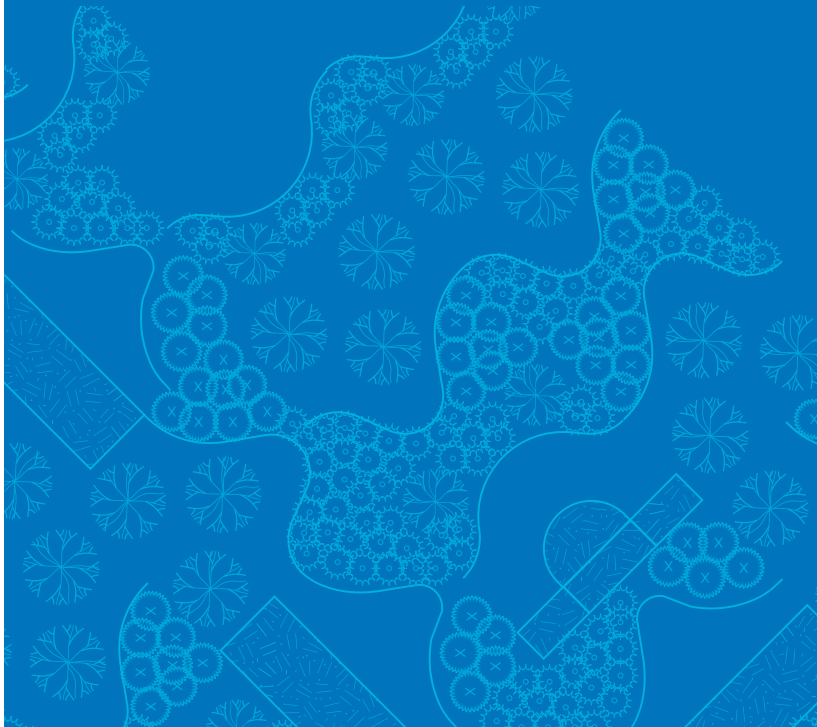


SMART WATER APPLICATION
TECHNOLOGIES

Smartphone-friendly irrigation controllers

JANUARY 2019



SWAT is a collaborative effort between
water providers and the irrigation industry.



SMARTPHONE-FRIENDLY IRRIGATION CONTROLLERS

Manufacturer	Model name(s)	EPA WaterSense certified	Maximum stations	Weather data source	Rain data source	Rain delay?*	Subscription fee for weather data?	Automatic scheduling interval capable	Guest access (contractor)	Home automation?	Other product information	Sensor capabilities	Run time input	Watering restrictions	Predictive scheduling (rain, freeze)	Zone customization	Cycle and soak (custom or calculated)	Operation without internet connection
Aeon Matrix	Yardian Smart Irrigation Controller	✓	36	Weatherbug	Weatherbug	auto.		✓	✓	IFTTT	built-in security camera, motion detection	rain	✓	✓	✓	✓	✓	✓
Aifro	Water Eco and Water Eco Lite		36	real-time local weather data, uses OpenWeatherMap	real-time local weather data, uses OpenWeatherMap	auto.		✓	✓		pause feature, winter dormancy, AiCan smart plug to operate house appliances, manually water more than one zone at a time	built-in temperature sensor, optional rain sensor	✓	✓	✓	✓	✓	
Asante	Asante Irrigation Controller Kit		6						✓		rain forecast feature	rain/freeze	✓	✓	✓			
Blossom	Blossom, Scotts Gro™ Controller	✓	8	current local weather and forecasts from multiple weather services	current local weather and forecasts from multiple weather services	auto.		✓	✓	Google Assistant, Amazon Alexa	only for indoor installation	rain, freeze	✓	✓	✓	✓	✓	
BlueSpray	BlueSpray		64	NOAA	NOAA	auto.			+	open API	run time in minutes or seconds, can turn on multiple valves simultaneously	rain, freeze, flow	✓	✓	✓		✓	
ET Water	HermitCrab, Hermit Crab 2 and Smart Box	✓	◆	Accuweather	Accuweather	auto.	✓	✓	✓		subscription-based product; add-on to various models of Hunter, Irritrol, Toro, Superior, Weathermatic, Rain Bird and Rain Master controllers		✓	✓	✓	✓	✓	✓
GreenIQ	Smart Green Hub Irrigation Controller	✓	16	nearest weather station or option to use Parrot Flower Power, Koubachi sensor and/or Netatmo personal weather station and rain gauge	nearest weather station or option to use Parrot Flower Power, Koubachi sensor and/or Netatmo personal weather station and rain gauge	auto.	✓			PlanLink, Parrot, Koubachi, Netatmo, Toro Precision soil moisture sensor, Echo, IFTTT, Nest, Cresteon, Muzzley		rain, soil moisture, fertilizer level and flow sensors	✓	✓	✓		✓	
Hunter	HC, Pro-HC, HPC-FP, Pro-C Hydrowise™, HCC	✓	54	Weather Underground and The Weather Channel; local airport weather stations, personal weather stations and/or virtual weather station options available	Weather Underground and The Weather Channel forecasts, weather station data and/or on-site rain shutoff sensor	user conf.	★	✓	✓	Amazon Alexa, Control4	automatic weather adjustments customizable by zone, contractor portal for multi-site management, real-time alerts and notifications, built-in milliamp sensor, event logs and reports	rain, freeze, soil moisture, flow	✓	✓	✓	✓	✓	✓
HydroPoint	WeatherTRAK LC+	✓	36	proprietary ET Everywhere Weather Data (public and private weather stations, NOAA)	current local weather and forecast from weather stations	✓	✓	✓	✓	API	centralized cloud control for multisite management, alerts, 30+ customizable reports, over the air updates	rain sensor, flow sensor (with optional key)	✓	✓	✓	✓	✓	*
Hydro-Rain	HRC 400 WiFi	✓	16	smart WeatherSense local weather data		user conf.		✓	✓	Amazon Alexa	optional catch cups and irrigation audit input	rain/freeze sensor, flow or soil moisture sensor	✓	✓	✓	✓	✓	✓
H2OPro	H2OPro		8	local weather stations or user-defined local weather stations	weather station, no sensor	auto.					flow monitoring, alerts, restrictions	Climate Logic (rain/freeze)	✓	✓	✓		?	✓

* Rain delay? auto. = automatic, user conf. = user configurable, user def. = user defined | + “discovery” mode | ◆ same number as host controller | ★ yes, if more than one airport station is to be subscribed | * yes, backup mode from panel

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Irritrol	Climate Logic proprietary plug in for Irritrol Kwik Dial, Rain Dial, Total Control and MC-E Controllers	✓ with Climate Logic	12	on-site sensor	rain sensor, no rainfall measurement	user conf.			✓		SMRT logic allows auxiliary wireless control up to 250 wireless relays	Climate Logic (rain/freeze)	✓	✓			✓	✓
K-Rain	PRO EX 2.0 WIFI		16	WeatherIQ	WeatherIQ	user def.			✓		optional long-range antenna, virtual rain sensor (Weather IQ), Wi-Fi hub plugs into internet router to use RF connection, increases router to controller distance through RF	rain, freeze	✓	✓	✓		✓	✓
Netro	Netro Sprite and Whisperer		12	local weather data from multiple sources, as well as historical climate data	based on address, with latitude and longitude, collection of weather data from multiple sources	✓		✓		Alexa and Google Home, working on IFTTT and Wink		✓	✓	✓	✓	✓	✓	
Nxeco	Nxeco	✓	24	real-time weather					✓	Alexa, Google Home	24-zone extension module to build 36-zone controller	rain, freeze	✓	✓	✓		✓	✓
OnPoint EcoSystems	WaterPoint 1000 WaterSage	✓	16					✓	✓			rain, freeze	✓	✓		✓	✓	✓
Orbit	B-Hyve	✓	12	smart WeatherSense local weather data	smart WeatherSense local weather data	user conf.		✓	✓	Amazon Alexa			✓	✓	✓	✓	✓	✓
Rachio	Rachio Irrigation Controller	✓	16	NOAA, PWS	NOAA, PWS	user def.		✓	✓	Nest™, Amazon Echo, Google Assistant, IFTTT, Alarm.com, SmartThings™, Control 4, Crestron, Icontrol® Networks, Muzzley, Nexia, Wink	current and historic weather data used, real-time notifications	rain and soil, flow with Rachio 3	✓	✓	✓	✓	✓	✓
Rain Bird	Lnk Wi-Fi Module works with ESP-TM2 and ESP-Me Series Controllers and WR2 Series Wireless Rain/Freeze sensors; ST8-Wi-Fi Controller	✓	22	World Weather Online	World Weather Online	user def.			✓	✓		rain, freeze, soil	✓	✓	✓		✓	✓
Rain Machine	RainMachine Touch HD	✓	16	options include NOAA, MetNo, Weather Underground, DarkSky.net, FAWS and CIMIS (with subscription to CIMIS)	options include NOAA, MetNo, Weather Underground, DarkSky.net, FAWS and CIMIS (with subscription to CIMIS)	auto.		✓	✓	IFTTT, Alexa/Echo		rain, freeze	✓	✓	✓	✓	✓	✓
RainCommander	RainCommander RC1200		12	None								rain sensor	✓	✓			✓	

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RainPal	RainPal Pro	✓	12					✓		open API	optional leak detection and freeze detection (FL-100)	rain, flow, freeze	✓	✓	✓	✓	✓	✓
Signature	EZ Pro, EZ Connect and EZ Share series controllers	✓	24	integration of weather data feeds from NOAA, Accuweather, weather forecast data and weather alerts	integration of weather data feeds from NOAA, Accuweather, weather forecast data and weather alerts	user def.		✓	✓	integrates with Signature Smart Home Module Platform	programming accessed via the Signature Share app, end-user of contractor web portal	can integrate two sensors, such as flow, rain, pressure, freeze, ET, soil moisture; some models can use DC latching solenoids	✓	✓		✓	✓	✓
Skydrop	Skydrop Halo Controller	✓	16	local weather stations	local weather stations	✓		✓	✓	IFTTT, Nest, Alexa, Echo			✓	✓	✓	✓	✓	
Spruce Irrigation	Spruce Controller WiFi	✓	16	Darksky.net and optional soil moisture sensors				✓	?	Alexa	combines real-time moisture sensor data and weather predictions	rain, flow, spruce soil moistures sensors	✓	✓	✓	✓	✓	✓
Toro	TMC and Evolution Series Controllers	✓, with Climate Logic	24	on-site sensor and/or Toro Precision Soil Sensor with Evolution controller	on-site rain sensor, no measurement of rainfall	user def.		✓	⊕	✓	grow-in schedule able to control fountains, gates, landscape lighting via a wireless relay	rain, freeze, ET, soil moisture sensor	✓	✓		✓	✓	✓
Weathermatic	SL and PL Series with SLW15 weather station	✓	48	on-site sensor	on-site rain sensor, no measurement of rainfall	user def.	✓		✓	Amazon Echo	SmartLine Air Card, no Wi-Fi or router required	rain, freeze, weather sensor	✓	✓		✓	✓	✓

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TERMINOLOGY

automatic scheduling interval	the ability to determine the next watering day when irrigation is needed versus a predetermined interval
cycle and soak	capable to determine maximum run time to prevent runoff and soak time before next irrigation event
developer/manufacture	the creator of the product
EPA WaterSense certified	the controller meets the specifications for labeling as determined by the U.S. EPA WaterSense program
guest access	the ability to allow third-party access for checking or modifying the irrigation program
home automation interface (Nest, Alexa)	the product can interface with the "internet of things"
IFTTT	an acronym for If This Then That, which is a free service that automates connectivity between apps and devices
operation without internet connection	the ability to continue to irrigate if the internet connection is disrupted
predictive scheduling	ability to use weather forecasts to automatically modify an irrigation schedule
rain data source	indicates if the data comes from a remote or on-site source
rain delay	an automatic or manual time delay feature
run time	the programmed or calculated number of minutes for irrigation
sensor interface	capability of interfacing with climatic, flow or soil moisture sensors
station/valve/zone	the indicator on the controller that is controlling a specific valve or valves
subscription	a user fee to maintain an ongoing service
unique features	ability to control other devices that are not irrigation (i.e., lighting)
watering restriction	ability to restrict days or times of irrigation
weather data	indicates if the data is historical, from an on-site source or a remote weather data source
zone customization	allows the user to provide detailed information such as soil type, plant type, sprinkler or drip information, sun exposure, etc.