

Smart Water Application Technology™ (SWAT™) Performance Summary
Testing Agency: Center for Irrigation Technology www.californiawater.org
Product: Irritrol® MC-E Series® with CLIMATE LOGIC™ Kit
Product Type: Climatologically Based Controller
Product Description: MC-48E controller with Climate Logic Kit (CL-100 Wireless includes CL-M1 receiver module and CL-W1 Weather sensor/transmitter) to convert conventional controller to smart controller.

SWAT Protocol*: Turf and Landscape Equipment Climatologically Based Controllers 8th Draft Testing Protocol (Sept. 2008)
 The concept of climatologically controlling irrigation systems has an extensive history of scientific study and documentation. The objective of this protocol is to evaluate how well current commercial technology has integrated the scientific data into a practical system that meets the agronomic needs of turf and landscape plants. The evaluation is accomplished by creating a virtual landscape subjected to a representative climate to evaluate the ability of individual controllers to adequately and efficiently irrigate that landscape. After initial programming and calibration the controller is expected to perform without further intervention during the test period. Performance results indicate to what degree the controller maintained root zone moistures within an acceptable range. If moisture levels are maintained without deficit, it can be assumed the crop growth and quality will be adequate. If moisture levels are maintained without excess it can be assumed that scheduling is efficient.

*All SWAT protocols may be viewed at www.irrigation.org

Irritrol MC-E Series with Climate Logic Kit SWAT™ Performance Summary
Irrigation Adequacy

Minimum of 6 test zones: 100%
Maximum of 6 test zones: 100%
Mean/Average of 6 test zones: 100%
Irrigation Adequacy represents how well irrigation met the needs of the plant material. This reflects the percentage of required water for turf or plant material supplied by rainfall and controller-scheduled irrigations. Research suggests that if this value is between 80% and 100%, the acceptable quality of vegetation will be maintained.

Irrigation Excess

Minimum of 6 test zones: 0%
Maximum of 6 test zones: 4.2%
Mean/Average of 6 test zones: 1.4%
Irrigation Excess represents how much irrigation water was applied beyond the needs of the plant material. This reflects the percentage of water applied in excess of 100% of required water according to data from CIMIS station #80 Fresno State, Fresno County during the test period.

Product Detail Supplied by Manufacturer
Irritrol MC-E Series with Climate Logic Kit
www.irritrol.com

Installation	Data Source	Data Link	Initial Purchase	Additional Hardware	Additional Fees
New or existing MC-E series controllers. (5.02 or later firmware-blue colored front panel)	Onsite sensors transmit daily weather information (solar and temperature)	Wireless communication up to 1000 feet line of sight.	Includes Climate Logic weather sensor/transmitter and receiver module. Has built-in rain sensor.	Optional remote control.	None
Additional Features					
Zones	Time of Day	Day of Week	Other	If Data Link is Discontinued	
4, 6, 8, 12, 18, 24, 30, 36, 42 & 48 stations, commercial outdoor models.	Capability to independently restrict the time of day for watering in each of eight independent programs.	Capability to independently set any day(s) of the week, 1-60 skip days, odd/even date for each of eight independent programs.	<input type="checkbox"/> 10-year historical weather database w/SD card (included) <input type="checkbox"/> Site specific customization by zip code or latitude/longitude. <input type="checkbox"/> Wireless weather sensor interfaces with multiple receivers <input type="checkbox"/> Adjustable rain delay (0-3 days) following rain event <input type="checkbox"/> 1% weather-adjustment resolution <input type="checkbox"/> Station run times in seconds, minutes or hours	Visual alarm will display on receiver's LCD, 10-year, site specific historical average will be used until on-site weather transmissions re-establish. Existing rain/cold weather interruptions remain in effect per receiver module settings.	