a preset amount of rain is received.
- The controller shall have an electronic diagnostic circuit breaker that shall sense a zone with an electrical overload or short circuit and shall bypass that zone and continue to operate all other zones. When an electrical condition exists that is preventing normal operation the red LED shall illuminate and remain illuminated and display a message on the display as to what the problem is.
- The controller shall offer a grow-in water feature, which allows the controller to run a time based program for a user defined amount of time before converting to ET based programming.
- A copy zone to zone feature shall be built into the controller to allow for faster programming.
- The controller shall have a zone set up wizard to assure all the necessary information is accurately entered into the controller.
- The controller shall allow fine tune watering from -60% to +60% by zone.
- The controller shall allow the programmer to set the estimated current moisture level of the soil at initial programming.
- Logs, alarms, resets, irrigation events and weather data shall be held for a 30 day period of time and be made easily accessible for review.
- The controller shall be EPA WaterSense labeled.
- The controller shall offer manual watering of ALL zones sequentially or ONE zone at a time. When manual watering is triggered, the unit shall ignore data from the weather sensor (sensor pod) until manual watering is completed.
- The controller shall display on the screen the message NO AC to indicate to the user when AC Power is not present (if running on batteries).
- The controller shall be compatible with Rain Bird's LIMR (Landscape Irrigation Management Remote) and have a mechanism to communicate with future expansion accessories.
- The controller shall provide a method for the installer to save the irrigation schedule into non-volatile memory for easy recall later if unwanted schedule changes are made.
- The controller shall provide a method for the installer to restore the schedule to the factory fresh condition in order to start programming from a "blank" state.
- The controller shall provide a method to wire the controller through a 1/2", 3/4" and 1" wire conduit to allow for a more professional installation.
- The controller shall have a reset button to reset the controller in the case of micro-controller "lock-up" due to power surges or frequent interruption of power to the power supply.
- The controller shall be manufactured by Rain Bird Corporation in a NAFTA member country.

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### Rain Bird Corporation

6991 East Southpoint Road  
Tucson, AZ 85756  
Phone: (520) 741-6100  
Fax: (520) 741-6522

### Rain Bird Technical Services

(800) RAINBIRD (1-800-724-6247)  
(U.S. and Canada)

### Rain Bird Corporation

970 West Sierra Madre Ave.  
Azusa, CA 91702  
Phone: (626) 812-3400  
Fax: (626) 812-3411

### Specification Hotline

1-800-458-3005 (U.S. and Canada)

### Rain Bird International, Inc.

1000 West Sierra Madre Ave.  
Azusa, CA 91702  
Phone: (626) 963-9311  
Fax: (626) 852-7343

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[www.rainbird.com](http://www.rainbird.com)