

PRODUCTS &
TECHNICAL INFORMATION | **2010**

CONTROLLERS | SATELLITES | CENTRAL CONTROLS | ROTORS | SPRAYS | IMPACTS | VALVES | SENSORS

Intelligence • Information • Irrigation™

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Signature Control Systems has maintained a continuous presence in golf and landscape irrigation since our beginnings in 1907—from brass rotors and valves, to today's most sophisticated irrigation control systems.

OVERVIEW

Signature Control Systems, Inc. can trace its roots in the irrigation industry to humble beginnings over 100 years ago. Since then, Signature Control Systems has been dedicated to providing the highest-quality products and services in the landscape and irrigation industry.

Signature Control Systems is an industry leader in the design and manufacture of Turf Management Systems including intelligent irrigation controllers, site management software, irrigation valves, gear-drive rotors & spray-head products, thus providing landscape managers, golf course superintendents, as well as property managers', direct control of their irrigation system, water and energy resources.

To achieve these goals we have invested heavily in our own research and development of new products, product line expansion and manufacturing facilities. We are also committed to increasing our manufacturing capacity of our own products in our own factory in the USA or foreign locations, under our own supervision and quality control.

We are proud to bring to market a full basket of Professional Irrigation products servicing all industry segments and end users of irrigation products. Whether Installer, Designer, Distributor

or End User you will find Signature Control Systems can meet and exceed your irrigation requirements.

In recent years, we have successfully staked a claim as an innovative creator of central control systems that range from the basic to the most complex. Today we have expanded controller ranges and with the advent of water management legislation you will find Signature's own intellectual property is well positioned to meet and exceed this legislation.

Further and when appropriate, we have and continue to invest in acquisitions that increase our product breadth and depth. As a result of several acquisitions, Signature Control Systems is now a full line manufacturer and supplier to the Irrigation Industry with products that will cover any installation requirement. We are sure that you will be familiar with many of the products you see listed in our catalog and invite you to look at them with the new understanding that Signature Control Systems will be supplying the Irrigation Industry for many years to come with innovative solutions.

Brian J. Smith
PRESIDENT AND CEO

BACKGROUND

You may think that Signature Controls Systems is a fairly new name in the irrigation industry... we are not! We can trace our roots in the irrigation industry to 1907 when we started out as the Thompson Manufacturing Co.

Through a series of strategic acquisitions we now manufacture and distribute a complete line of irrigation equipment needs: battery operated controllers, controllers, satellite controllers, central control systems, gear drive rotors, spray head sprinklers, impact sprinklers, valves, quick coupling valves and sensors.

Not only is Signature a nimble company that can adapt to the changing economies of the world or regional market influences, but we are a company driven by several guiding lights that keep us on track to achieve our most important goal—satisfying our customer. To that end we are market driven, we listen to our customers and make sure any product or service we deliver meets their needs, not just ours.

Signature Control Systems, Inc.'s designs are highly respected in the industry and with the emergence of our new design concepts Signature will certainly play a major role in the future of the irrigation industry.

MAJOR PRODUCT LINES

Some of the names you may recognize:

Constellation® and **Galaxy™**
Commercial irrigation satellite controllers

eConstellation®
Web-based central control systems

EZ PRO®
Controllers

SoloRain®
Battery operated controllers “No Power ... No Problem”®

The **Constellation®** and **Galaxy™** range of irrigation controllers and software are industry recognized as the latest technology in cost effective irrigation. Signature Control Systems provides **Constellation** management systems in hardwire, radio and telephone configurations including weather station equipment. In addition, we have a comprehensive range of commercial and large turf sprinklers, valves, and rotors. All Signature Control Systems products are compatible for both domestic and international markets.



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BATTERY OPERATED CONTROLLERS

APPLICATIONS	SoloRain® 8010	SoloRain® 8014	SoloRain® 8020	SoloRain® 8030
RESIDENTIAL	✓	✓	✓	✓
COMMERCIAL/MUNICIPAL	✓	✓	✓	✓
HIGHWAY MEDIANS	✓	✓	✓	✓
PARKS	✓	✓	✓	✓
ATHLETIC FIELDS	✓	✓	✓	✓
NEW CONSTRUCTION	✓	✓	✓	✓
ZONE REPAIR	✓	✓	✓	✓
RETROFITTING MANUAL SYSTEMS	✓	✓	✓	✓
ISOLATED AREAS WITHOUT POWER	✓	✓	✓	✓
FEATURES				
SINGLE ZONE	✓	✓	✓	
MULTI ZONE				✓
PROGRAMS	1	6	3	16

PRODUCT OVERVIEW

SoloRain® 8010



- Single zone valve mounted battery operated controller.
- Single Program
- Operates on one replaceable 9 volt battery for over one year depending on usage.
- Waterproof design allows this unit to be submerged up to 6 ft (1,8 m) of water.
- Installs directly on all Signature Turf valves and can be fitted to many other valves through the use of adapters.
- Includes three dials for easy programming and flexible programming features.
- 8010 can be purchased mounted on a 7900 series valve.

SoloRain® 8014



- Single zone valve mounted battery operated controller.
- 6 Programs
- Operates on one replaceable 3.6 volt lithium battery for several years depending on usage.
- Waterproof design allows this unit to be submerged up to 6 ft (1,8 m) of water.
- Installs directly on all Signature Turf valves and can be fitted to many other valves through the use of adapters.
- SR model accommodates normally closed rain, freeze or event sensors.
- 8014 can be purchased mounted on a 7900 series valve.

SoloRain® 8020



- Multi-zone, valve box mounted, battery operated controller. Available in 1, 2, 4 and 6 zone models.
- 3 Programs
- Operates on two AA batteries for several years depending on usage.
- Waterproof design allows this unit to be submerged up to 6 ft (1,8 m) of water.
- Installs directly on all Signature Turf valves and can be fitted to many other valves through the use of adapters.
- Can have up to 250 ft (76 m) of 18 AWG direct burial wire between the 8020 series controller and the DC solenoid.
- All models accommodate normally closed rain, freeze or event sensors.

SoloRain® 8030



- Single zone, remote programmable, valve mounted battery operated controller.
- 16 Programs
- Operates on one replaceable 9 volt battery for over one year depending on usage.
- Waterproof design allows this unit to be submerged up to 6 ft (1,8 m) of water.
- Programming is accomplished through the 8071 handheld programmer which can be used on unlimited 8030 actuators. The built in memory in the 8071 allows storage of up to 36 different programs.
- Installs directly on to all Signature Turf valves and can be fitted to many other valves through the use of adapters.
- 8030 can be purchased mounted on a 7900 series valve (8032).



MODELS

SoloRain[®]

8010

Programmable Actuator

8012

Programmable Actuator with
7901 Valve



SPECIFICATIONS

DIMENSIONS (H x W x D)

4½" (11,5 cm) x 2¾" (7 cm) x 1¾" (4,5 cm)

ELECTRICAL:

One 9V Energizer[®] alkaline battery
(not included)

CE, IP68DW

FEATURES

SoloRain[®] 8010 Series:

- Single program stand-alone unit includes three dials for easy programming
- Waterproof design in both the programmable actuator and the battery compartment - proper installation allows unit to be completely submersible in up to 6 ft (1,8 m) of water
- Solenoid and battery compartment are compact and made of durable nylon with protective cover included
- Operates on a single 9 volt Energizer[®] alkaline battery for one year depending on usage (not included)
- Latching solenoid design uses minimal battery consumption
- Resistant to the hazards of lightning and power surges commonly seen in AC systems
- Compatible with most valves via adapters
- Programmable clock for real time operation
- Automatic watering up to two times per day
- Watering times from 1-2 minute to 5½ hours
- Manual ON and OFF

VALVE COMPATIBILITY CHART

SoloRain [®] 8010 ADAPTERS	
Signature adapter (sold with Model 8010)	
compatible with Signature's NE adapter:	
7901 / 7916(BSP)	7911 / 7917(BSP)
7931	7941
7951 / 7971(BSP)	7952 / 7972(BSP)
7953 / 7973(BSP)	
9001	9011
9002	9012
9003	9013
9004	9014
9501	9501FC
9502	
7981 / 7991(BSP)**	7982 / 7992(BSP)**
Hardie/Irritrol adapter: Model 77422*	
Hardie/Irritrol 100, 700, 2400	Hardie/Irritrol 623 DPR**
Hardie/Irritrol 216	Superior 950, 800
Hit 510	Bermad 1"
Buckner 20021, 20321	Dorot 1"
Griswold 1"	Galcon 1"
Richdel 205TF, 711APR, 713 APR	
Toro adapter: Model 77423*	
Toro Flo-pro	
Rainbird adapter: Model 77424*	
Rainbird: PEB, DV, DVF, ASVF, EFB-CP, GB, PGA	
* Sold separately ** No adapter required for these valves This is a partial list. Please contact Signature for complete list.	

SPECIFICATIONS

DIMENSIONS (H x W x D)

8014, 8014SR: 5½" (14 cm) x 3½" (9 cm)
 8013E: 7¾" (18,8 cm) x 5" (12,7 cm) x 3" (7,6 cm)
 8015, 8015E: 7½" (19 cm) x 4" (10,2 cm) x 3½" (8,9 cm)

ELECTRICAL:

Factory installed 3.6V lithium battery

CE, IP68DW



SoloRain®

8014

DuraLife® Valve Actuator

8014SR

DuraLife® Valve Actuator
with Sensor Ready

8013E

DuraLife® Valve Actuator with
1" (25,4 mm) 9003 valve

8015 (8015E)

DuraLife® Valve Actuator with
1" (25,4 mm) 7901/7916 valve

FEATURES

SoloRain® 8014/8014SR/8013E/8015 Series:

- Long life factory installed lithium battery.
Actual battery life will depend on the number of cycles run per year, valve size, operating pressure, and temperature. The battery is replaceable and is available as a service part.
- LCD displays clock and programming
- Timed manual ON and OFF
- Length of watering time: 1 minute to 12 hours
- Six watering programs available per day
- Mist Cycle available on Program 6
- Days of the week, Odd/Even, and Interval scheduling
- Rain Delay is programmable from 1 to 99 days
- Fits all Signature® Turf valves
- Leap year compatible-automatically includes Feb. 29th every four years
- Waterproof design is submersible in up to 6 ft (1,8 m) of water
- Two wires on the "SR" version allows any normally open/normally closed sensor to be hooked up to it (switch has to be closed for the 8014 to operate). Sensors can be up to 25 ft (7,5 m) away.

VALVE COMPATIBILITY CHART

SoloRain® 8014 and 8020 DC ADAPTERS*	
Model 77467	
ALL HARDIE/IRRITROL VALVES	
SIGNATURE**:	
7937/7987 (BSP)	7938/7988 (BSP)
Model 77468	
Rainbird:	
PEB, DV, DVF, ASVF, EFB-CP, GB, PGA, PESB, BPE, BPES	
Model 77481	
Weathermatic:	
ALL WEATHERMATIC VALVES	
Model 77516	
Hunter:	
ALL HUNTER VALVES	
Model 77526	
Toro:	
252 SERIES	
* Sold separately ** No adapter required for these valves This is a partial list. Please contact Signature for complete list.	

* Battery Life will vary depending on environmental conditions and number of zones. Test results have shown 2-3 years of battery life.

MODELS

SoloRain[®] – Kits

8021

1 zone Battery Powered Controller Kit

8022

2 zone Battery Powered Controller Kit

8024

4 zone Battery Powered Controller Kit

8026

6 zone Battery Powered Controller Kit

Kit includes: Controller, Solenoids, Waterproof Connectors, 2 Mounting Options & Common Jumper Wires

SoloRain[®] – Controllers

8021C

1 zone controller only

8022C

2 zone controller only

8024C

4 zone controller only

8026C

6 zone controller only

Accessories

8020DC

Latching Solenoid

8020P

8020 Series Mounting Plate

8020S

8020 Series Mounting Stake

8020GC

8020 Series Waterproof Connectors (15 qty)



FEATURES

SoloRain[®] 8020 Series:

- Available in 1, 2, 4, and 6 zones
- Three start times per program (9 total start times)
- Three independent programs
- Length of programmable watering time (1min to 3hr 59min per zone)
- Four scheduling options to suit the need of plant material or to comply with watering restrictions (days of the week, 1-30 day interval, true odd/even)
- Leap year compatible (automatically includes February 29th)
- 0-200% Water budget programming
- Three test cycles (manual open, cycle, and 3min test)

SPECIFICATIONS

DIMENSIONS (H x W x D)

4 1/4" (10,8 cm) x 3 1/4" (8,25 cm)

ELECTRICAL:

Two Energizer[®] AA alkaline batteries (not included)

CE, IP68DW

8014 and 8020 DC ADAPTERS* Model 77467	
ALL HARDIE/IRRITROL VALVES	
SIGNATURE**: 7937/7987 (BSP)	7938/7988 (BSP)
Model 77468	
Rainbird: PEB, DV, DVF, ASVF, EFB-CP, GB, PGA, PESB, BPE, BPES	
Model 77481	
Weathermatic: ALL WEATHERMATIC VALVES	
Model 77516	
Hunter: ALL HUNTER VALVES	
Model 77526	
Toro: 252 SERIES	
* Sold separately ** No adapter required for these valves This is a partial list. Please contact Signature for complete list.	

- Color coded label, wires and solenoid stickers make wiring /zone identification quick and easy!
- Can have up to 250 ft (76 m) of 18 AWG direct burial wire between the solenoid and the 8020 Series Controller (Must use Waterproof connectors for splice or your warranty is void)
- Long life battery*
- Operates RainBird[®] & Hunter[®] DC latching Solenoids (makes for an easy controller replacement)

* Battery Life will vary depending on environmental conditions and number of zones. Test results have shown 2-3 years of battery life.

SPECIFICATIONS

DIMENSIONS (H x W x D)

8030: 4½" (11,5 cm) x 2¾" (7 cm) x 1¾" (4,5 cm)
 8032: 7" (17,8 cm) x 4¾" (12 cm) x 2¾" (7 cm)
 8071: 9⅞" (25,1 cm) x 5¼" (13,3 cm) x 1¼" (3,2 cm)

ELECTRICAL:

One 9V Energizer® alkaline battery
 (not included)

CE, IP68DW

FEATURES

SoloRain® 8030 Series:

- Solenoid and battery compartment are compact and made of durable nylon construction
- Programming interface through cord connection to the model 8071 Programmer control console
- Waterproof design in both the programmable actuator and the battery compartment - proper installation allows unit to be completely submersible in up to 6 ft (1,8 m) of water
- Latching solenoid design uses minimal battery consumption

SoloRain® 8071:

- Independent programming of an unlimited number of 8030 series actuators
- Up to 16 irrigation start times per actuator
- 14-day programming calendar
- Built-in memory allows storage of up to 36 different irrigation programs
- Downloadable transfer of programs individually or to a group of actuators
- Memory is retained for 2 minutes during battery change
- Four line LCD display for easy menu guided programming
- User can choose between five languages for operation
- Easy to program with large LCD display and simplified four rubber button keypad with audio "beep" response
- Impact-resistant plastic housing
- Operates on one 9 volt alkaline battery
- Programmable 12 or 24-hour clock with synchronizing function
- Watering times from one minute to 24 hours in one minute increments
- Manual START and STOP function
- Program review
- Rain ON/OFF capability



SoloRain®

8030

Remote Programmable Actuator

8032 (8033)

Remote Programmable Actuator with 1" (25,4 mm) 7901/7916 valve

8071

Programmer Plus console

Note: Versions in parenthesis feature BSP threading for international use

VALVE COMPATIBILITY CHARTS

SoloRain® 8030 series ADAPTERS Signature adapter (sold with Model 8030)

<i>compatible with Signature's NE adapter:</i>	
7901 / 7916(BSP)	7911 / 7917(BSP)
7931	7941
7951 / 7971(BSP)	7952 / 7972(BSP)
7953 / 7973(BSP)	
9001	9011
9002	9012
9003	9013
9501	9501FC
9502	
7981 / 7991(BSP)**	7982 / 7992(BSP)**

Hardie/Irritrol adapter: Model 77422*

Hardie/Irritrol 100, 700, 2400	Hardie/Irritrol 623 DPR**
Hardie/Irritrol 216	Superior 950, 800
Hit 510	Bermad 1"
Buckner 20021, 20321	Dorot 1"
Griswold 1"	Galcon 1"
Richdel 205TF, 711APR, 713 APR	

Toro adapter: Model 77423*

Toro Flo-pro

Rainbird adapter: Model 77424*

Rainbird:
PEB, DV, DVF, ASVF, EFB-CP, GB, PGA

* Sold separately ** No adapter required for these valves
 This is a partial list. Please contact Signature for complete list.



CONTROLLERS

APPLICATIONS	EZ Pro™ Indoor 8100	EZ Pro Jr.™ 8300	EZ Pro™ 8600
RESIDENTIAL	✓	✓	✓
COMMERCIAL/MUNICIPAL		✓	✓
INDOOR	✓	✓	✓
OUTDOOR		✓	✓
PEDESTAL MOUNTING			✓
UPGRADEABLE TO WEB-BASED CENTRAL CONTROL			✓
FEATURES			
PROGRAMS	2	3	3
ZONES	4, 6	4, 6, 9, 12	8, 12, 16, 20, 24

PRODUCT OVERVIEW

EZ Pro™ Indoor 8100



- Dual program, multiple start times and schedule options. The 8100 series is capable of 6 hours of run time per zone.
- Available in 4 and 6 zones.
- Two AA batteries keep the correct time and date for up to one year.
- .5 amp fuse for short circuit zone protection.
- External transformer.
- Rain sensor compatible with use of a normally closed sensor.

EZ Pro™ Jr. 8300



- Three programs, multiple start times and schedule options. The 8300 series is capable of 5 hours 59 minutes of run time per zone.
- Available in 4, 6, 9, and 12 zones.
- Lithium battery backup stores programs without AC power or AA batteries.
- 1.0 amp self resetting fuse for short circuit zone protection.
- The 8300 series comes in an indoor / outdoor weather resistant plastic cabinet with an internal transformer.
- This series is packed with many advanced water management features such as global water budgeting, water budgeting by month, event days and a built in sensor input.

EZ Pro™ 8600



- Three programs, multiple start times and schedule options. The 8600 series is capable of 9 hours 59 minutes of run time per zone.
- Available in 8, 12, 16, 20, and 24 zones.
- Nonvolatile memory stores programs without AC power or AA batteries.
- 1.0 amp self resetting fuse for short circuit zone protection.
- The 8600 series comes in an indoor / outdoor weather resistant plastic cabinet with an internal transformer.
- This series is packed with many advanced water management features such as global water budgeting, water budgeting by month and a built in sensor input.
- Remote and Central control ready. Just install the appropriate module and adjust or change a program or activate a zone wirelessly using the EZ Command® Remote Programmer.
- Central control ready. Just install the EZ Pro™ Live communications module and control your controller from anywhere in the world.

SPECIFICATIONS

DIMENSIONS (H x W x D)

5 3/4" (14,6 cm) x 4 1/2" (11,5 cm) x 1 1/2" (3,8 cm)

CABINET:

Durable plastic- indoor controller

OF ZONES:

4, 6

ELECTRICAL:

8114/8116

INPUT: 120V AC, 60 Hz

OUTPUT: 24V AC, .50 Amp

8184/8186

INPUT: 230V AC, 50 Hz

OUTPUT: 24V AC, .50 Amp

Two Energizer® AA alkaline batteries
(not included)

FCC Part 15 Class B compliant



MODELS

**EZ Pro™ Indoor
8100 Indoor Only**

8114 (8184*)
4 zone

8116 (8186*)
6 zone

* A country code is required
after model number:

'ES' - Spain

'IT' - Italy

'PT' - Portugal

'FR' - France

FEATURES

- Stacking start times
- Two independent programs
- Three start times per program
- True calendar clock (Leap year compatible)
- Scheduling options:
 - Odd/Even
 - Interval, 1-30 days
 - 7-day Calendar
- Zone run times from one minute to 6 hours
- Two AA alkaline batteries keep correct time and date for up to 1 year
- .5 fuse for short-circuit zone protection
- Manual test with manual advance feature
- Rain sensor compatible

MODELS

EZ Pro™ Jr.
8304 (8374*)
 4 zone

8306 (8376*)
 6 zone

8309 (8379*)
 9 zone

8312 (8382*)
 12 zone

*A country code is required
 after model number:
 'ES' - Spain
 'IT' - Italy
 'PT' - Portugal
 'FR' - France



SPECIFICATIONS

DIMENSIONS (H x W x D)

8" (20,3 cm) x 10" (25,4 cm) x 4" (10 cm)

CABINET:

Weather resistant plastic

OF ZONES:

4, 6

ELECTRICAL:

8304 to 8312:

INPUT: 120V AC, 60 Hz

OUTPUT: 24V AC, .83 Amp

8374 to 8382:

INPUT: 230V AC, 50 Hz

OUTPUT: 24V AC, .83 Amp

Two Energizer® AA alkaline batteries
 (not included)

FCC Part 15 Class B compliant



FEATURES

- Lithium battery back-up stores programs without AC power or AA batteries
- Stacking start times
- Three independent programs
- Three start times per program
- True calendar clock (Leap year compatible)
- Scheduling options: Odd/Even; Interval 1-30 days; 7-day Calendar; Event Day
- Zone run times from one minute to five hours 59 minutes
- Programmable delay between zones, one second to 30 minutes
- Quick push button rain sensor bypass
- Cycle test, Manual test with manual advance
- Two AA alkaline batteries keep correct time and date for 5 years
- Input and output surge protection
- 1.0 amp self resetting polyswitch for short-circuit zone protection

WATER MANAGEMENT FEATURES

- Event days per program - Blocks any day from irrigating
- Water budget option reduces or increases watering 0 to 200 percent
- Advanced water budget to set water budget for each month of the year, per program 0 to 200 percent



SPECIFICATIONS

DIMENSIONS (H x W x D)

9" (22,9 cm) x 12" (30,5 cm) x 5" (12,5 cm)

CABINET:

Weather resistant plastic

OF ZONES:

8, 12, 16, 20, 24

ELECTRICAL:**8608 to 8624:**

INPUT: 120V AC, 60 Hz

OUTPUT: 24V AC, 1.25 Amp

8678 to 8694:

INPUT: 230V AC, 50 Hz

OUTPUT: 24V AC, 1.25 Amp

Two Energizer® AA alkaline batteries (not included)

FCC Part 15, Sub Part C, 15.247

UL, COL and CE Listed:

FCC Part 15 Class B compliant



MODELS

EZ Pro™
8608 (8678*)
8 zone

8612 (8682*)
12 zone

8616 (8686*)
16 zone

8620 (8690*)
20 zone

8624 (8694*)
24 zone

* A country code is required
after model number:

'ES' - Spain

'IT' - Italy

'PT' - Portugal

'FR' - France

Upgradeable to EZ Pro™ Live.
Optional equipment required.
See page 30.

FEATURES

- Non-volatile memory stores programs without AC power or batteries
- Two AA batteries keep correct time for one year
- Stacking start times
- Pump start programmable by zone
- Programmable Rain Delay to 99 days
- Three independent programs
- Four start times per program
- Three scheduling options to suit the needs of plant material or to comply with watering restrictions (7 day calendar, 1-30 day interval, true odd/even)
- Leap year compatible
- Water budget option reduces or increases watering 0-200 percent
- Advanced water budget to set water budget for each month of the year
- Three test cycles (Manual test with manual advance feature, Cycle test, 3-minute test)
- Programmable run times from one minute to 9 hours 59 minutes
- Poly-fuse self resetting circuit protection



SATELLITES

PARTIAL FEATURES LIST

	SATELLITES		DECODER SATELLITES (2-Wire)	
	GALAXY	CONSTELLATION	GALAXY	CONSTELLATION
APPLICATIONS				
Residential	✓	✓	✓	✓
Commercial	✓	✓	✓	✓
Municipal	✓	✓	✓	✓
TYPE OF CONTROLLER				
Wall Mounting	✓	✓	✓	✓
Plastic Pedestal	✓	✓	✓	✓
Heavy Duty Stainless Steel Pedestal/Wall Mount	✓	✓	✓	✓
NETWORK COMMUNICATION				
Peer-to-Peer Communication		✓		✓
Local Sensors	✓	✓	✓	✓
Sharing of Sensor Data		✓		✓
CENTRAL CONTROL UPGRADEABLE				
Upgradeable to eConstellation (Web-Based)	✓	✓	✓	✓
Upgradeable to Constellation (PC-Based)	✓	✓	✓	✓
OTHER				
Accepts Decoder Modules	✓	✓		
Accepts Valve Modules			✓	✓

PRODUCT OVERVIEW

Satellite Controllers

GALAXY



- The **Galaxy™** Satellite Controller delivers the ultimate in power at an affordable price.
- Galaxy is designed to operate as a stand-alone controller or as a satellite in a central controlled system.
- Galaxy is easy to operate with flexible configuration and communication options.
- Galaxy firmware can be upgraded in the field to a fully configured Constellation® version allowing the user full access to our patented Peer-to-Peer networking features.

CONSTELLATION



- The **Constellation®** Satellite Controller delivers the ultimate in power, ease and value.
- Constellation is designed to function as a stand-alone controller or as a satellite in a network with or without a central computer.
- Each Constellation Satellite Controller is like having a central computer in the field for unprecedented control and unparalleled value.
- Constellation is easy to operate with flexible configuration and communication options.
- Fits every commercial application—from parks, sports complexes, and business parks—to cemeteries, theme parks, HOAs.



Decoder Satellite Controller

- All the features and benefits of the Galaxy Satellite in a decoder version.
- The Galaxy™ Satellite Controller delivers the ultimate in power at an affordable price.
- Galaxy is designed to operate as a stand-alone controller or as a satellite in a central controlled system.

- Galaxy is easy to operate with flexible configuration and communication options.
- Galaxy firmware can be upgraded in the field to a fully configured Constellation® version allowing the user full access to our patented Peer-to-Peer networking features.

**GALAXY
DECODER**

- All the features and benefits of the Constellation Satellite in a decoder version.
- The Constellation® Satellite Controller delivers the ultimate in power, ease and value.
- Constellation is designed to function as a stand-alone controller or as a satellite in a network with or without a central computer.

- In fact, each Constellation Satellite Controller is like having a central computer in the field for unprecedented control and unparalleled value.
- Constellation is easy to operate with flexible configuration and communication options.
- Fits every commercial application—from parks, sports complexes, and business parks—to cemeteries, theme parks, HOAs.

**CONSTELLATION
DECODER**

- Field addressable
- Direct burial
- Different models to fit every application:
- One zone, two zone, three zone and four addresses available.

- Decoder programmer also available (not shown).

**FIELD
DECODERS**

MODELS

GALAXY

CONSTELLATION

GALAXY DECODER

CONSTELLATION DECODER



Wall Mount Enclosure



Plastic Pedestal Enclosure

FEATURES & BENEFITS

Constellation[®] Satellite Controller

Stand-alone controller or network satellite for commercial sites

NETWORK

Patented true two-way communication (peer to peer) allows a Constellation Satellite Controller to operate as a stand-alone controller or as part of a satellite network with or without a central computer

Sensor inputs allow satellites to monitor, store and share data from multiple sensors across a network

Hardwire, telephone, ethernet and radio communications can be used on the same network

Cell phones and handheld radios can be used as remotes

Backward and forward compatible

Network can be monitored and controlled at any satellite through our patented Peer to Peer communications, through a central computer with our desktop software, through the internet with our eConstellation service, or all of the above

Hardwire ready configuration allows for quick and inexpensive installation of our patented Peer to Peer communication between satellites

SATELLITE CONTROLLER

Multilingual user interface

Enable and disable commands with delay timer

User-selectable, 12-hour or 24-hour clock format

Semi-automatic, manual and delayed manual station control

Global, controller/satellite, program water budgeting from 0-999%

Open, Overload and short-circuit protection

User-selectable Water Budget or ET-adjusted control for each irrigation schedule/program

Master valves (2 N/C and 2 N/O) and local and remote pump capabilities and pump start

Accommodates up to two sensors and shares an additional 4 sensors across a network

Flow monitoring and reporting of over-flow or under-flow conditions

Generates alarms, flow and status reports which can be transmitted to a user defined-location and/or stored in the local alarm log

Pedestal units can be configured for 96 traditional stations, or 250 decoder addresses (6 valve modules max. within a pedestal)

Wallmount units can be configured for 48 traditional stations, or 250 decoder addresses (3 valve modules max. within a wall mount)

Manages 128 fully independent, customized schedules/programs

Each schedule/program has 8 start times and can accommodate up to 48 events; stations can be run in any sequence and you have the capability to run the same station multiple times within the same schedule/program, each with a different run time if needed

Programs can be linked to start when another program ends—from any satellite on the network

Each schedule/program has a completely independent watering calendar which can be All Months, Months, Weeks, Odd/Even or interval up to 99 days

Virtually unlimited flexibility for specific cycle scheduling/programming

Multiple repeats and pauses within a schedule/program

NETWORK COMMUNICATIONS OPTIONS

- Hardwire (Standard)
- Digital Spread Spectrum Radio (License Free) [900 MHz and 2.4 GHz]

Ethernet Modem

REMOTE COMMUNICATIONS OPTIONS

- Handheld Maintenance Radio [VHF]
- Landline Telephone
- Cellular Phone (CDMA and GSM)
- Ethernet Modem

NOTE:

Other options available — options vary by location; check with your local distributor

ENCLOSURE OPTIONS

Plastic Pedestal:

- Black Granite, Green Granite, Gray Granite, Tan

Wall Mount:

- Large (Indoor/Outdoor Mount), Gray Only

Heavy-Duty Stainless Steel:

- Top Opening or Front Opening

SENSOR OPTIONS

Accepts both Pulse (standard) and 4-20mA (optional equipment required) sensors

Pulse Sensors:

- ET Gauge
- Tipping Rain Bucket
- Rain Switch
- Flow Meter
- Frost /Temperature
- Any On/Off or Active/Non-Active

4-20mA Sensors:

- Soil Temperature
- Soil Moisture
- Flow
- Pressure

VALVE MODULE OPTIONS

A style = 16 station (small terminals)

B style = 8 station (large terminals)

C style = 16 station (large terminals, pedestals only)

D style = 125 address decoder

ELECTRICAL

Input Power:

110/117VAC, 60 Hz or 220/240VAC, 50 Hz

0.20 amps @ 115VAC, 60 Hz (no load)

0.80 amps @ 115VAC, 60 Hz (max. load)

Station Output Power

24VAC (120VA) total

Station draw: max. 3 solenoids per station,

14 stations simultaneously (max. 3.2 amps)



Plastic Pedestal Color Options



Heavy-Duty Stainless Steel Pedestal (Top Opening Style)



Plastic Pedestal front view with 32 stations (2 C modules x 16 stations per module = 32)



Plastic Pedestal back view (showing the field wiring connections)

DIMENSIONS (H x W x D)

Metal Wall Mount

18" (46 cm) x 14" (36 cm) x 4 1/4" (36 cm)

Plastic Pedestal

45" (114 cm) x 16" (41 cm) x 11 5/8" (30 cm)

PARTIAL FEATURES LIST COMMUNICATION FEATURES

Peer-to-Peer Communication

PROGRAMMING FEATURES

Number of Zones (Wall Mount)

Number of Zones (Pedestal)

Remote Master Valve / Pump Starts

Master Valve / Pump Starts

Number of Independent Programs Per Controller

Start Times per Program

Multiple Start Types per Program

Events per Program

Real Time Flow Sensing

SENSOR FEATURES

Local Sensors per Satellite

Remote Sensors per Satellite

Sharing of Sensor Data - from Interface Unit

Sharing of Sensor Data - from any Satellite

Number of Sensor Logs

SATELLITES GALAXY CONSTITUTION

DECODER SATELLITES (2-Wire) GALAXY CONSTITUTION

Peer-to-Peer Communication		✓		✓
Number of Zones (Wall Mount)	8-48	8-48	up to 250	up to 250
Number of Zones (Pedestal)	8-96	8-96	up to 250	up to 250
Remote Master Valve / Pump Starts		✓		✓
Master Valve / Pump Starts	1 N/O	2 N/O, 2 N/C	1 N/O	2 N/O, 2 N/C
Number of Independent Programs Per Controller	32	128	32	128
Start Times per Program	8	8	8	8
Multiple Start Types per Program	✓	✓	✓	✓
Events per Program	48	48	48	48
Real Time Flow Sensing	✓	✓	✓	✓
Local Sensors per Satellite	2	2	2	2
Remote Sensors per Satellite		4		4
Sharing of Sensor Data - from Interface Unit	✓	✓	✓	✓
Sharing of Sensor Data - from any Satellite		✓		✓
Number of Sensor Logs	7	90	7	90

DECODER OPTIONS

ACDECI: 125-Zone Decoder Modulator Board

CD-111: Field Decoder,
1- address, 1-solenoid

CD-112: Field Decoder,
1- address, up to 2-solenoid per address

CD-122: Field Decoder,
2- addresses, up to 2-solenoids per address

CD-132: Field Decoder,
3- addresses, up to 2-solenoids per address

CD-142: Field Decoder,
4- addresses, up to 2-solenoids per address

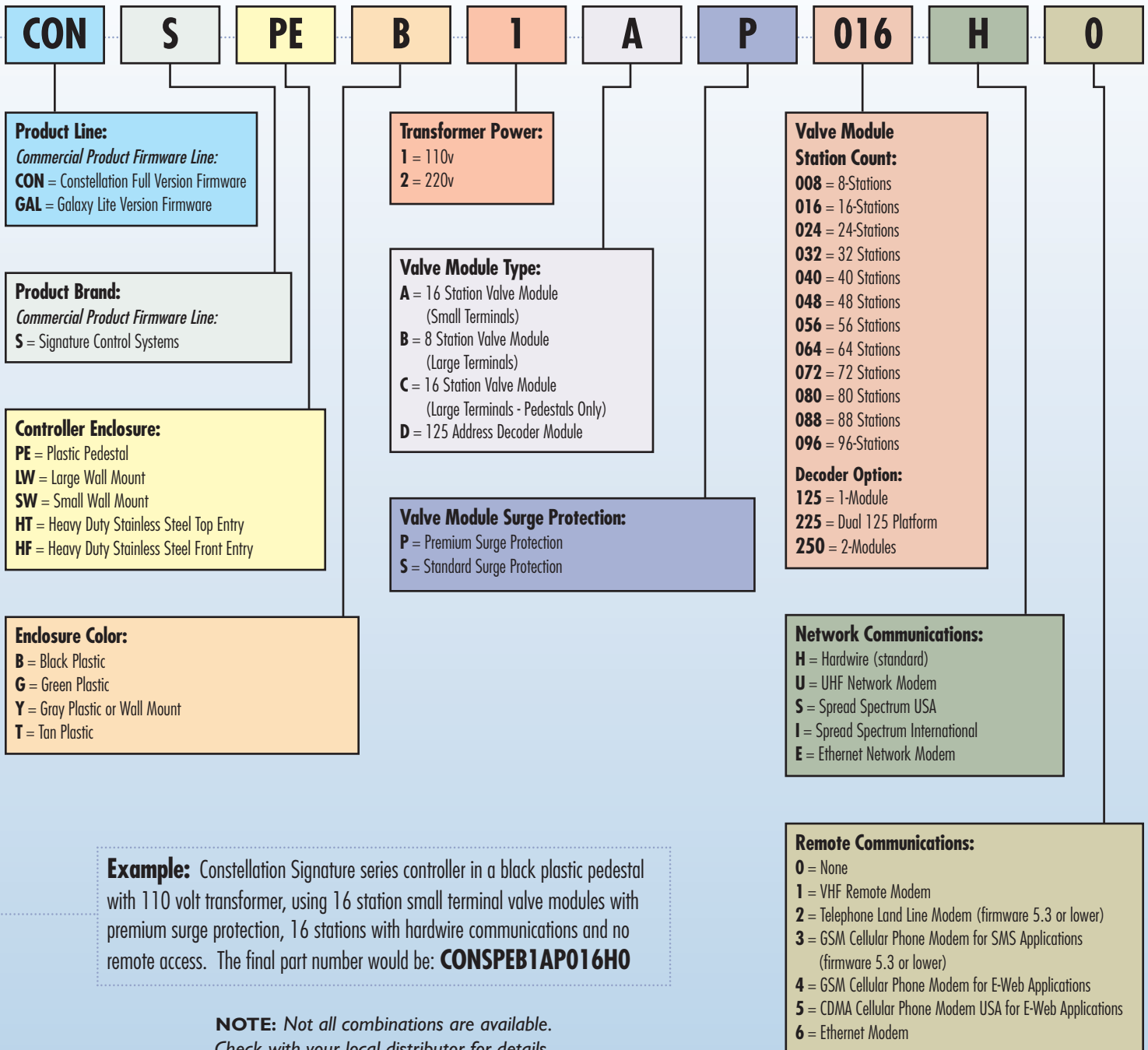
ADPROG: Decoder Field Programmer

TWSPK: Decoder Surge Protection Kit



HOW TO ORDER

CONTROLLER PART NUMBER GRID:





CENTRAL CONTROLS

	EZ PRO Live	eConstellation Lite	eConstellation Pro	Constellation Professional
APPLICATIONS				
Residential	✓	✓		
Commercial / Municipal	✓	✓	✓	✓
STANDARD FEATURES				
Remote Access from any Internet Computer	✓	✓	✓	
24/7 Availability	✓	✓	✓	
Automatic Upgrades	✓	✓	✓	
Seamless Upgrades	✓	✓	✓	
Automatic Backups	✓	✓	✓	
Manual ET-Based Scheduling	✓	✓	✓	
Automatic Daily ET Download	Optional	Optional	Optional	With W/S
Multi-level Access with Passwords	✓	✓	✓	✓
Real-Time 2-Way Communication	✓	✓	✓	✓
Works with all EZ PRO® Controllers	✓			
Works with all Galaxy Satellites		✓	✓	✓
Works with all Constellation Satellites		✓	✓	✓
Works with Radio Satellites/Networks		✓	✓	✓
Works with Hardwire Satellites/Networks		✓	✓	✓
Works with Decoder Satellites/Networks		✓	✓	✓
SOFTWARE FEATURES				
Manual Operation	✓	✓	✓	✓
Rain Shutdown	✓	✓	✓	✓
Programming	✓	✓	✓	✓
Budget Adjust	✓	✓	✓	✓
Report Generation		✓	✓	✓
Controller Setup		✓	✓	
Graphical Map				✓
Import GPS, CAD or Aerial Photo				✓
Group Programming			✓	✓
Flow Management			✓	✓
Projected Flow (Dry Run)			✓	✓

PRODUCT OVERVIEW

Online Central Control (Web Based)

The eSignature Series of Online Central Control or Online Management Systems are internet-based central control system for irrigation control and water management. Communicating with remote irrigation field controllers with wireless connectivity, and allows you management of sites from anywhere in the world via the internet.

Along with all the advantages of internet-based access to remote irrigation field controllers, the eSignature Series of internet based central control provides optional weather-based irrigation scheduling. Location-specific weather data (ET) is delivered daily to irrigation controllers which allow the realization of quantifiable water savings and reduced operational costs.

EZ PRO™ LIVE



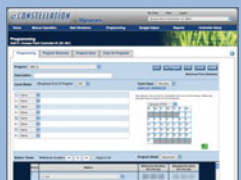
- **EZ PRO™ Live** works with your existing or new EZ PRO controllers (8600 Series)
- Plug-in module makes your controller accessible from any internet capable computer anywhere in the world
- Menus are user friendly and intuitive using graphical user interface
- Uses real-time weather data and transmits it to each controller (Optional ET Smart Watering Service)

eCONSTELLATION™ LITE



- **eConstellation™ Lite** is accessible from any internet capable computer anywhere in the world
- Requires no expensive desktop software purchases or support plans
- Eliminates need for dedicated irrigation computer and extended service plans
- Abolishes time consuming software upgrades and related programming

eCONSTELLATION™ PRO



- **eConstellation™ Pro** flow manages from anywhere and downloads to your satellite network
- Remotely monitor sites—across the city, state, or world—from one location or an infinite number of locations
- All programs and site data are stored in your personal and secure eConstellation account
- Multi-user environment with multi-level passwords and access controls

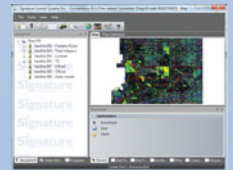
Central Control (PC Based)

Constellation® Professional software is the classical Personal Computer (PC) based system for irrigation control and water management. It has the capability of Manual Programming, Group Programming

and Flow Managed Programming. It works with local Weather Stations for environmental programming and scheduling.

- Works with your existing Constellation network
- Works with hardwire, local radio, or any hybrid version
- Works with traditional valves, decoders, or any combination of the two
- Flow Management: Limits flow within the irrigation system to eliminate the possibility of excessive demand placed on the pumps and piping; Capable of determining the most efficient distribution of water flow within specific limitations set by the operator.

CONSTELLATION® PROFESSIONAL



MODELS

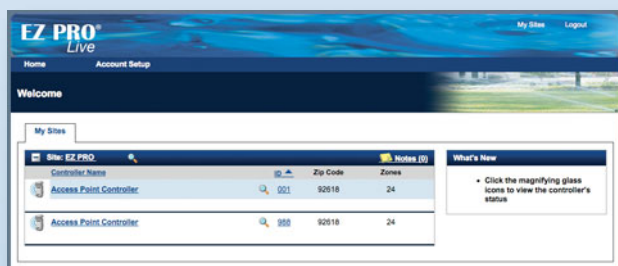
8603 EZ PRO™ LIVE Communication board

HOW IT WORKS

EZ PRO™ Live is an internet-based central control system used with EZ PRO 8600 Series controllers. It communicates with EZ PRO irrigation field controllers using wireless connectivity, and allows management of controller from anywhere in the world via the internet.

Along with all the advantages of internet-based access to remote irrigation field controllers, EZ PRO Live provides an weather-based irrigation scheduling option. Location-specific weather data (ET) is delivered daily to irrigation controllers which allows the realization of quantifiable water savings and reduced operational costs.

The exciting features of EZ PRO Live can be added to all EZ PRO 8600 Series controllers without any changes to the controller other than the addition of a single communications modem board. (Also requires a cellular data plan from your local carrier.)



FEATURES & BENEFITS

REMOTE ACCESS

EZ PRO Live is accessible from any internet capable computer anywhere in the world

Remotely monitor sites from one location or an infinite number of locations

All programs are stored in the controller once downloaded, and are available 24/7 on our secure server

COST EFFECTIVE

EZ PRO Live requires no expensive desktop software purchases or support plans

Eliminates need for dedicated irrigation computer and extended service plans

Abolishes time consuming software upgrades and related programming

EASY TO USE

EZ PRO Live requires no extensive backups; we handle all upgrades, support and maintenance

Upgrades are uploaded seamlessly; when you log on they are ready

Menus are user friendly and intuitive using graphical user interface

WEATHER-BASED IRRIGATION SCHEDULEING (ET) [OPTIONAL SERVICE]

EZ PRO Live uses real-time weather data (ET) and transmits it to each controller

Smart controller functions save water, time, and expense

Eliminates requirement to purchase a weather station or other weather services

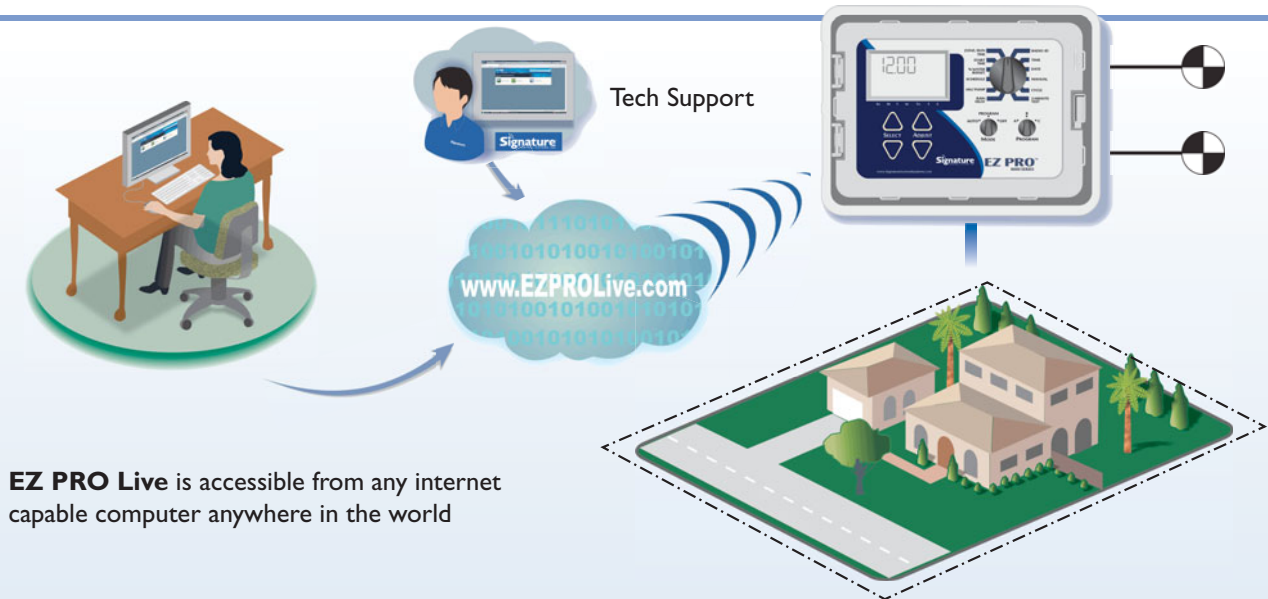
The addition of an EZ PRO Live communications board makes your existing or new EZ PRO controller live on the web

EZ PRO Live accesses any new or existing EZ PRO 8600 Controller with the addition of a single communications board

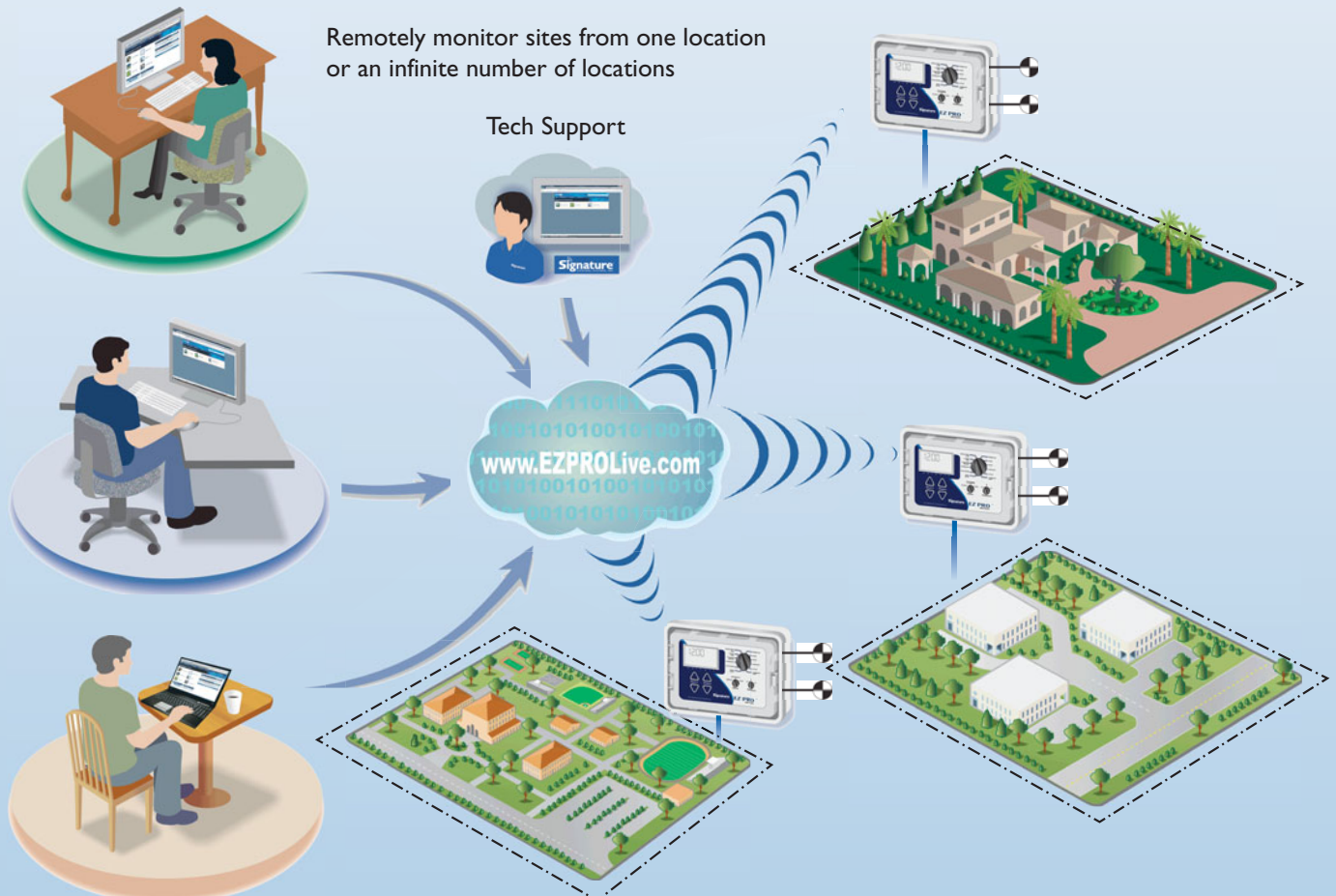
NOTE:

Also requires a cellular data plan from your local carrier.

USAGE EXAMPLE: EZ PRO Live — Single User / Single Site



USAGE EXAMPLE: EZ PRO Live — Multiple Users / Multiple Sites



MODELS

HOW IT WORKS

eConstellation™ LITE eConstellation™ PRO

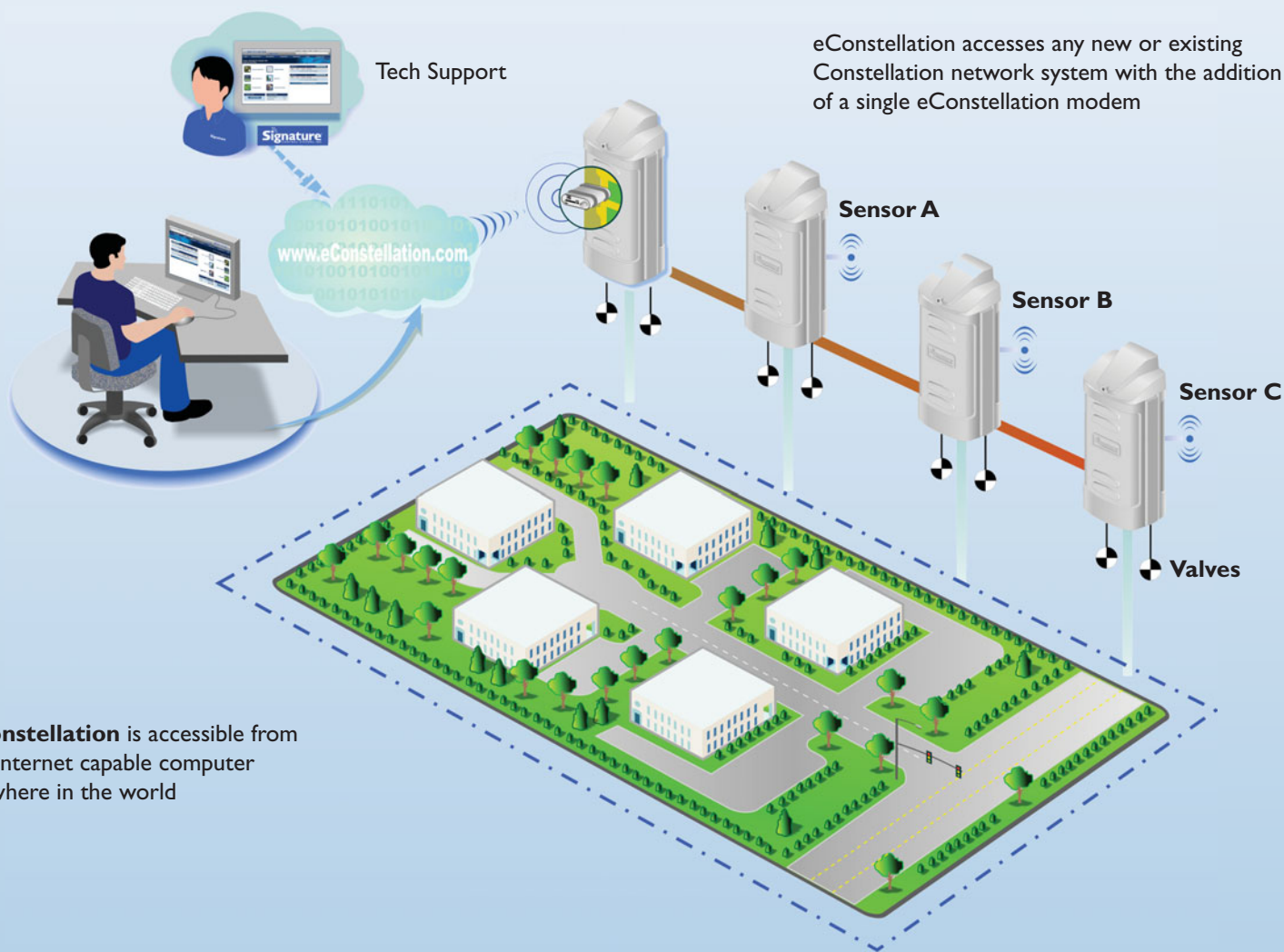
eConstellation™ is an internet-based central control system for use with Constellation and Galaxy Series controllers. It communicates with remote irrigation field controllers using wireless connectivity, and allows management of controller from anywhere in the world via the internet.

Along with all the advantages of internet-based access to remote irrigation field controllers, eConstellation provides an weather-based irrigation scheduling option. Location-specific

weather data (ET) is delivered daily to irrigation controllers which allow the realization of quantifiable water savings and reduced operational costs.

The exciting features of eConstellation can be added to all Constellation and Galaxy Series controllers and networks without any changes to the controller other than the addition of a single communications modem board. (Also requires a cellular data plan from your local carrier.)

USAGE EXAMPLE: eConstellation — Single User / Multiple Controller Site



eConstellation is accessible from any internet capable computer anywhere in the world

FEATURES & BENEFITS

REMOTE ACCESS:

eConstellation is accessible from any internet capable computer anywhere in the world

All programs and site data are stored on our secure server and available 24/7

Remotely monitor sites - across the city, state, or world - from one location or an infinite number of locations

All programs and site data are stored in your personal and secure eConstellation account

Multi-user environment with multi-level passwords and access controls

COST EFFECTIVE:

eConstellation requires no expensive desktop software purchases or support

Eliminates need for dedicated irrigation computer and extended service plans

Abolishes time consuming software upgrades and related programming

Billing is available in annual or monthly installments

For seasonal users, access fees are waived during "off" months

EASY TO USE:

eConstellation requires no extensive backups; we handle all upgrades, support and maintenance

Upgrades are uploaded seamlessly; when you log on they are ready

Menus are user friendly and intuitive using graphical user interface

On-screen help menus provide user with detailed instructions for simple set-up and fast launch

Online trouble shooting to read alarms, events, and flow meters

WEATHER-BASED IRRIGATION SCHEDULING (ET):

eConstellation uses real-time weather data (ET) and transmits it to each controller in your network

Smart controller functions save water, time, and expense

Eliminates requirement to purchase a weather station or other weather services

Removes any vandalism and maintenance issues with weather stations and sensors

Irrigate using ET from installation of first controller

HIGH PERFORMANCE:

eConstellation accesses any new or existing Constellation network system with the addition of a single eConstellation modem

Enjoy the same power and performance of your Constellation networks with no hardware modifications

Only one access point is required in each Constellation network

Hardwire, radio, fiber optic or Ethernet communications can be combined on the same network

Flexible programming operates lighting, fountains, security gates and locks, etc

The addition of an eConstellation web modem makes your existing or new Constellation network on the web

eConstellation accesses any new or existing Constellation controller network with the addition of a single GPRS modem

FLOW MANAGEMENT (PRO VERSION ONLY):

All the features of Lite PLUS the ability to flow manage your site

Optimizes water usage over multiple controller site

Checks to see that watering fits within water window

Graphical representation of flow for ease of verification

Irrigation is easily scheduled to meet complex watering parameters

USAGE EXAMPLE: eConstellation — Multiple Users / Multiple Controller Sites with Multiple Satellites

eConstellation accesses any new or existing Constellation network system with the addition of a single **eConstellation** modem

Remotely monitor sites - across the city, state, or world - from one location or an infinite number of locations

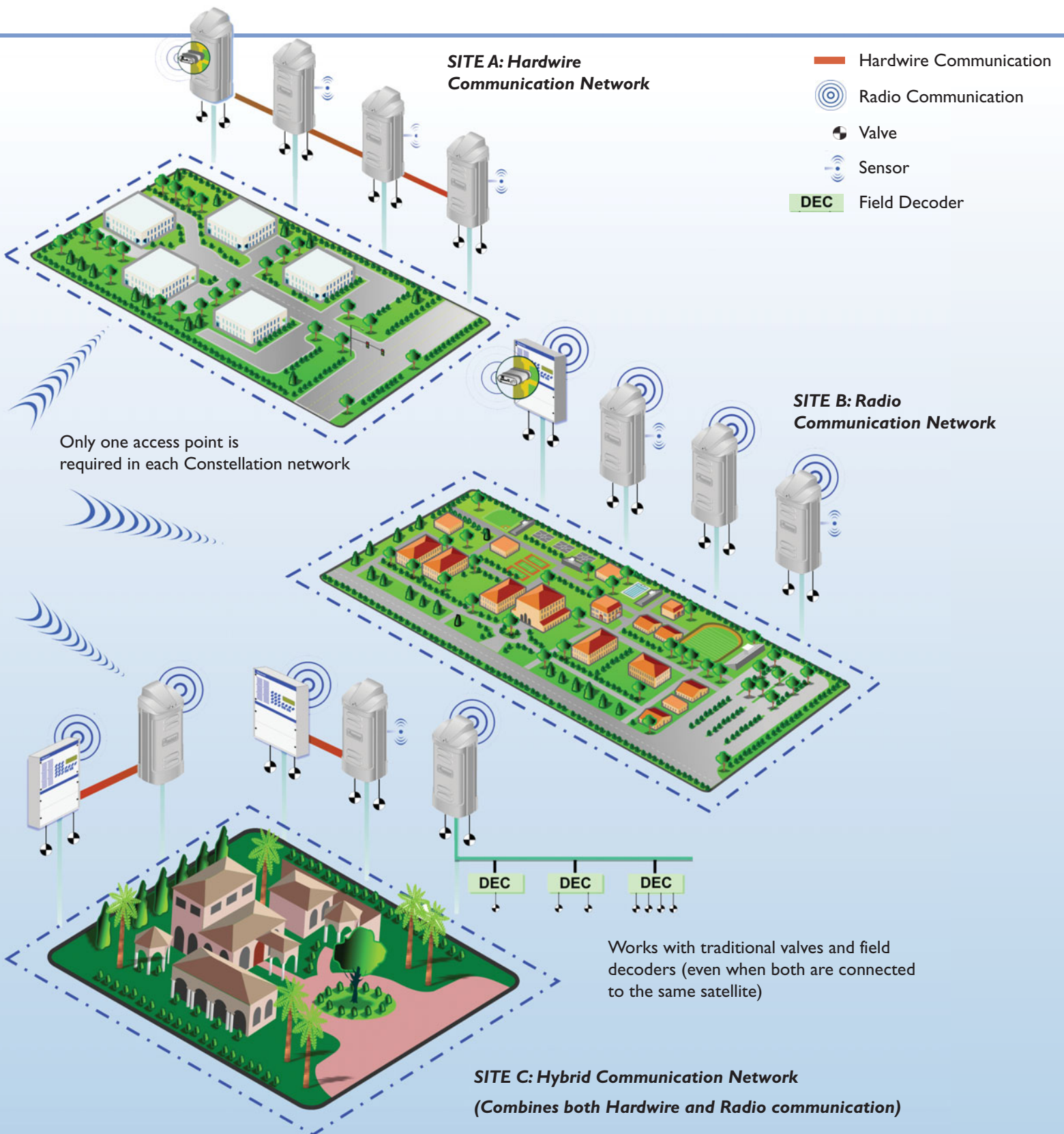
Multi-user environment with multi-level passwords and access controls

Tech Support



www.eConstellation.com

eConstellation requires no extensive backups; we handle all upgrades, support and maintenance



MODELS

HOW IT WORKS

Constellation[®] Professional

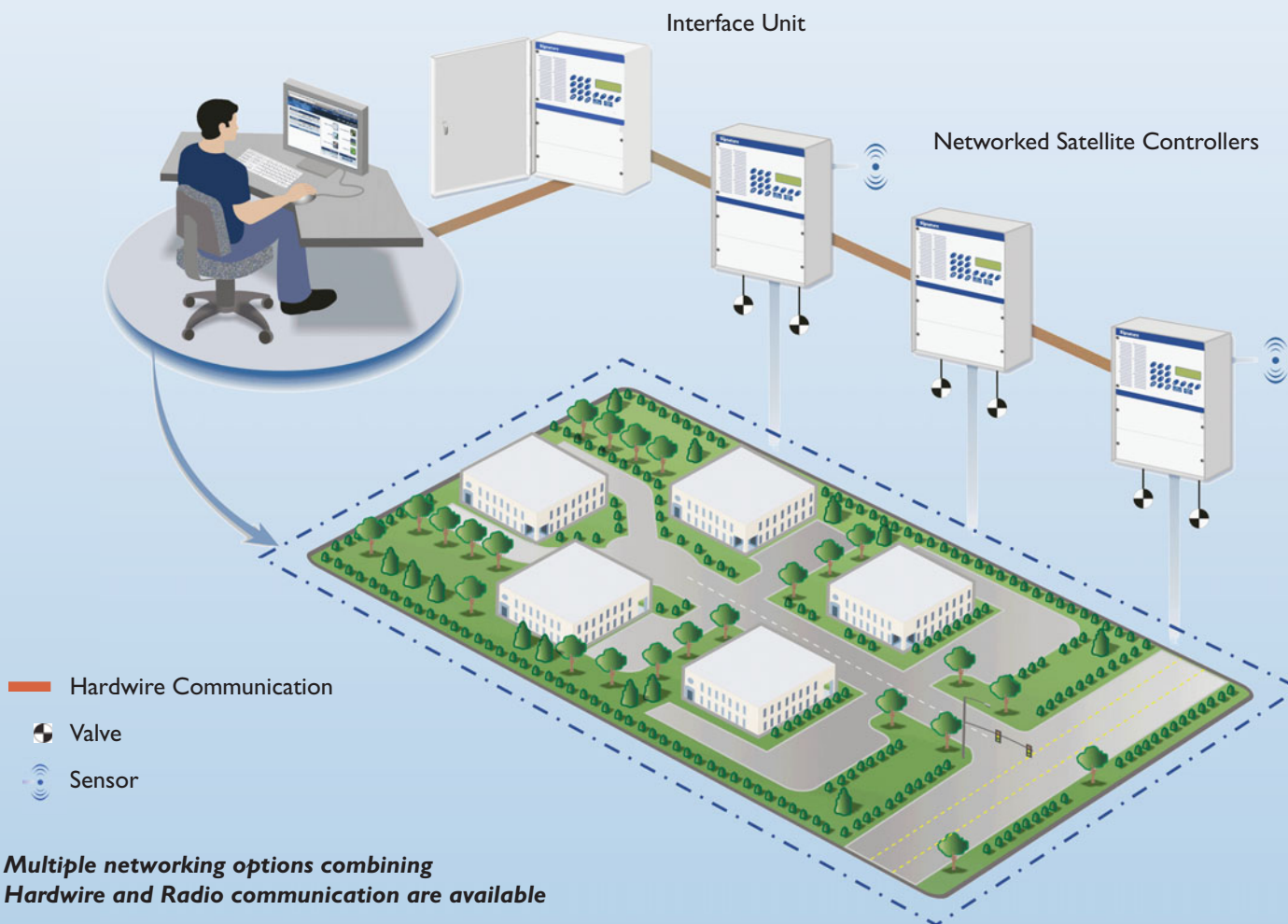
Constellation[®] Professional is the traditional-type of central control system for use with Constellation and Galaxy Series controllers. It communicates with remote irrigation field controllers using hardwire, local radio (900MHz or 2.4 GHz Digital Spread Spectrum), Ethernet, and allows management of satellite controllers from one irrigation computer with irrigation software resident on the computer.

The features of Constellation Professional can be added to all Constellation and Galaxy Series controllers and networks without any changes

to the controller or network. All that is required is (a) an Interface Unit located in close proximity to the irrigation computer to facilitate the field connection, or (b) an Ethernet connection and Ethernet modem in one of the Satellite controllers in the Constellation network.

Constellation Professional provides weather-based irrigation scheduling option using a local weather station. ET data is delivered daily to irrigation controllers which allow the realization of quantifiable water savings and reduced operational costs.

USAGE EXAMPLE: Constellation Professional — Single User / Multiple Controller Site



FEATURES & BENEFITS

NETWORK COMMUNICATION – UNLIMITED OPTIONS

Communication options for Constellation Networks include hardwire, local radio (900 MHz and 2.4 GHz digital spread spectrum radio), telephone, cellular phone, Ethernet, fiber-optics, Wi-Fi and others. (Not all options are available in all areas. Contact your local dealer for options available for your specific area.)

CENTRAL COMMUNICATION – STANDARD AND REMOTE OPTIONS

Communications options between the central irrigation computer and the Constellation satellite controllers include all those listed above PLUS the ability to access the network from anywhere in the world where you can get an internet connection from your computer.

NETWORK MONITORING – ROBUST INTELLIGENCE

The Constellation network monitors itself continuously and can make use of six sensor inputs per satellite controller (2 direct; 4 indirect). The satellite controllers can monitor and adjust to flow, rain (on/off), rain fall adjustments, wind, moisture, temperature or virtually any other sensor to adjust and take action in real time... without the need for the central computer to even be on.

SOFTWARE FEATURES (Partial List)

- Graphical User Interface
- Weather station monitoring for automated ET-adjusted irrigation schedule
- Automated ET (with optional equipment)
- Flow Management
- Event Calendar Scheduling
- Manual station control
- Dry Run and monitor irrigation water windows
- Operates lighting, fountains, security gates, etc.
- English and metric units
- Multilingual instructions

REMOTE OPTION

Untether your control! Move to a laptop and an Ethernet modem in one of your Constellation network satellite controllers and use your computer anywhere in the world where you can get to the Internet. STANDARD!

CONTROL FEATURES

Irrigation cycles are easily scheduled to meet varying and complex watering requirements. Cycles can be scheduled with some of the following:

- Standard Start Times
- Stop Times
- Link Start Times
- Water Days
- Intervals
- Program Specific Water Budget
- Controller Specific Water Budget
- Sequential or Parallel Start Event Operation
- Automatic ET Control
- Sensor Starts or Stops or Pauses

OTHER FEATURES

Self-monitoring feature finds open/short circuits, activates alarms/pagers, and shuts down automatically if necessary.

Hardwire and radio communications can be used on the same network.

Independent programming allows control of each station in any sequence, with multiple repeats and pauses.

True two-way communication between central controls and satellites.

REMOTE TECHNICAL SUPPORT

High-speed technical support from the factory via an internet connection.



ROTORS

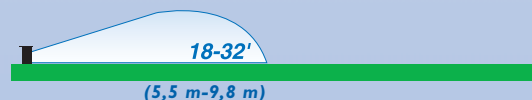
APPLICATIONS	5500	6000	6500	7000	7500
SPACING 18'-32' (5,5 m-9,8 m)	✓				
SPACING 30'-51' (9,2 m-15,6 m)		✓			
SPACING 44'-60' (13,4 m-18,3 m)			✓		
SPACING 41'-63' (12,5 m-19,2 m)				✓	
SPACING 53'-74' (16,2 m-22,6 m)					✓
RESIDENTIAL	✓	✓			
COMMERCIAL/MUNICIPAL	✓	✓	✓	✓	✓
ATHLETIC FIELDS	✓	✓	✓	✓	✓
HIGH VANDALISM AREAS	✓	✓	✓	✓	✓
LOW PRESSURE SYSTEMS	✓	✓			
RISER MOUNTED	✓	✓			
GROUND COVER/SHRUBS	✓	✓			
RECLAIMED WATER	✓	✓	✓	✓	✓
SLOPES	✓	✓	✓	✓	✓
HIGH ROTATION SPEED			✓		✓

PRODUCT OVERVIEW



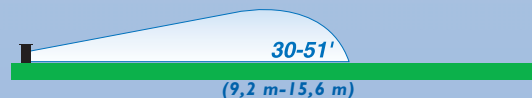
5500

- The 5500 Pro series rotors are constructed of high impact plastic and all internal metal parts are made of stainless steel.
- $\frac{3}{4}$ " (2 cm) inlet
- No tools are required to adjust the arc from 40° – 360° by using the easy to use Click-Set disc.
- This series comes with 4 interchangeable nozzles with a discharge range between 0.5 – 2.5 gpm (0,11 – 0,57 m³/hr).
- All models come with a rubber protective cap and an optional vandal resistant retaining screw.
- The built in slip clutch protects the gears and motor from damage when adjusting for a part circle. If the rotor is manually moved out of position it will automatically reset to the defined pattern.
- NIR² (Nozzle Insertion / Radius Reduction) eliminates the need to remove the cap while fine tuning the radius and inserting the nozzle.
- 5500 comes in many various styles: shrub head version, heavy duty stainless version, 12" (30,5 cm) high pop version, anti-drain valve (ADV) version and the standard version.



6000

- The 6000 Pro series rotors are constructed of high impact plastic and all internal metal parts are made of stainless steel.
- $\frac{3}{4}$ " (2 cm) inlet
- No tools are required to adjust the arc from 40° – 360° by using the easy to use Click-Set disc.
- This series comes with 8 interchangeable nozzles with a discharge range between 1.0 – 9.5 gpm (0,23 – 2,16 m³/hr). There is also a low angle nozzle tree available.
- All models come with a rubber protective cap and an optional vandal resistant retaining screw.
- The built in slip clutch protects the gears and motor from damage when adjusting for a part circle. If the rotor is manually moved out of position it will automatically reset to the defined pattern.
- NIR² (Nozzle Insertion / Radius Reduction) eliminates the need to remove the cap while fine tuning the radius and inserting the nozzle.
- 6000 comes in many various styles: shrub head version, heavy duty stainless version, 12" (30,5 cm) high pop version, anti-drain valve (ADV) version and the standard version.



- The 6500 Pro Series 1" (25,4 mm) inlet series rotors are constructed of High impact plastic and all internal metal parts are made of stainless steel.
- No tools are required to adjust the arc from 40° – 360° by using the easy to use Click-Set disc.
- This series comes with 4 interchangeable nozzles with a discharge range between 2.8 – 13.2 gpm (0,64 – 3,00 m³/hr).
- All models come with a rubber protective cap and an optional vandal resistant retaining screw.

- The built in slip clutch protects the gears and motor from damage when adjusting for a part circle. If the rotor is manually moved out of position it will automatically reset to the defined pattern.
- NIR² (Nozzle Insertion / Radius Reduction) eliminates the need to remove the cap while fine tuning the radius and inserting the nozzle.
- 6500 comes in various styles: heavy duty stainless version with anti-drain valve (ADV), High speed rotation and the standard version with ADV.

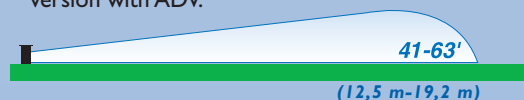


6500



- The 7000 Pro Series 1" (25,4 mm) inlet series rotors are constructed of High impact plastic and all internal metal parts are made of stainless steel.
- The arc will adjust from 40° – 360° by using the easy to use Click-Set disc.
- This series comes with 6 interchangeable nozzles with a discharge range between 5.6 – 19.6 gpm (1,27 – 4,45 m³/hr).
- All models come with a rubber protective cap.

- The built in slip clutch protects the gears and motor from damage when adjusting for a part circle. If the rotor is manually moved out of position it will automatically reset to the defined pattern.
- NIR² (Nozzle Insertion / Radius Reduction) eliminates the need to remove the cap while fine tuning the radius and inserting the nozzle.
- 7000 comes in two styles: heavy duty stainless version with anti-drain valve (ADV) and the standard version with ADV.



7000



- The 7500 Pro Series 1" (25,4 mm) inlet series rotors are constructed of High impact plastic and all internal metal parts are made of stainless steel.
- The arc will adjust from 40° – 360° by using the easy to use Click-Set disc.
- This series comes with 6 interchangeable nozzles with a discharge range between 9.4 – 27.5 gpm (2,13 – 6,24 m³/hr).
- All models come with a rubber protective cap.

- The built in slip clutch protects the gears and motor from damage when adjusting for a part circle. If the rotor is manually moved out of position it will automatically reset to the defined pattern.
- NIR² (Nozzle Insertion / Radius Reduction) eliminates the need to remove the cap while fine tuning the radius and inserting the nozzle.
- 7500 comes in two styles: stainless version with anti-drain valve (ADV) and the high speed stainless version with ADV.



7500



MODELS

5500 PRO

Standard

5501 PRO

Shrub head

5505 PRO

Stainless steel sleeve, heavy-duty spring, anti-drain valve (ADV) and locking screw

5512 PRO

12" (30,5 cm) High-Pop, heavy-duty spring and anti-drain valve (ADV)

Accessories

6090

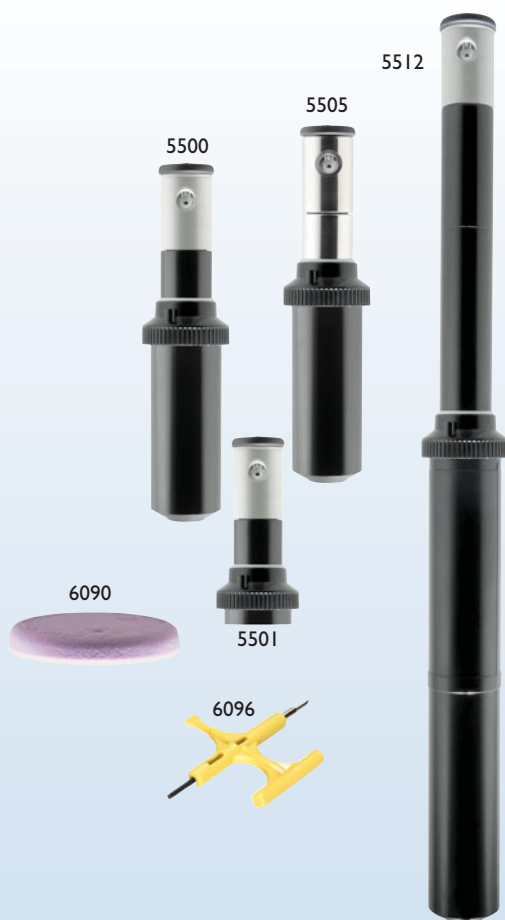
Lavender Cover

6096

Wrench

6099

Anti-drain valve (not shown)



Radius reduction
adjustment hole



Pull-up slot

SPECIFICATIONS

OPERATING RANGE:

20-65 psi (1,4 – 4,5 bar) (5500, 5501)

25-65 psi (1,7 – 4,5 bar) (5505, 5512)

MAXIMUM PRESSURE:

75 psi (5,2 bar)

DISCHARGE:

0.5 to 2.5 gpm (0,11 – 0,57 m³/hr)

SPRAY TRAJECTORY:

13°

POP-UP HEIGHT:

4" (10 cm) (5500, 5505)

12" (30,5 cm) (5512)

BODY HEIGHT:

7½" (19 cm) (5501)

7¾" (18,7 cm) (5500, 5505)

16¾" (43 cm) (5512)

EXPOSED CAP DIAMETER:

1⅞" (4,7 cm)

CAP DIAMETER:

2⅞" (7,3 cm)

TYPE OF CAP:

Rubber with locking screw

INLET SIZE:

¾" (19 mm) female (NPT and BSP)

SCREEN MESH:

.045 sq. in. (1,14 mm²) / 1150 micron

ADV MODELS:

Holds back up to 10' (3 m) difference in elevation

PER BOX:

10 (5512)

20

FEATURES

- Bayonet protective cap
- NIR² feature (Nozzle Insertion/Radius Reduction) on all models eliminates the need to remove the cap for nozzle adjustments
- Four interchangeable Acu-Cover nozzles ranging from 0.5 to 2.5 gpm (0.11 – 0.57 m³/hr)
- 5512 Pro pops up a full 12" (30.5 cm). Ideal for shrubs and ground cover areas, at the base of hillsides where risers are not appropriate and where liability is a concern
- Better pattern coverage than turning down a mid-range gear drive
- Water lubricated gear motor
- Click-Set[®] collars are quick and easy to adjust
- Continuous 360° rotation or part-circle adjustable 40° to 310°
- Ratcheting slip clutch protects gears and motor from damage while adjusting turret for part-circle adjustments - wet or dry
- Wrench, piston clamp and installation instructions included (Model 5501 has no clamp)



5500 PRO SERIES

Nozzle color ○
13° trajectory



Pressure	Max Radius	Min Radius	Discharge	Precipitation Rate¹		Nozzle Number	Pressure	Max Radius	Min Radius	Discharge	Precipitation Rate¹			
PSI	FT	FT	GPM	IN/HR■	IN/HR▲		BAR	kPa	m	m	L/min	m³/hr	mm/hr■	mm/hr▲
20	18	14	0.5	0.30	0.37	51	1.4	138	5.5	4.1	1.9	0.11	7.5	9.4
35	20	15	0.7	0.34	0.42		2.5	242	6.1	4.6	2.6	0.16	8.6	10.7
50	21	16	0.8	0.35	0.44		3.5	345	6.4	4.8	3.0	0.18	8.9	11.1
20	20	15	0.8	0.39	0.48	52	1.4	138	6.1	4.6	3.0	0.18	9.8	12.2
35	24	18	1.2	0.40	0.50		2.5	242	7.3	5.5	4.5	0.27	10.2	12.7
50	25	19	1.3	0.40	0.50		3.5	345	7.6	5.7	4.9	0.30	10.2	12.7
20	22	17	1.1	0.44	0.55	53	1.4	138	6.7	5.0	4.2	0.25	11.1	13.9
35	27	20	1.6	0.42	0.53		2.5	242	8.2	6.2	6.1	0.36	10.7	13.4
50	28	21	1.8	0.44	0.55		3.5	345	8.5	6.4	6.8	0.41	11.2	14.0
20	23	17	1.6	0.58	0.73	54	1.4	138	7.0	5.3	6.1	0.36	14.8	18.5
35	31	23	2.2	0.44	0.55		2.5	242	9.5	7.1	8.3	0.50	11.2	14.0
50	32	24	2.5	0.47	0.59		3.5	345	9.8	7.3	9.5	0.57	11.9	14.9

¹ Precipitation rates for square and triangular spacing calculated at 50% of diameter for half-circle operation. Assumes zero wind for precipitation and radius. Adjust for local conditions.



MODELS

6000 PRO

Standard

6001 PRO

Shrub head

6002 PRO

Heavy-duty spring and anti-drain valve (ADV)

6005 PRO

Stainless steel sleeve, heavy-duty spring, anti-drain valve (ADV) and locking screw

6006

6000 Pro with preinstalled lavender cap for reclaimed water usage

Note: Any orders for the 6006 may require a 4 week lead time.

6000-7

Standard with factory installed #7 nozzle

6012 PRO

12" (30,5 cm) High-Pop, heavy-duty spring and anti-drain valve (ADV)



Accessories

6090

Lavender Cover

6096

Wrench

6099

Anti-drain valve (not shown)

Radius reduction
adjustment hole



Pull-up slot

SPECIFICATIONS

OPERATING RANGE:

20-65 psi (1,4 – 4,5 bar) (6000, 6001, 6002)

25-65 psi (1,7 – 4,5 bar) (6005, 6012)

MAXIMUM PRESSURE:

75 psi (5,2 bar)

DISCHARGE:

1.0 to 9.5 gpm (0,23 – 2,16 m³/hr).

SPRAY TRAJECTORY:

25°

(13° optional)

POP-UP HEIGHT:

4" (10 cm) (6000, 6005)

12" (30,5 cm) (6012)

BODY HEIGHT:

7 1/2" (19 cm) (6001)

7 3/8" (18,7 cm) (6000, 6005)

16 7/8" (43 cm) (6012)

EXPOSED CAP DIAMETER:

1 7/8" (4,7 cm)

CAP DIAMETER:

2 7/8" (7,3 cm)

TYPE OF CAP:

Rubber with locking screw

INLET SIZE:

3/4" (19 mm) female (NPT and BSP)

SCREEN MESH:

.045 sq. in. (1,14 mm²) / 1150 micron

ADV MODELS:

Holds back up to 10' (3 m) difference in elevation

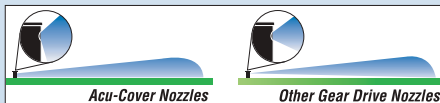
PER BOX:

10 (6012)


20

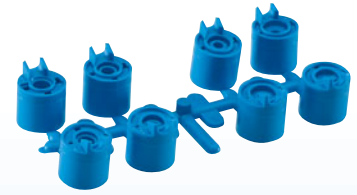
FEATURES

- Bayonet protective cap
- NIR² feature (Nozzle Insertion/Radius Reduction) on all models eliminates the need to remove the cap for nozzle adjustments
- Eight interchangeable Acu-Cover nozzles ranging from 1.0 to 9.5 gpm (0.23 – 2.16 m³/hr).
- Seven optional low-angle nozzles (13°) for windy areas or for throwing under trees
- Proven reliability of the water driven gear motor
- 6012 Pro pops up a full 12" (30.5 cm). Ideal for shrubs and ground cover areas, at the base of hillsides where risers are not appropriate and where liability is a concern
- Click-Set[®] collars are quick and easy to adjust
- Continuous 360° rotation or part-circle adjustable 40° to 310°
- Ratcheting slip clutch protects gears and motor from damage while adjusting turret for part-circle adjustments - wet or dry
- Wrench, piston clamp and installation instructions included (Model 6001 has no clamp)



6000 PRO SERIES


Nozzle color 
25° trajectory



Pressure	Max Radius	Min Radius	Discharge	Precipitation Rate¹		Nozzle Number	Pressure		Max Radius	Min Radius	Discharge	Precipitation Rate¹		
PSI	FT	FT	GPM	IN/HR	IN/HR▲		BAR	kPa	m	m	L/min	m³/hr	mm/hr■	mm/hr▲
20	30	23	1.0	0.21	0.27	4	1.4	138	9.2	6.9	3.8	0.23	5.4	6.8
35	31	23	1.4	0.28	0.35		2.5	242	9.5	7.1	5.3	0.32	7.1	8.9
50	34	26	1.7	0.28	0.35		3.5	345	10.4	7.8	6.4	0.39	7.2	9.0
20	33	25	1.2	0.21	0.26	5	1.4	138	10.1	7.5	4.5	0.27	5.4	6.7
35	37	28	1.6	0.23	0.28		2.5	242	11.3	8.5	6.1	0.36	5.7	7.1
50	38	29	1.9	0.25	0.32		3.5	345	11.6	8.7	7.2	0.43	6.4	8.0
20	32	24	1.4	0.26	0.33	6	1.4	138	9.8	7.3	5.3	0.32	6.7	8.3
35	38	29	1.9	0.25	0.32		2.5	242	11.6	8.7	7.2	0.43	6.4	8.0
50	40	30	2.3	0.28	0.35		3.5	345	12.2	9.2	8.7	0.52	7.0	8.8
20	38	29	2.2	0.29	0.37	7	1.4	138	11.6	8.7	8.3	0.50	7.5	9.3
35	40	30	2.7	0.33	0.41		2.5	242	12.2	9.2	10.2	0.61	8.3	10.3
50	41	31	3.1	0.36	0.44		3.5	345	12.5	9.4	11.7	0.70	9.0	11.3
35	38	29	3.1	0.41	0.52	8	2.5	242	11.6	8.7	11.7	0.70	10.5	13.1
50	42	32	4.0	0.44	0.54		3.5	345	12.8	9.6	15.1	0.91	11.1	13.8
65	43	32	4.6	0.48	0.60		4.6	449	13.1	9.8	17.4	1.04	12.2	15.2
35	42	32	4.2	0.46	0.57	9	2.5	242	12.8	9.6	15.9	0.95	11.6	14.5
50	47	35	5.4	0.47	0.59		3.5	345	14.3	10.8	20.4	1.23	12.0	14.9
65	48	36	6.3	0.53	0.66		4.6	449	14.6	11.0	23.8	1.43	13.4	16.7
35	42	32	5.4	0.59	0.74	10	2.5	242	12.8	9.6	20.4	1.23	15.0	18.7
50	48	36	6.8	0.57	0.71		3.5	345	14.6	11.0	25.7	1.54	14.4	18.0
65	49	37	8.0	0.64	0.80		4.6	449	14.9	11.2	30.3	1.82	16.3	20.3
35	42	32	6.4	0.70	0.87	11	2.5	242	12.8	9.6	24.2	1.45	17.7	22.1
50	48	36	8.1	0.68	0.84		3.5	345	14.6	11.0	30.7	1.84	17.2	21.4
65	51	38	9.5	0.70	0.88		4.6	449	15.6	11.7	36.0	2.16	17.9	22.3

¹ Precipitation rates for square and triangular spacing calculated at 50% of diameter for half-circle operation. Assumes zero wind for precipitation and radius. Adjust for local conditions.

6095 LOW ANGLE

Nozzle color 
13° trajectory
(optional for 6000 series only)



Pressure	Max Radius	Min Radius	Discharge	Precipitation Rate¹		Nozzle Number	Pressure	Max Radius	Min Radius	Discharge	Precipitation Rate¹			
PSI	FT	FT	GPM	IN/HR	IN/HR▲		BAR	kPa	m	m	L/min	m³HR	mm/hr■	mm/hr▲
20	26	20	0.9	0.26	0.32	4	1.4	138	7.9	5.9	3.4	0.20	6.5	8.1
35	33	25	1.3	0.23	0.29		2.5	242	10.1	7.5	4.9	0.30	5.8	7.3
50	34	26	1.5	0.25	0.31		3.5	345	10.4	7.8	5.7	0.34	6.3	7.9
20	26	20	1.1	0.31	0.39	5	1.4	138	7.9	5.9	4.2	0.25	8.0	9.9
35	33	25	1.4	0.25	0.31		2.5	242	10.1	7.5	5.3	0.32	6.3	7.8
50	35	26	1.7	0.27	0.33		3.5	345	10.7	8.0	6.4	0.39	6.8	8.5
20	26	20	1.4	0.40	0.50	6	1.4	138	7.9	5.9	5.3	0.32	10.1	12.6
35	33	25	1.9	0.34	0.42		2.5	242	10.1	7.5	7.2	0.43	8.5	10.6
50	36	27	2.3	0.34	0.43		3.5	345	11.0	8.2	8.7	0.52	8.7	10.8
20	31	23	2.5	0.50	0.62	7	1.4	138	9.5	7.1	9.5	0.57	12.7	15.9
35	35	26	3.1	0.49	0.61		2.5	242	10.7	8.0	11.7	0.70	12.4	15.4
50	37	28	3.5	0.49	0.61		3.5	345	11.3	8.5	13.2	0.79	12.5	15.6
35	32	24	3.2	0.60	0.75	8	2.5	242	9.8	7.3	12.1	0.73	15.3	19.1
50	38	29	4.0	0.53	0.67		3.5	345	11.6	8.7	15.1	0.91	13.6	16.9
65	39	29	4.7	0.60	0.74		4.6	449	11.9	8.9	17.8	1.07	15.1	18.9
35	34	26	3.9	0.65	0.81	9	2.5	242	10.4	7.8	14.8	0.89	16.5	20.6
50	37	28	4.9	0.69	0.86		3.5	345	11.3	8.5	18.5	1.11	17.5	21.8
65	40	30	5.7	0.69	0.86		4.6	449	12.2	9.2	21.6	1.29	17.4	21.7
35	33	25	5.1	0.90	1.12	10	2.5	242	10.1	7.5	19.3	1.16	22.9	28.6
50	39	29	6.4	0.81	1.01		3.5	345	11.9	8.9	24.2	1.45	20.6	25.7
65	42	32	7.5	0.82	1.02		4.6	449	12.8	9.6	28.4	1.70	20.8	25.5

MODELS

6500 PRO(6510)

Standard with anti-drain valve (ADV)

6503 PRO(6513)

High speed rotation and stainless steel piston sleeve

6505 PRO(6515)

Stainless steel piston sleeve, heavy-duty spring and anti-drain valve (ADV)

Note: Versions in parenthesis feature BSP threading

Accessories

6090

Lavender Cover

6096

Wrench

6099

Anti-drain valve (not shown)



Radius reduction
adjustment hole



Pull-up slot

SPECIFICATIONS

OPERATING RANGE:

40-75 psi (2,7 – 5,2 bar)

MAXIMUM PRESSURE:

80 psi (5,5 bar)

DISCHARGE:

2.8 to 13.2 gpm (0,64 – 3,00 m³/hr)

SPRAY TRAJECTORY:

25°

POP-UP HEIGHT:

4" (10 cm)

BODY HEIGHT:

8" (20,3 cm)

EXPOSED CAP DIAMETER:

1 7/8" (4,7 cm)

CAP DIAMETER:

2 7/8" (7,3 cm)

TYPE OF CAP:

Rubber with locking screw

INLET SIZE:

1" (25,4 mm) female NPT (6500, 6503, 6505)

1" (25,4 mm) female BSP (6510, 6513, 6515)

SCREEN MESH:

.045 sq. in. (1, 14 mm²) / 1150 micron

ADV MODELS:

Holds back up to 10' (3 m) difference
in elevation

PER BOX:

20

FEATURES

- Bayonet protective cap
- NIR² feature (Nozzle Insertion/Radius Reduction) on all models eliminates the need to remove the cap for nozzle adjustments
- Four interchangeable Acu-Cover nozzles ranging from 2.8 to 13.2 gpm (0.64 – 3.00 m³/hr)
- Rubber cap has locking screw (6092) for vandal protection (standard on all units)
- Proven reliability of the water driven gear motor
- Click-Set[®] collars are quick and easy to adjust
- Continuous 360° rotation or part-circle adjustment 40° to 310°
- Ratcheting slip clutch protects gears and motor from damage while adjusting turret for part-circle adjustments - wet or dry
- 6503 Pro offers one minute revolution for quick syringe applications
- Heavy-duty case with stabilizer ribs increases stability even in loose soil
- Wrench, piston clamp and installation instructions included

6500 PRO SERIES

Nozzle color ●
25° trajectory



Pressure	Max Radius	Min Radius	Discharge	Precipitation Rate ¹	Nozzle Number	Pressure	Max Radius	Min Radius	Discharge	Precipitation Rate ¹
PSI	FT	FT	GPM	IN/HR■ IN/HR▲		BAR	kPa	m	m	L/min m³/hr
45	44	33	2.8	0.23 0.29	61	3.1	310	13.4	10.1	10.6 0.64
60	46	35	3.3	0.27 0.34		4.1	414	14.0	10.5	12.5 0.75
75	46	35	3.8	0.31 0.39		5.2	517	14.0	10.5	14.4 0.86
45	48	36	5.2	0.39 0.49	62	3.1	310	14.6	11.0	19.7 1.18
60	52	39	6.1	0.41 0.52		4.1	414	15.9	11.9	23.1 1.39
75	54	41	7.0	0.44 0.54		5.2	517	16.5	12.4	26.5 1.59
45	51	38	7.4	0.52 0.65	63	3.1	310	15.6	11.7	28.0 1.68
60	54	41	8.8	0.55 0.68		4.1	414	16.5	12.4	33.3 2.00
75	55	41	10.1	0.60 0.75		5.2	517	16.8	12.6	38.2 2.29
45	52	39	9.7	0.67 0.83	64	3.1	310	15.9	11.9	36.7 2.20
60	57	43	11.6	0.66 0.82		4.1	414	17.4	13.0	43.9 2.63
75	60	45	13.2	0.66 0.84		5.2	517	18.3	13.7	50.0 3.00

¹ Precipitation rates for square and triangular spacing calculated at 50% of diameter for half-circle operation. Assumes zero wind for precipitation and radius. Adjust for local conditions.

6503/6513 PRO HIGH SPEED

Nozzle color ●
25° trajectory



Pressure	Max Radius	Min Radius	Discharge	Precipitation Rate ¹	Nozzle Number	Pressure	Max Radius	Min Radius	Discharge	Precipitation Rate ¹
PSI	FT	FT	GPM	IN/HR■ IN/HR▲		BAR	kPa	m	m	L/min m³/hr
45	43	32	2.8	0.29 0.34	61	3.1	310	13.1	9.8	10.6 0.64
60	43	32	3.3	0.34 0.40		4.1	414	13.1	9.8	12.5 0.75
75	43	32	3.8	0.40 0.46		5.2	517	13.1	9.8	14.4 0.86
45	44	33	5.2	0.52 0.60	62	3.1	310	13.4	10.1	19.7 1.18
60	46	35	6.1	0.56 0.64		4.1	414	14.0	10.5	23.1 1.39
75	47	35	7.0	0.61 0.71		5.2	517	14.3	10.7	26.5 1.59
45	48	36	7.4	0.62 0.72	63	3.1	310	14.6	11.0	28.0 1.68
60	50	38	8.8	0.68 0.79		4.1	414	15.2	11.4	33.3 2.00
75	50	38	10.1	0.78 0.90		5.2	517	15.2	11.4	38.2 2.29
45	46	35	9.7	0.89 1.02	64	3.1	310	14.0	10.5	36.7 2.20
60	49	37	11.6	0.93 1.08		4.1	414	14.9	11.2	43.9 2.63
75	51	38	13.2	0.98 1.13		5.2	517	15.5	11.7	50.0 3.00

¹ Precipitation rates for square and triangular spacing calculated at 50% of diameter for half-circle operation. Assumes zero wind for precipitation and radius. Adjust for local conditions.



MODELS

7000 (7010E) PRO

Standard with anti-drain valve (ADV)

7005 (7015E)

Stainless steel piston sleeve, heavy-duty spring and anti-drain valve (ADV)

Note: "E" versions (or versions in parenthesis) feature BSP threading



Accessories

6101

Sod Cup Kit

6102

Lavender Cover

6097

Wrench



SPECIFICATIONS

OPERATING RANGE:

40-90 psi (2,7 – 6,2 bar)

MAXIMUM PRESSURE:

100 psi (6,9 bar)

DISCHARGE:

5.6 to 19.6 gpm (1,27 – 4,45 m³/hr)

SPRAY TRAJECTORY:

25°

POP-UP HEIGHT:

4½" (11,4 cm)

BODY HEIGHT:

9½" (24,1 cm)

EXPOSED CAP DIAMETER:

2½" (6,3 cm)

TYPE OF CAP:

Rubber with locking screw

INLET SIZE:

1" (25,4 mm) female NPT (7000, 7015)

1" (25,4 mm) female BSP (7010E, 7015E)

SCREEN MESH:

.045 sq. in. (1,14 mm²) / 150 micron

ADV MODELS:

Holds back up to 10' (3 m) difference in elevation


PER BOX:

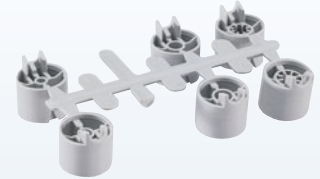
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FEATURES

- NIR² feature (Nozzle Insertion/Radius Reduction) on all models eliminates the need to remove the cap for nozzle adjustments
- Six interchangeable Acu-Cover nozzles ranging from 5.6 to 19.6 gpm (1,27 – 4,45 m³/hr)
- Rubber cap has two locking screws for vandal protection
- Click-Set[®] collars are quick and easy to adjust
- Gear drive may be installed ½" (1,3 cm) below grade
- Proven reliability of the water driven gear motor
- Continuous 360° rotation or part-circle adjustable 40° to 310°
- Heavy-duty case with stabilizer ribs increases stability even in loose soil
- Ratcheting slip clutch protects gears and motor from damage while adjusting turret for part-circle adjustments - wet or dry
- Wrench, piston clamp and installation instructions included

PRO 7000 SERIES

Nozzle color 
25° trajectory



Pressure	Max Radius	Min Radius	Discharge	Precipitation Rate ¹	Nozzle Number	Pressure	Max Radius	Min Radius	Discharge	Precipitation Rate ¹
PSI	FT	FT	GPM	IN/HR ■ IN/HR ▲		BAR	kPa	m	m	L/min m³/HR mm/hr ■ mm/hr ▲
45	41	31	5.6	0.64 0.74	1	3.1	310	12.5	9.4	21.2 1.27 16.3 18.8
60	42	32	5.9	0.64 0.74		4.1	414	12.8	9.6	22.3 1.34 16.4 18.9
75	42	32	7.2	0.79 0.91		5.2	517	12.8	9.6	27.3 1.64 20.0 23.0
90	43	32	7.8	0.81 0.94		6.2	621	13.1	9.8	29.5 1.77 20.6 23.8
45	48	36	6.9	0.58 0.67	2	3.1	310	14.6	11.0	26.1 1.57 14.6 16.9
60	49	37	7.8	0.63 0.72		4.1	414	14.9	11.2	29.5 1.77 15.9 18.3
75	49	37	8.9	0.71 0.82		5.2	517	14.9	11.2	33.7 2.02 18.1 20.9
90	50	38	9.8	0.75 0.87		6.2	621	15.2	11.4	37.1 2.23 19.2 22.1
45	52	39	8.7	0.62 0.72	3	3.1	310	15.9	11.9	32.9 1.98 15.7 18.2
60	53	40	9.9	0.68 0.78		4.1	414	16.2	12.1	37.5 2.25 17.2 19.9
75	53	40	11.3	0.77 0.89		5.2	517	16.2	12.1	42.8 2.57 19.7 22.7
90	54	41	12.4	0.82 0.95		6.2	621	16.5	12.3	46.9 2.82 20.8 24.0
45	54	41	10.7	0.71 0.82	4	3.1	310	16.5	12.3	40.5 2.43 17.9 20.7
60	55	41	12.2	0.78 0.90		4.1	414	16.8	12.6	46.2 2.77 19.7 22.8
75	56	42	14.0	0.86 0.99		5.2	517	17.1	12.8	53.0 3.18 21.8 25.2
90	58	44	15.3	0.88 1.01		6.2	621	17.7	13.3	57.9 3.48 22.2 25.7
45	55	41	11.5	0.73 0.85	5	3.1	310	16.8	12.6	43.5 2.61 18.6 21.5
60	57	43	13.2	0.78 0.90		4.1	414	17.4	13.0	50.0 3.00 19.9 22.9
75	57	43	15.1	0.89 1.03		5.2	517	17.4	13.0	57.2 3.43 22.7 26.2
90	59	44	16.4	0.91 1.05		6.2	621	18.0	13.5	62.1 3.73 23.0 26.6
45	56	42	13.7	0.84 0.97	6	3.1	310	17.1	12.8	51.9 3.11 21.4 24.7
60	59	44	15.7	0.87 1.00		4.1	414	18.0	13.5	59.4 3.57 22.1 25.5
75	61	46	18.8	0.97 1.12		5.2	517	18.6	13.9	71.2 4.27 24.7 28.5
90	63	47	19.6	0.95 1.10		6.2	621	19.2	14.4	74.2 4.45 24.1 27.9

¹ Precipitation rates for square and triangular spacing calculated at 50% of diameter for half-circle operation. Assumes zero wind for precipitation and radius. Adjust for local conditions.



MODELS

7500 (7510E) PRO

Standard with anti-drain valve (ADV)

7503 (7513E)

High speed rotation, stainless steel piston sleeve, and anti-drain valve (ADV)

Note: "E" versions (or versions in parenthesis) feature BSP threading



Accessories

6101

Sod Cup Kit

6102

Lavender Cover

6097

Wrench



SPECIFICATIONS

OPERATING RANGE:

40-90 psi (2,7 – 6,2 bar)

MAXIMUM PRESSURE:

100 psi (6,9 bar)

DISCHARGE:

9.4 to 27.5 gpm (2,13 – 6,24 m³/hr)

SPRAY TRAJECTORY:

25°

POP-UP HEIGHT:

4½" (11,4 cm)

BODY HEIGHT:

9½" (24,1 cm)

EXPOSED CAP DIAMETER:

2½" (6,3 cm)

TYPE OF CAP:

Rubber with locking screw

INLET SIZE:

1" (25,4 mm) female NPT (7500, 7503)

1" (25,4 mm) female BSP (7510E, 7513E)

SCREEN MESH:

.045 sq. in. (1,14 mm²) / 1150 micron

ADV MODELS:

Holds back up to 10' (3 m) difference in elevation

PER BOX:

10

FEATURES

- NIR² feature (Nozzle Insertion/Radius Reduction) on all models eliminates the need to remove the cap for nozzle adjustments
- Six interchangeable Acu-Cover nozzles ranging from 9.4 to 27.5 gpm (2,13 – 6,24 m³/hr)
- Rubber cap has two locking screws for vandal protection
- Click-Set® collars are quick and easy to adjust
- Gear drive may be installed ½" (1,3 cm) below grade
- Proven reliability of the water driven gear motor
- Continuous 360° rotation or part-circle adjustable 40° to 310°
- Heavy-duty case with stabilizer ribs increases stability even in loose soil
- Ratcheting slip clutch protects gears and motor from damage while adjusting turret for part-circle adjustments - wet or dry
- Wrench, piston clamp and installation instructions included



PRO 7500 SERIES

Nozzle color ●
25° trajectory



Pressure		Max Radius	Min Radius	Discharge	Precipitation Rate ¹		Nozzle Number	Pressure		Max Radius	Min Radius	Discharge	Precipitation Rate ¹	
PSI	FT	FT	FT	GPM	IN/HR	IN/HR▲		BAR	kPa	m	m	L/min	m ³ /hr	mm/hr
45	53	40		9.4	0.64	0.80	3	3.1	310	16.2	12.1	35.6	2.13	16.4
60	56	42		10.9	0.67	0.83		4.1	414	17.1	12.8	41.3	2.47	17.0
75	57	43		12.2	0.72	0.90		5.2	517	17.4	13.0	46.2	2.77	18.4
90	58	44		13.4	0.77	0.96		6.2	621	17.7	13.3	50.7	3.04	19.5
45	54	41		11.4	0.75	0.94	4	3.1	310	16.5	12.4	43.1	2.59	19.1
60	59	44		13.2	0.73	0.91		4.1	414	18.0	13.5	50.0	3.00	18.6
75	61	46		14.9	0.77	0.96		5.2	517	18.6	14.0	56.4	3.38	19.6
90	62	47		16.4	0.82	1.02		6.2	621	18.9	14.2	62.1	3.72	20.9
45	57	43		12.3	0.73	0.91	5	3.1	310	17.4	13.0	46.6	2.79	18.5
60	61	46		14.4	0.75	0.93		4.1	414	18.6	14.0	54.5	3.27	18.9
75	65	49		16.2	0.74	0.92		5.2	517	19.8	14.9	61.3	3.68	18.8
90	66	50		17.8	0.79	0.98		6.2	621	20.1	15.1	67.4	4.04	20.0
60	64	48		17.5	0.82	1.03	6	4.1	414	19.5	14.6	66.2	3.97	20.9
75	68	51		20.0	0.83	1.04		5.2	517	20.7	15.6	75.7	4.54	21.2
90	68	51		22.1	0.92	1.15		6.2	621	20.7	15.6	83.6	5.02	23.4
60	65	49		19.6	0.89	1.11	7	4.1	414	19.8	14.9	74.2	4.45	22.7
75	69	52		21.3	0.86	1.07		5.2	517	21.0	15.8	80.6	4.84	21.9
90	73	55		24.6	0.89	1.11		6.2	621	22.3	16.7	93.1	5.58	22.6
60	66	50		21.8	0.96	1.20	8	4.1	414	20.1	15.1	82.5	4.95	24.5
75	71	53		24.8	0.95	1.18		5.2	517	21.7	16.2	93.9	5.63	24.1
90	74	56		27.5	0.97	1.21		6.2	621	22.6	16.9	104.1	6.24	24.6

¹ Precipitation rates for square and triangular spacing calculated at 50% of diameter for half-circle operation. Assumes zero wind for precipitation and radius. Adjust for local conditions.

PRO 7503/7513

HIGH SPEED

Nozzle color ●
25° trajectory



Pressure		Max Radius	Min Radius	Discharge	Precipitation Rate ¹		Nozzle Number	Pressure		Max Radius	Min Radius	Discharge	Precipitation Rate ¹	
PSI	FT	FT	FT	GPM	IN/HR	IN/HR▲		BAR	kPa	m	m	L/min	m ³ /hr	mm/hr
45	48	36		9.4	0.79	0.98	3	3.1	310	14.6	11.0	35.6	2.13	20.0
60	50	38		10.9	0.84	1.05		4.1	414	15.3	11.4	41.3	2.47	21.3
75	50	38		12.2	0.94	1.17		5.2	517	15.3	11.4	46.2	2.77	23.9
90	53	40		13.4	0.92	1.15		6.2	621	16.2	12.1	50.7	3.04	23.3
45	51	38		11.4	0.84	1.05	4	3.1	310	15.6	11.7	43.1	2.59	21.4
60	54	41		13.2	0.87	1.09		4.1	414	16.5	12.4	50.0	3.00	22.1
75	55	41		14.9	0.95	1.18		5.2	517	16.8	12.6	56.4	3.38	24.1
90	55	41		16.4	1.04	1.30		6.2	621	16.8	12.6	62.1	3.72	26.5
45	52	39		12.3	0.88	1.09	5	3.1	310	15.9	11.9	46.6	2.79	22.3
60	55	41		14.4	0.92	1.14		4.1	414	16.8	12.6	54.5	3.27	23.3
75	57	43		16.2	0.96	1.20		5.2	517	17.4	13.0	61.3	3.68	24.4
90	58	44		17.8	1.02	1.27		6.2	621	17.7	13.3	67.4	4.04	25.9
60	58	44		17.5	1.00	1.25	6	4.1	414	17.7	13.3	66.2	3.97	25.4
75	60	45		20.0	1.07	1.33		5.2	517	18.3	13.7	75.7	4.54	27.2
90	61	46		22.1	1.14	1.43		6.2	621	18.6	14.0	83.6	5.02	29.1
60	58	44		19.6	1.12	1.40	7	4.1	414	17.7	13.3	74.2	4.45	28.5
75	60	45		21.3	1.14	1.42		5.2	517	18.3	13.7	80.6	4.84	28.9
90	61	46		24.6	1.27	1.59		6.2	621	18.6	14.0	93.1	5.58	32.3
60	59	44		21.8	1.21	1.50	8	4.1	414	18.0	13.5	82.5	4.95	30.6
75	61	46		24.8	1.28	1.60		5.2	517	18.6	14.0	93.9	5.63	32.6
90	64	48		27.5	1.29	1.61		6.2	621	19.5	14.6	104.1	6.24	32.8

¹ Precipitation rates for square and triangular spacing calculated at 50% of diameter for half-circle operation. Assumes zero wind for precipitation and radius. Adjust for local conditions.



SPRAYS

APPLICATIONS	63XA	63XB	63XC	63XD	63XE
TURF GRASS	✓	✓	✓	✓	✓
GROUND COVER	✓	✓	✓	✓	✓
RESIDENTIAL	✓	✓	✓	✓	✓
RECLAIMED WATER	✓	✓	✓	✓	✓
COMMERCIAL/MUNICIPAL	✓	✓	✓	✓	✓
HIGH TRAFFIC AREAS			✓	✓	✓
HIGH VANDALISM AREAS			✓	✓	✓
WATER CONSERVATION — iStop™			✓	✓	✓
FEATURES					
ADV — FACTORY INSTALLED		✓			✓
ADV — FIELD RETROFIT OPTION	✓		✓	✓	
PRESSURE REGULATION				✓	✓
WATER CONSERVATION — iStop™			✓	✓	✓

PRODUCT OVERVIEW

Over the past year, the spray head series from Signature has been reinvented. We've combined the best of our two previous lines into one and added a major new feature set. Now whether you need just a basic production spray line or a top end specification driven product with no equal, Signature has the product you need.

Standard Models



63XA

STANDARD

- High impact corrosion resistant construction with stainless steel metal components.
- Dome cap design will ensure sand and debris flush away from the riser to provide for longer life.
- Double lipped wiper seal will help keep debris away from the riser.
- $\frac{1}{2}$ " (12,7 mm) bottom inlet is standard on all models.
- All models can be upgraded with an anti-drain valve (ADV) and the new iStop™.
- Standard male thread on the riser.
- All models can be upgraded to use iStop™ with installation of retrofit kit 63XR.



63XB

ADV ONLY

- The 63XB series comes with all the same great features as the standard 63XA model with the addition of the anti-drain valve (ADV).
- The anti-drain valve (ADV) will prevent low head drainage and prevent flooding or erosion.
- Will hold back up to 10 ft (3 m) difference in elevation.
- All models can be upgraded to use iStop™ with installation of retrofit kit 63XR.

NOZZLES



- Wide range of matched precipitation fixed spray.
- Color coded bodies for easy identification.
- Multi-arc nozzles from 8 ft – 17 ft (2.4 m – 5.2 m) radius that can be adjusted from 0° - 360°.
- Fixed spray nozzles from 8 ft – 15 ft (2.4 m – 4.6 m) radius in all the various patterns.
- Wide variety of special pattern nozzles.

Advanced Models using iStop™

WITH iStop™

- The 63XC series comes with all the same great features as the standard 63XA model with the addition of the new iStop™ feature.
- The new iStop™ saves water by stopping the flow of water on broken or damaged heads as well as stopping the flow of water during nozzle maintenance.

63XC



WITH iStop™ AND PR

- The 63XD series comes with the iStop™ feature and the addition of a pressure regulating valve.
- The new iStop™ saves water by stopping the flow of water on broken or damaged heads as well as stopping the flow of water during nozzle maintenance.
- The pressure regulator maintains optimum nozzle performance and prevents misting.

63XD



WITH iStop™, PR AND ADV

- The 63XE series comes with the iStop™ feature, a pressure regulating valve, and a factory installed anti-drain valve (ADV).
- The new iStop™ saves water by stopping the flow of water on broken or damaged heads as well as stopping the flow of water during nozzle maintenance.
- The pressure regulator maintains optimum nozzle performance and prevents misting.
- The anti-drain valve (ADV) will prevent low head drainage and prevent flooding or erosion.
- Will hold back up to 10 ft (3 m) difference in elevation.

63XE



- Retrofit any existing 6300 sprayhead with new iStop™.
- The new iStop™ saves water by stopping the flow of water on broken or damaged heads as well as stopping the flow of water during nozzle maintenance.

63XR

iStop™
RETROFIT
KITS



MODELS

STANDARD

63XA-02

2½" (6,3 cm) Pop-up

63XA-04

4" (10,2 cm) Pop-up

63XA-06

6" (15,2 cm) Pop-up

63XA-12

12" (30,5 cm) Pop-up

ADV ONLY

63XB-02

2½" (6,3 cm) Pop-up

63XB-04

4" (10,2 cm) Pop-up

63XB-06

6" (15,2 cm) Pop-up

63XB-12

12" (30,5 cm) Pop-up

WITH iStop™

63XC-02

2½" (6,3 cm) Pop-up

63XC-04

4" (10,2 cm) Pop-up

63XC-06

6" (15,2 cm) Pop-up

63XC-12

12" (30,5 cm) Pop-up

WITH iStop™ AND PR

63XD-04

4" (10,2 cm) Pop-up

63XD-06

6" (15,2 cm) Pop-up

63XD-12

12" (30,5 cm) Pop-up

WITH iStop™, PR AND ADV

63XE-04

4" (10,2 cm) Pop-up

63XE-06

6" (15,2 cm) Pop-up

63XE-12

12" (30,5 cm) Pop-up



SPECIFICATIONS

OPERATING RANGE:

15-60 psi (1-4,1 bar)

OPTIMUM PRESSURE:

30 psi (2 bar)

MAXIMUM PRESSURE:

60 psi (4,1 bar)

SEALING PRESSURE:

10 psi (0,7 bar)

POP-UP HEIGHT:

2½" (6,3 cm) (63X-02)

4" (10,2 cm) (63X-04)

6" (15,2 cm) (63X-06)

12" (30,5 cm) (63X-12)

BODY HEIGHT:

3½" (8,9 cm) (63X-02)

3⅞" (9,8 cm) (63X-04)

5⅞" (15 cm) (63X-06)

15" (38,1 cm) (63X-12)

SHRUB MODEL AVAILABLE

FLUSH RATE:

0.2 gpm (0,75 l/min)

INLET SIZE:

½" (12,7 mm) NPT Female thread

CHECK HEIGHT:

10 ft (3 m) elevation change

SCREEN MESH:

.045 sq. in. (1,14 mm²) / 150 micron

EFFLUENT CAP AVAILABLE

PER BOX:

50

63X-02 Series, 63X-04 Series, 63X-06 Series

25

63X-12 Series

ACCESSORY FEATURES

iStop™ 63XR Retrofit Kit

- Shuts off if the nozzle is removed
- Shuts off if the riser is broken at any point above the top level of the cap
- Retrofit any existing 6300 sprayhead with new iStop™

6318 (Not Shown)

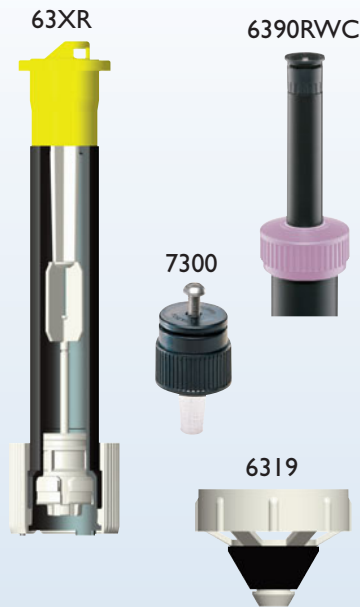
- Adds 6" (15, 24 cm) to any series pop-up
- Perfect for landscape areas that need extra clearance
- It threads directly onto the top of the piston and accepts all Signature spray nozzles

6319

- Anti-drain valve (ADV) helps eliminate low head drainage and puddling. Holds back up to 10 ft (3 m) difference in elevation.

7300

- Provides an umbrella pattern that can be adjusted with a stainless steel set screw
- Bubbler installs on standard 1/2" (12,7 mm) riser and has a maximum flow of 4.9 gpm (7,6 l/min) at 18" (45 cm) radius



iStop™ 63XR Retrofit Kits

63XR-02

2 1/2" (6,3 cm)
Retrofit iStop™ Kit

63XR-04

4" (10,2 cm)
Retrofit iStop™ Kit

63XR-06

6" (15,2 cm)
Retrofit iStop™ Kit

63XR-12

12" (30,5 cm)
Retrofit iStop™ Kit

Standard Accessories

6318

Piston Extension

6319


Anti-drain valve (ADV)

6390RWC

Identifies reclaimed water site

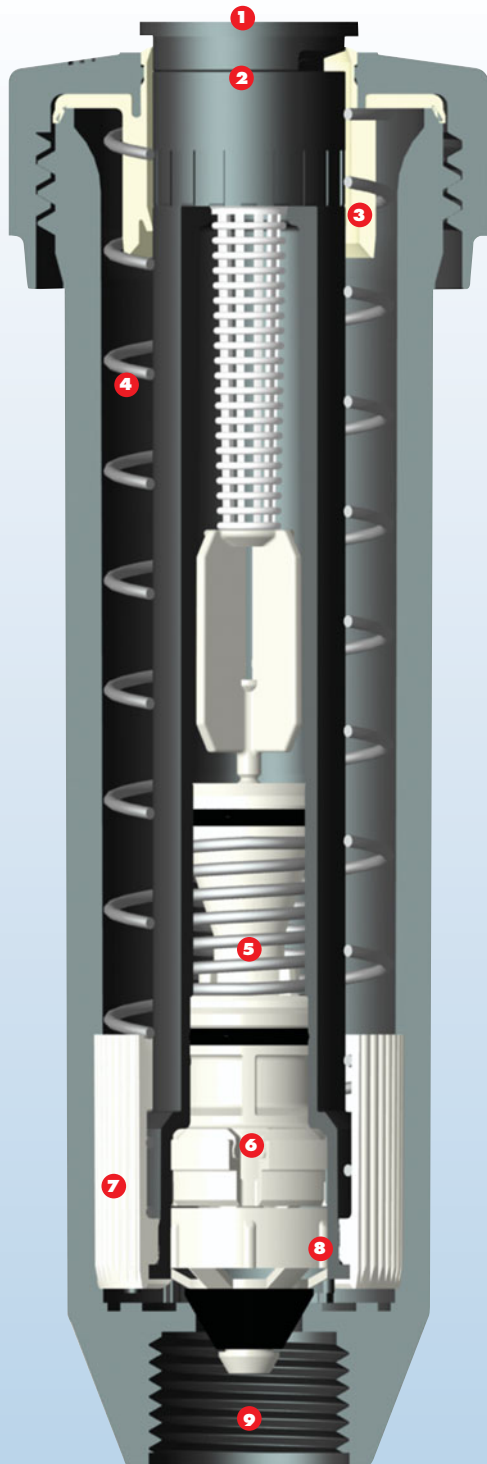
7300

Adjustable Bubbler

Pressure	Radius ¹	Discharge ¹	Model	Pressure		Radius ¹	Discharge ¹	
PSI	FT	GPM		BAR	kPa	m	L/min	m³/hr
20	0.8	2.9	7300 FULL (360°) 	1.4	138	0.2	11.0	0.66
30	0.9	3.5		2.1	207	0.3	13.2	0.79
40	1.1	4.1		2.8	276	0.3	15.5	0.93
50	1.2	4.5		3.5	345	0.4	17.0	1.02
60	1.2	4.9		4.2	414	0.4	18.5	1.11

¹ Radius and flow can be reduced with adjustment screw.





FEATURES/BENEFITS

- ❶ Stainless steel adjustment screw to reduce radius
- ❷ Fixed arc nozzles available in 8 ft, 10 ft, 12 ft, 15 ft (2.4 m, 3 m, 3.65 m and 4.8 m) and Specialty Arcs
 - All arcs balanced within standard radius families
 - Multi-Arc™ nozzles available in 8 ft, 10 ft, 12 ft, 15 ft, and 17 ft (2.4 m, 3 m, 3.65 m and 4.8 m and 5.18 m)
- ❸ Low flush seal allows maximum number of sprays on a line
- ❹ Stainless steel retraction spring to prevent rust and ensure positive retraction
- ❺ Pressure regulator keeps all sprays operating at 30 PSI (2 bar) at the nozzle regardless of inlet pressure
- ❻ The iStop® feature shuts off water flow if nozzle is removed or if riser is broken off any where above cap when popped up
- ❼ Friction collar allows easy riser turn to position spray to desired area
- ❽ Check valve option holds back 10 ft (3 m) of head
- ❾ 1/2" (12,7 mm) NPT female inlet

8' (2,4 m) FIXED PATTERN (5° Trajectory - flat)

Pressure Radius Discharge Precipitation Rate¹				Model	Pressure Radius Discharge Precipitation Rate¹							
PSI	FT. R	GPM	■ IN/HR ▲		BARS	M	M/H L/min	■ MM/HR				
15	6	1.0	2.3	2.8	7284 8F-FLT FULL (360°)	1.1	104	1.8	0.23	3.8	58.4	71.1
20	7	1.2	2.1	2.6		1.4	138	2.1	0.27	4.5	53.3	66.0
25	7	1.2	2.0	2.5		1.8	173	2.1	0.27	4.5	50.8	63.5
30	8	1.5	1.9	2.4		2.1	207	2.4	0.34	5.7	48.2	61.0
15	6	0.5	2.3	2.8	7282 8H-FLT 1/2 (180°)	1.1	104	1.8	0.11	1.9	58.4	71.1
20	7	0.6	2.1	2.6		1.4	138	2.1	0.14	2.3	53.3	66.0
25	7	0.6	2.0	2.5		1.8	173	2.1	0.14	2.3	50.8	63.5
30	8	0.7	1.9	2.3		2.1	207	2.4	0.16	2.6	48.2	61.0
15	6	0.3	2.3	2.8	7281 8Q-FLT 1/4 (90°)	1.1	104	1.8	0.07	1.1	58.4	71.1
20	7	0.3	2.1	2.6		1.4	138	2.1	0.07	1.1	53.3	66.0
25	7	0.3	2.0	2.5		1.8	173	2.1	0.07	1.1	50.8	63.5
30	8	0.4	1.9	2.3		2.1	207	2.4	0.09	1.5	48.2	61.0

10' (3,1 m) FIXED PATTERN (15° Trajectory - low angle)

15	7	1.2	2.3	2.6	7274 10F-LA FULL (360°)	1.1	104	2.1	0.27	4.5	58.4	66.0
20	8	1.3	2.0	2.3		1.4	138	2.4	0.30	4.9	50.8	58.4
25	9	1.4	1.7	2.0		1.8	173	2.7	0.32	5.3	43.2	50.8
30	10	1.6	1.5	1.8		2.1	207	3.1	0.36	6.1	38.1	45.7
15	7	0.6	2.3	2.6	7272 10H-LA 1/2 (180°)	1.1	104	2.1	0.14	2.3	58.4	66.0
20	8	0.6	2.0	2.3		1.4	138	2.4	0.14	2.3	50.8	58.4
25	9	0.7	1.7	2.0		1.8	173	2.7	0.16	2.6	43.2	50.8
30	10	0.8	1.5	1.8		2.1	207	3.1	0.18	3.0	38.1	45.7
15	7	0.3	2.3	2.6	7271 10Q-LA 1/4 (90°)	1.1	104	2.1	0.06	1.1	58.4	66.0
20	8	0.3	2.0	2.3		1.4	138	2.4	0.06	1.1	50.8	58.4
25	9	0.4	1.7	2.0		1.8	173	2.7	0.09	1.5	43.2	50.8
30	10	0.4	1.5	1.8		2.1	207	3.1	0.09	1.5	38.1	45.7

12' (3,7 m) FIXED PATTERN (30° Trajectory - low gallonage)

15	9	1.8	2.1	2.5	7374 12F FULL (360°)	1.1	104	2.7	0.40	6.8	53.3	63.5
20	10	2.1	2.0	2.3		1.4	138	3.1	0.48	7.9	50.8	58.4
25	11	2.4	1.9	2.2		1.8	173	3.4	0.54	9.1	48.2	55.9
30	12	2.6	1.7	2.0		2.1	207	3.7	0.59	9.8	43.2	50.8
15	9	1.4	2.1	2.5	7373 12TQ 3/4 (270°)	1.1	104	2.7	0.32	5.3	53.3	63.5
20	10	1.6	2.0	2.3		1.4	138	3.1	0.36	6.1	50.8	58.4
25	11	1.8	1.9	2.2		1.8	173	3.4	0.41	6.8	48.2	55.9
30	12	2.0	1.7	2.0		2.1	207	3.7	0.45	7.6	43.2	50.8
15	9	1.2	2.1	2.5	7375 12TT 2/3 (240°)	1.1	104	2.7	0.27	5.5	53.3	63.5
20	10	1.4	2.0	2.3		1.4	138	3.1	0.32	5.3	50.8	58.4
25	11	1.6	1.9	2.2		1.8	173	3.4	0.36	6.1	48.2	55.9
30	12	1.7	1.7	2.0		2.1	207	3.7	0.39	6.4	43.2	50.8
15	9	0.9	2.1	2.5	7372 12H 1/2 (180°)	1.1	104	2.7	0.20	3.4	53.3	63.5
20	10	1.1	2.0	2.3		1.4	138	3.1	0.25	4.2	50.8	58.4
25	11	1.2	1.9	2.2		1.8	173	3.4	0.27	4.5	48.2	55.9
30	12	1.3	1.7	2.0		2.1	207	3.7	0.30	4.9	43.2	50.8
15	9	0.6	2.1	2.5	7376 12T 1/3 (120°)	1.1	104	2.7	0.14	2.3	53.3	63.5
20	10	0.7	2.0	2.3		1.4	138	3.1	0.16	2.6	50.8	58.4
25	11	0.8	1.9	2.2		1.8	173	3.4	0.18	3.0	48.2	55.9
30	12	0.9	1.7	2.0		2.1	207	3.7	0.20	3.1	43.2	50.8
15	9	0.5	2.1	2.5	7371 12Q 1/4 (90°)	1.1	104	2.7	0.11	1.9	53.3	63.5
20	10	0.5	2.0	2.3		1.4	138	3.1	0.11	1.9	50.8	58.4
25	11	0.6	1.9	2.2		1.8	173	3.4	0.14	2.3	48.2	55.9
30	12	0.7	1.7	2.0		2.1	207	3.7	0.16	2.6	43.2	50.8

15' (4,6 m) FIXED PATTERN (30° Trajectory - standard)

15	11	2.6	2.1	2.4	7074 15F FULL (360°)	1.1	104	3.4	0.59	9.8	53.3	60.7
20	12	3.0	2.0	2.3		1.4	138	3.7	0.68	11.4	50.8	58.4
25	14	3.3	1.6	1.9		1.8	173	4.3	0.75	12.5	40.6	48.2
30	15	3.7	1.6	1.8		2.1	207	4.6	0.84	14.0	40.6	45.7
15	11	2.0	2.1	2.4	7073 15TQ 3/4 (270°)	1.1	104	3.4	0.45	7.6	53.3	60.7
20	12	2.3	2.0	2.3		1.4	138	3.7	0.52	8.7	50.8	58.4
25	14	2.5	1.6	1.9		1.8	173	4.3	0.57	9.5	40.6	48.2
30	15	2.8	1.6	1.8		2.1	207	4.6	0.64	10.6	40.6	45.7
15	11	1.7	2.1	2.4	7075 15TT 2/3 (240°)	1.1	104	3.4	0.39	6.4	53.3	60.7
20	12	2.0	2.0	2.3		1.4	138	3.7	0.45	7.6	50.8	58.4
25	14	2.2	1.6	1.9		1.8	173	4.3	0.50	8.3	40.6	48.2
30	15	2.5	1.6	1.8		2.1	207	4.6	0.57	9.5	40.6	45.7
15	11	1.3	2.1	2.4	7072 15H 1/2 (180°)	1.1	104	3.4	0.30	4.9	53.3	60.7
20	12	1.5	2.0	2.3		1.4	138	3.7	0.34	5.7	50.8	58.4
25	14	1.7	1.6	1.9		1.8	173	4.3	0.39	6.4	40.6	48.2
30	15	1.9	1.6	1.8		2.1	207	4.6	0.43	7.2	40.6	45.7
15	11	0.9	2.1	2.4	7076 15T 1/3 (120°)	1.1	104	3.4	0.20	3.4	53.3	60.7
20	12	1.0	2.0	2.3		1.4	138	3.7	0.22	3.8	50.8	58.4
25	14	1.1	1.6	1.9		1.8	173	4.3	0.25	4.2	40.6	48.2
30	15	1.2	1.6	1.8		2.1	207	4.6	0.27	4.5	40.6	45.7
15	11	0.7	2.1	2.4	7071 15Q 1/4 (90°)	1.1	104	3.4	0.16	2.6	53.3	60.7
20	12	0.8	2.0	2.3		1.4	138	3.7	0.18	3.0	50.8	58.4
25	14	0.8	1.6	1.9		1.8	173	4.3	0.18	3.0	40.6	48.2
30	15	0.9	1.6	1.8		2.1	207	4.6	0.20	3.4	40.6	45.7

SPECIAL PATTERN

15	18 X 18	2.6	3.1	3.6	7081 15SQ SQUARE	1.1	104	5.5 X 5.5	0.59	9.8	78.7	91.4
20	20 X 20	3.0	2.9	3.3		1.4	138	6.1 X 6.1	0.68	11.4	73.7	83.3
25	22 X 22	3.3	2.6	3.0		1.8	173	6.7 X 6.7	0.75	12.5	66.0	76.2
30	24 X 24	3.7	2.5	2.9		2.1	207	7.3 X 7.3	0.84	14.0	63.5	73.7
15	4 X 13	0.5	1.7	-	7082 15EST END STRIP	1.1	104	1.2 X 4.0	0.11	1.9	43.2	-
20	4 X 14	0.5	1.7	-		1.4	138	1.2 X 4.3	0.11	1.9	43.2	-
25	4 X 14	0.6	1.9	-		1.8	173	1.2 X 4.3	0.14	2.3	48.3	-
30	4 X 15	0.6	1.9	-		2.1	207	1.2 X 4.6	0.14	2.3	48.3	-
15	4 X 26	0.9	1.7	-	7083 15CST CENTER STRIP	1.1	104	1.2 X 7.9	0.20	3.4	43.2	-
20	4 X 28	1.0	1.7	-		1.4	138	1.2 X 8.5	0.22	3.8	43.2	-
25	4 X 28	1.1	1.9	-		1.8	173	1.2 X 8.5	0.25	4.2	48.3	-
30	4 X 30	1.2	1.9	-		2.1	207	1.2 X 9.1	0.27	4.5	48.3	-
15	4 X 26	0.9	1.7	-	7084 15SST SIDE STRIP	1.1	104	1.2 X 7.9	0.20	3.4	43.2	-
20	4 X 28	1.0	1.7	-		1.4	138	1.2 X 8.5	0.22	3.8	43.2	-
25	4 X 28	1.1	1.9	-		1.8	173	1.2 X 8.5	0.25	4.2	48.3	-
30	4 X 30	1.2	1.9	-		2.1	207	1.2 X 9.1	0.27	4.5	48.3	-

8' (2,4 m) MULTI-ARC™ (5° Trajectory)

Pressure		Radius	Discharge		Precipitation Rate	Model	Pressure		Radius	Discharge		Precipitation Rate
PSI	FT. R	GPM	■	IN/HR ▲			BARS	M	M/H	L/min	■	MM/HR ▲
20	7.0	1.10	2.2	2.5	7170 FULL (360°)	1.4	2.1	0.25	4.2	54.9	63.4	
25	7.0	1.24	2.4	2.8		1.7	2.1	0.28	4.7	61.9	71.4	
30	8.0	1.35	2.0	2.2		2.0	2.4	0.31	5.1	51.6	59.5	
20	7.0	0.82	1.6	2.5	7170 3/4 (270°)	1.4	2.1	0.19	3.1	40.9	63.4	
25	7.0	0.92	1.8	2.8		1.7	2.1	0.21	3.5	45.9	71.4	
30	8.0	1.02	1.5	2.2		2.0	2.4	0.23	3.9	39.0	59.5	
20	7.0	0.76	1.5	2.5	7170 2/3 (240°)	1.4	2.1	0.17	2.9	37.9	63.4	
25	7.0	0.86	1.7	2.8		1.7	2.1	0.20	3.3	42.9	71.4	
30	8.0	0.93	1.4	2.2		2.0	2.4	0.21	3.5	35.5	59.5	
20	7.0	0.57	1.1	2.5	7170 1/2 (180°)	1.4	2.1	0.13	2.2	28.4	63.4	
25	7.0	0.65	1.3	2.8		1.7	2.1	0.15	2.5	32.4	71.4	
30	8.0	0.70	1.1	2.2		2.0	2.4	0.16	2.6	26.7	59.5	
20	7.0	0.37	0.7	2.5	7170 1/3 (120°)	1.4	2.1	0.08	1.4	18.5	63.4	
25	7.0	0.43	0.8	2.8		1.7	2.1	0.10	1.6	21.5	71.4	
30	8.0	0.46	0.7	2.2		2.0	2.4	0.10	1.7	17.6	59.5	
20	7.0	0.30	0.6	2.5	7170 1/4 (90°)	1.4	2.1	0.07	1.1	15.0	63.4	
25	7.0	0.35	0.7	2.8		1.7	2.1	0.08	1.3	17.5	71.4	
30	8.0	0.38	0.6	2.2		2.0	2.4	0.09	1.4	14.5	59.5	



IMPACTS

APPLICATIONS	6700	1370	1973
RADIUS 40' (12,2 m)	✓	✓	✓
½" (1,27 cm) INLET			✓
DUAL ½" (1,27 cm) & ¾" (1,9 cm) INLET	✓		
½" (1,27 cm) MALE THREADS		✓	
RESIDENTIAL	✓	✓	
NURSERIES	✓	✓	✓
COMMERCIAL/MUNICIPAL	✓	✓	
HIGH VANDALISM AREAS	✓		
LOW PRESSURE SYSTEMS	✓	✓	✓
RISER MOUNTED		✓	✓
GROUND COVER/SHRUBS	✓	✓	
RECLAIMED WATER	✓	✓	✓
SLOPES	✓	✓	

PRODUCT OVERVIEW



6700

- Includes seven color coded nozzles.
- Combination $\frac{1}{2}$ " (1,27 cm) & $\frac{3}{4}$ " (1,9 cm) inlet.
- Adjustable from 20° - 360°.
- Spacing from 23' – 43' (7 m – 13 m) with a flow rate of 1.5 – 6.3 gpm (5,68 – 23,85 l/min).



1370

- Perfect for mounting on risers installs.
- Features $\frac{1}{2}$ " (1,27 cm) male threads.
- Includes five color coded nozzles.
- Adjustable from 20° - 360°.
- Spacing from 23' – 43' (7 m – 13 m) with a flow rate of 1.5 – 6.3 gpm (5,68 – 23,85 l/min).



1973

- Ideal for riser installs in planting areas.
- $\frac{1}{2}$ " (1,27 cm) female threads.
- 40' (12,2 m) diameter coverage.
- 3.4 – 4.4 gpm (12,8 – 16,6 l/min) flow.



6700
Pro Impact

6701
Lavender Cover

8601
Wrench



NOZZLE COLOR CODES

Red	6
Black	7
Blue	8
Yellow	10
Beige	12
Black	7LA
Yellow	10LA

NOZZLE PERFORMANCE CHARTS FOR 6700 and 1370

ENGLISH

Pressure	Nozzle	Radius	Flow	Precipitation Rate ¹	
PSI		FT	GPM	IN/HR	IN/HR
25	6	34	1.5	0.25	0.29
	07 LA	36	2.2	0.33	0.38
	7	37	2.1	0.30	0.34
	8	38	2.4	0.32	0.37
	10 LA	23	3.1	1.13	1.30
	10	33	3	0.53	0.61
35	12	32	4	0.75	0.87
	6	38	1.8	0.24	0.28
	07 LA	37	2.7	0.38	0.44
	7	39	2.4	0.30	0.35
	8	40	2.9	0.35	0.40
	10 LA	25	3.6	1.11	1.28
45	10	34	3.6	0.60	0.69
	12	37	5	0.70	0.81
	6	38	2.1	0.28	0.32
	07 LA	39	3	0.38	0.44
	7	39	2.8	0.35	0.41
	8	40	3.2	0.39	0.44
55	10 LA	27	4.2	1.11	1.28
	10	34	4.1	0.68	0.79
	12	39	5.7	0.72	0.83
	6	38	2.4	0.32	0.37
	07 LA	40	3.4	0.41	0.47
	7	41	3	0.34	0.40
60	8	41	3.7	0.42	0.49
	10 LA	27	4.6	1.22	1.40
	10	34	4.6	0.77	0.88
	12	43	6.3	0.66	0.76
	6	38	2.5	0.33	0.39
	07 LA	41	3.5	0.40	0.46
	7	41	3.2	0.37	0.42
	8	42	3.8	0.41	0.48
	10 LA	29	4.8	1.10	1.27
	10	34	4.8	0.80	0.92
	12	-	-	-	-

METRIC

Pressure	Nozzle	Radius	Flow	Precipitation Rate ¹	
BAR		m	L/min	mm/HR	mm/HR
1.72	6	10.36	5.68	3.17	3.66
	07 LA	10.97	8.33	4.15	4.79
	7	11.28	7.95	3.75	4.33
	8	11.58	9.08	4.06	4.69
	10 LA	7.01	11.73	14.33	16.54
	10	10.06	11.36	6.73	7.78
2.41	12	9.75	15.14	9.55	11.03
	6	11.58	6.81	3.05	3.52
	07 LA	11.28	10.22	4.82	5.57
	7	11.89	9.08	3.86	4.45
	8	12.19	10.98	4.43	5.12
	10 LA	7.62	13.63	14.08	16.26
3.10	10	10.36	13.63	7.61	8.79
	12	11.28	18.93	8.93	10.31
	6	11.58	7.95	3.56	4.11
	07 LA	11.89	11.36	4.82	5.57
	7	11.89	10.60	4.50	5.20
	8	12.19	12.11	4.89	5.65
3.79	10 LA	8.23	15.90	14.08	16.26
	10	10.36	15.52	8.67	10.01
	12	11.89	21.58	9.16	10.58
	6	11.58	9.08	4.06	4.69
	07 LA	12.19	12.87	5.19	6.00
	7	12.50	11.36	4.36	5.04
4.14	8	12.50	14.01	5.38	6.21
	10 LA	8.23	17.41	15.43	17.81
	10	10.36	17.41	9.73	11.23
	12	13.11	23.85	8.33	9.62
	6	11.58	9.46	4.23	4.89
	07 LA	12.50	13.25	5.09	5.88
	7	12.50	12.11	4.65	5.37
	8	12.80	14.38	5.27	6.08
	10 LA	8.84	18.17	13.95	16.11
	10	10.36	18.17	10.15	11.72
	12	-	-	-	-

¹ Precipitation rates for square and triangular spacing calculated at 50% of diameter for half-circle operation. Assumes zero wind for precipitation and radius. Adjust for local conditions.

SPECIFICATIONS

OPERATING RANGE:

25-60 psi

OPTIMUM PRESSURE:

40 psi

MAXIMUM PRESSURE:

60 psi

PART-CIRCLE RANGE:

20° - 340°

POP-UP HEIGHT:

3" (7,6 cm)

BODY HEIGHT:

9 1/4" (23,5 cm)

BOTTOM INLET SIZE:

1/2" and 3/4" (1,27 cm and 1,9 cm)

SIDE INLET SIZE:

1/2" (1,27 cm)

TOP DIAMETER:

5" (12,7 cm)

PER BOX:

20

FEATURES

- Includes seven easily interchangeable, color-coded nozzles and 2 low-angle nozzles.
- No tool is required to change nozzles.
- Heavy-duty plastic case with sturdy, reinforced ribbed design.
- Double-weighted arm for slower rotation and increased distance of throw.
- Powerful reverse action.
- Adjustable arm spring for low-pressure and low-gallonage operation.
- Full-circle or adjustable arc 20° to 340°.
- Distance controller diffuser pin.
- Multi-function, pressure-activated wiper seal.
- Inlet filter screen.
- Combination 1/2" (1,27 cm) or 3/4" (1,9 cm) bottom inlet
- Side inlet 1/2" (1,27 cm)
- Serviceable through the top of the case.

MODELS



1370
Adjustable Beta head
with ½" (1,27 cm)
bearing

1973
Whiz Head
rotary sprinkler

FEATURES

1370

Beta impact spray heads provide outstanding performance at an affordable price. Made with high impact plastic, they are durable, keeping maintenance to a minimum.

- Includes five easily interchangeable, color-coded nozzles and 2 low-angle nozzles.
- No tool is required to change nozzles.
- ½" (1,27 cm) male threads
- Non-clog nozzle and straight-through flow design
- Sealed bearing keeps dirt and debris out
- Anti-backsplash arm keeps water off buildings
- Adjust pattern and spray with diffuser pin and exclusive Click-Set® trip collars
- Use 1370's for riser installations
- Diffuser pin maintains set spray pattern adjustment

1973

- Ideal for riser installations in planting areas
- ½" (1,27 cm) female threaded inlet
- Made of high-impact corrosion resistant plastic
- Stainless steel bearing and large orifice nozzle



ENGLISH

WHIZ HEAD®	Pressure (psi)	Flow (gpm)	Coverage Dia. (ft)
	30	3.4	40
	40	3.9	40
	50	4.4	40

METRIC

WHIZ HEAD®	Pressure (bar)	Flow (l/min)	Coverage Dia. (m)
	2	12,8	12,2
	2,7	14,7	12,2
	3,5	16,6	12,2



VALVES

APPLICATIONS	9000	7900	9501	9502	9515-9520
RESIDENTIAL	✓	✓	✓		
COMMERCIAL/MUNICIPAL		✓	✓	✓	✓
FLOW CONTROL	✓	✓	✓	✓	✓
W/O FLOW CONTROL	✓	✓	✓		
HIGH PRESSURE				✓	✓
RECLAIMED WATER	✓	✓	✓	✓	✓
EZ CONNECT™			✓	✓	

PRODUCT OVERVIEW



9000

- Simple proven design has few moving parts.
- Available with or without flow control.
- Comes in 1" (25,4 mm) NPT, Slip or BSP versions.
- Easy to operate internal manual bleed.
- PVC construction makes gluing a snap with the slip configuration.



7900

- Heavy duty glass filled nylon construction.
- Simple proven design has few moving parts.
- Available with or without flow control.
- Comes in 1" (25,4 mm) NPT or BSP versions.
- Bayonet mounted bonnet for quick and easy servicing.

- ¾" (19,05 mm) & 1" (25,4 mm) EZ connect union valve makes installation and valve replacement a snap.
- Heavy duty glass filled nylon construction.
- Available with or without flow control.

- Many ¾" (19,05 mm) and 1" (25,4 mm) fittings available: BSP female, BSP male, Barb, Slip, NPT Female and NPT male.
- Bayonet mounted bonnet for quick and easy servicing.

9501



- 1½" – 2" (38,1 mm – 50,8 mm) EZ connect union valve makes installation and valve replacement a snap.
- Heavy duty glass filled nylon body with a PCV bonnet.
- Many 1½" (38,1 mm) and 2" (50,8 mm) fittings available: BSP female, Slip, NPT Female and Isolation valves.

- Eight stainless steel nuts grip into the bonnet to accommodate for extreme climatic fluctuations.

9502



- 1½" (38,1 mm) and 2" (50,8 mm) combination globe or angle valve.
- Heavy duty glass filled nylon body with a PCV bonnet.
- Eight stainless steel nuts grip into the bonnet to accommodate for extreme climatic fluctuations.

- 200 PSI (13,8 bar) rated for heavy duty applications.

9515-9520



MODELS

9001 (9003)

Manual Internal Bleed 1" (25,4 mm) globe

9002

Manual Internal Bleed 1" (25,4 mm) globe slip

9011 (9013)

Manual Internal Bleed 1" (25,4 mm) globe with flow control

9012

Manual Internal Bleed 1" (25,4 mm) globe slip with flow control

Note: Versions in parenthesis feature BSP threading



Accessories

7962RW

Reclaimed water solenoid

7963

115V replacement solenoid (not shown)

FEATURES

- Simple, proven design has few moving parts
- Easy-to-use flow control allows tailored adjustments in all job site conditions
- Fully encapsulated solenoid with a stainless steel plunger
- Molded in solenoid seat for tighter tolerance parts
- Manual internal bleed is easy to operate – just twist the solenoid
- Fabric reinforced diaphragm for increased durability
- High grade PVC makes solvent welding an ease with slip configurations
- Six stainless steel phillips head screws
- Directly compatible with SoloRain[®] series of battery-operated actuators
- Flat is added on all slip versions to force glue away from solenoid port, to prevent clogging

SPECIFICATIONS

FLOW RANGE:

Less than 1 to 30 gpm (0,23 – 6,81 m³/hr)

MINIMUM PRESSURE:

10 psi (0,7 bar)

MAXIMUM PRESSURE:

150 psi (10,3 bar)

INPUT:

24V AC

INRUSH CURRENT:

0.50 amps or less

HOLDING CURRENT:

0.23 amps

THREADING:

NPT (9001, 9011)

Slip (9002, 9012)

BSP (9003, 9013)

DIMENSIONS (L × W × H)

4½" (10,8 cm) × 3⅞" (9,8 cm) × 5⅛" (13 cm)
(9001, 9011, 9012)

PER BOX:

20

9001, 9002, 9003 GLOBE VALVE 9011, 9012, 9013 GLOBE VALVE

Flow	Pressure Loss	Flow	Pressure Loss	Flow	Pressure Loss
GPM	PSI	L/min	kPa	m ³ /hr	BAR
1	4.0	3.8	28	0.23	0.3
5	2.5	18.9	17	1.14	0.2
10	2.0	37.9	14	2.27	0.1
15	2.5	56.8	17	3.41	0.2
20	3.5	75.7	24	4.54	0.2
25	4.5	94.6	31	5.68	0.3
30	6.5	113.6	45	6.81	0.5

SPECIFICATIONS

FLOW RANGE:Less than 1 to 30 gpm (0,23 – 6,8l m³/hr)**MINIMUM PRESSURE:**

10 psi (0,7 bar)

MAXIMUM PRESSURE:

150 psi (10,3 bar)

INPUT:

24V AC

INRUSH CURRENT:

0.50 amps or less

HOLDING CURRENT:

0.23 amps

THREADING:

NPT (7901, 7911)

BSP (7916, 7917)

DIMENSIONS (L x W x H)4" (10,2 cm) x 2³/₄" (7 cm) x 5" (12,7 cm)
(7901, 7911)3³/₄" (9,5 cm) x 2³/₄" (7 cm) x 5⁷/₈" (15 cm)
(7931, 7941)**# PER BOX:**

20



MODELS

7901 (7916)Manual Internal Bleed 1"
(25,4 mm) globe**7911 (7917)**Manual Internal Bleed 1"
(25,4 mm) globe
with flow control*Note: Versions in parenthesis
feature BSP threading*

Accessories

7962RW

Reclaimed water solenoid

7963115V replacement solenoid
(not shown)

FEATURES

- Body and bonnet made of glass reinforced nylon to prevent leaks and breaks
- Simple valve configuration and design; few moving parts
- Solenoid has stainless steel plunger and spring to prevent corrosion
- Manual internal bleed keeps valve box dry
- Bayonet-mounted bonnet with captured diaphragm for quick and easy servicing
- Fabric reinforced diaphragm for increased durability
- Easy-to-use flow control permits manual adjustment of water flow rate (does not apply to models 7901, 7916)
- ACCESSORIES
 - 7963: 115 volt replacement solenoid (includes conduit connection)
 - 7962RW: Reclaimed water solenoid

**7901 (7916 BSP) & 7911 (7917 BSP)
1" (25,4 mm) GLOBE VALVE**

Flow	Pressure Loss	Flow	Pressure Loss	Flow	Pressure Loss
GPM	PSI	L/min	kPa	m ³ /hr	BAR
1	4.0	3.8	28	0.23	0.3
5	2.5	18.9	17	1.14	0.2
10	2.0	37.9	14	2.27	0.1
15	2.5	56.8	17	3.41	0.2
20	3.5	75.7	24	4.54	0.2
25	4.5	94.6	31	5.68	0.3
30	6.5	113.6	45	6.81	0.5

7931 & 7941 1" (25,4 mm) ANGLE VALVE

Flow	Pressure Loss	Flow	Pressure Loss	Flow	Pressure Loss
GPM	PSI	L/min	kPa	m ³ /hr	BAR
1	4.0	3.8	28	0.23	0.3
5	2.5	18.9	17	1.14	0.2
10	2.0	37.9	14	2.27	0.1
15	2.5	56.8	17	3.41	0.2
20	3.0	75.7	21	4.54	0.2
25	4.0	94.6	28	5.68	0.3
30	5.5	113.6	38	6.81	0.4

MODELS

950I

Manual Internal Bleed 1" (25,4 mm) union globe

950IFC

Manual Internal Bleed 1" (25,4 mm) union globe with flow control

¾" Fittings 1" Fittings

(19,05 mm)	(25,4 mm)
950I-075BM	950I-100BF
950I-075BR	950I-100BM
950I-075NF	950I-100BR
950I-075NM	950I-100NF
950I-075S	950I-100NM
950I-100S	



Reading model #'s:
BF= BSP female fitting
BM= BSP male fitting
BR= Barb fitting
NF= NPT female fitting
NM= NPT male fitting
S= Slip fitting

Accessories

7962RW

Reclaimed water solenoid

7963

115V replacement solenoid (not shown)

950I-100IN

1" (25,4 mm) Isolation Valve

FEATURES

- Body and bonnet made of glass reinforced nylon to prevent leaks and breaks
- Manual internal bleed keeps valve box dry
- Bayonet-mounted bonnet with captured diaphragm for quick and easy servicing
- Fabric reinforced diaphragm for increased durability
- Easy-to-use flow control permits manual adjustment of water flow rate (does not apply to model 950I)
- One-piece fully encapsulated glass filled nylon solenoid with a stainless steel plunger
- Plunger is captured with removable retainer for easy cleaning
- High-grade PVC unions located on the inlet and outlet allow maximum versatility of pipe size (¾" (19,05 mm) and/or 1" (25,4 mm) and numerous combinations. Installation and removal of the valve is a breeze!
- Directly compatible with SoloRain[®] series of battery-operated actuators

SPECIFICATIONS

FLOW RANGE:

Less than 1 to 30 gpm (0,23 – 6,8 l m³/hr)

MINIMUM PRESSURE:

10 psi (0,7 bar)

MAXIMUM PRESSURE:

150 psi (10,3 bar)

INPUT:

24V AC

INRUSH CURRENT:

0.50 amps or less

HOLDING CURRENT:

0.23 amps

DIMENSIONS (L x W x H)

4½" (10,8 cm) x 3⅞" (9,8 cm) x 5⅞" (13 cm)

PER BOX:

20

950I-075 SERIES (¾" (19,05 mm) FITTINGS)

Flow	Pressure Loss	Flow	Pressure Loss	Flow	Pressure Loss
GPM	PSI	L/min	kPa	m ³ /hr	BAR
1	2.5	3.8	17	0.23	0.17
5	2.7	18.9	18.6	1.14	0.18
10	3.7	37.9	25.5	2.27	0.25
15	4.5	56.8	31	3.41	0.30
20	5.0	75.7	34.5	4.54	0.34

950I-100 SERIES (1" (25,4 mm) FITTINGS)

Flow	Pressure Loss	Flow	Pressure Loss	Flow	Pressure Loss
GPM	PSI	L/min	kPa	m ³ /hr	BAR
1	3.0	3.8	20.7	0.23	0.20
5	2.7	18.9	18.6	1.14	0.18
10	2.5	37.9	17.3	2.27	0.17
15	2.5	56.8	17.3	3.41	0.17
20	3.5	75.7	24.0	4.54	0.24
25	4.5	94.6	31.0	5.68	0.31
30	6.5	113.6	44.8	6.81	0.44

SPECIFICATIONS

FLOW RANGE:

20-200 gpm (4,54 – 45,40 m³/hr)

MINIMUM PRESSURE:

15 psi (1,03 bar)

MAXIMUM PRESSURE:

200 psi (13,8 bar)

INPUT:

24V AC

INRUSH CURRENT:

0.50 amps or less

HOLDING CURRENT:

0.23 amps

DIMENSIONS (L x W x H)

7⁷/₈" (28,3 cm) x 5¹/₂" (14 cm) x 8" (20,3 cm)
(globe)

Bodies with fittings installed:

11¹/₈" (20 cm) x 5¹/₂" (14 cm) x 5" (12,7 cm)
(globe)

PER BOX:

4 (valve bodies)

16 (fittings)

4 (isolation valves)

FEATURES

- Manual internal bleed keeps valve box dry
- Flow Control, standard on all valves, allow adjustment of water flow when needed
- Eight stainless steel 1/2" (12,7 mm) nuts grip into bonnet for extreme and fluctuating climatic conditions
- One-piece fully encapsulated glass filled nylon solenoid with a stainless steel plunger
- Plunger is captured with removable retainer for easy cleaning
- One-piece fabric reinforced diaphragm for increased durability
- Glass-filled nylon body with eight molded in brass studs, a stainless steel metering rod and high-grade PVC bonnet for heavy-duty applications up to 200 psi (13,8 bar)



Reading model #'s:
N=NPT threading;
S= Slip;
B= BSP threading;
I= Isolation Valve

MODELS

9502

Heavy duty union valve

1 1/2" Fittings

(38,1 mm)

9502-150N

9502-150S

2" Fittings

(50,8 mm)

9502-200B

9502-200N

9502-200S

Accessories

9502-150IN

1 1/2" isolation valve

9502-200IN

2" isolation valve

7962RW

Reclaimed water solenoid

7963

115V replacement solenoid
(not shown)

PRESSURE LOSS

Flow (GPM)	9500 1 1/2" Globe (PSI)	9500 2" Globe (PSI)	Flow (L/min)	9500 1 1/2" Globe (Kpa)	9500 2" Globe (Kpa)	Flow (m ³ /hr)	9500 1 1/2" Globe (BARS)	9500 2" Globe (BARS)
20	3.0	—	75.7	20.7	—	4.54	.20	—
30	3.5	—	113.5	24.2	—	6.81	.24	—
40	3.7	—	151.4	25.5	—	9.08	.25	—
50	3.9	2.9	189.3	26.9	20.1	11.35	.27	.20
60	4.0	3.0	227.1	27.6	20.7	13.62	.28	.21
80	5.0	3.5	302.8	34.5	24.2	18.16	.34	.24
100	6.0	4.2	378.5	41.4	28.9	22.70	.41	.29
120	8.0	6.5	454.2	55.2	44.9	27.40	.55	.45
140	10.0	8.2	529.9	69.0	56.6	31.78	.69	.56
160	—	11.0	605.6	—	75.9	36.32	—	.75
180	—	11.5	681.3	—	79.3	40.86	—	.79
200	—	16.5	757.0	—	113.8	45.40	—	1.14

MODELS

9515NC*, 9515BC*

1½" (38,1 mm) Globe or Angle Valve

9520NC*, 9520BC*

2" (50,8 mm) Globe or Angle Valve

*NC = NPT Conventional

*BC = BSP Conventional



Accessories

7962RW

Reclaimed water solenoid

7963

115V replacement solenoid (not shown)

FEATURES

- Manual internal bleed is easy to operate – just twist the solenoid
- Flow Control, standard on all valves, allows adjustment of water flow when needed
- One-piece fully encapsulated glass-filled nylon solenoid with a stainless steel plunger. Plunger is captured with removable retainer for easy cleaning
- Manual bleed by rotating solenoid approximately ¾ of a turn counter clockwise
- Eight stainless steel ½" (12,7 mm) nuts grip into bonnet for extreme and fluctuating climatic conditions
- One-piece fabric reinforced diaphragm for increased durability
- 200 psi (13,8 bar) rated valve for heavy-duty applications
- Glass-filled nylon body with eight molded in brass studs, a stainless steel metering rod and high-grade PVC bonnet
- Directly compatible with SoloRain[®] series of battery-operated actuators

SPECIFICATIONS

FLOW RANGE:

9515: 15-150 gpm (3,40 – 34,07 m³/hr)

9520: 15-200 gpm (3,40 – 45,42 m³/hr)

MINIMUM PRESSURE:

15 psi (1,03 bar)

MAXIMUM PRESSURE:

200 psi (13,8 bar)

INPUT:

24V AC

INRUSH CURRENT:

0.50 amps or less

HOLDING CURRENT:

0.23 amps

DIMENSIONS (L × W × H)

6¾" (17,1 cm) × 5½" (14 cm) × 8" (20,3 cm)

(9515 with plug)

6¾" (17,1 cm) × 5½" (14 cm) × 8½" (21,6 cm)

(9520)

PER BOX:

4

PRESSURE LOSS

Flow (GPM)	9515NC 1½" Globe	9515NC 1½" Angle	9520NC 2" Globe	9520NC 2" Angle	Flow (m³/hr)	9515BC 1½" Globe	9515BC 1½" Angle	9520BC 2" Globe	9520BC 2" Angle
15	3.0	2.8	–	–	3.40	20.7	19.3	–	–
20	3.0	2.8	–	–	4.54	20.7	19.3	–	–
30	3.5	3.0	–	–	6.81	24.2	20.7	–	–
40	3.7	3.2	–	–	9.08	25.5	22.0	–	–
50	3.9	3.4	2.9	1.9	11.36	26.9	23.5	20.1	13.1
60	4.0	3.7	3.0	2.3	13.63	27.6	25.5	20.7	15.8
80	5.0	4.1	3.5	2.5	18.17	34.5	28.3	24.2	17.2
100	6.0	4.5	4.2	3.1	22.71	41.4	31.1	28.9	21.3
120	8.0	6.0	6.5	3.8	27.25	55.2	41.4	44.9	26.2
140	10.0	7.0	8.2	4.9	31.79	69.0	48.3	56.6	33.8
160	–	–	11.0	5.5	36.34	–	–	75.9	37.9
180	–	–	11.5	6.8	40.80	–	–	79.3	46.9
200	–	–	16.5	8.2	45.42	–	–	113.8	56.5





QUICK COUPLING VALVES

APPLICATIONS	7640	7650
COMMERCIAL	✓	✓
ATHLETIC FIELDS	✓	✓
SPORTS TURF	✓	✓
RECLAIMED WATER	✓	✓
1" INLET (25,4 mm)	✓	
1½" INLET (38,1 mm)		✓

PRODUCT OVERVIEW

7640



- 1" (25,4 mm) quick coupling valves with rubber covers.
- Available with locking covers.
- Reclaimed water covers.
- Featuring acme threads for convenient flow control.

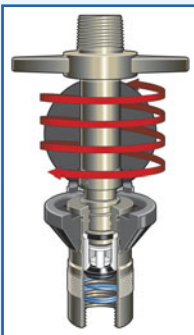
7650



- 1½" (38,1 mm) quick coupling valves with rubber covers.
- Available with locking covers.
- Reclaimed water covers.
- Featuring acme threads for convenient flow control.

SPECIFICATIONS

Signature quick coupling valves and keys use Acme® threads for slow and steady flow control instead of immediate on/off. All models feature rubber cover. Optional locking cover available. Optional lavender rubber cover identifies reclaimed water site – molded in “RECLAIMED WATER - DO NOT DRINK”: in English and Spanish.



Acme® threads provide convenient flow control



Series Swivel ells

- 8810
¾" (19,05 mm) FPT x ¾" (19,05 mm) GHT
- 8811
1" (25,4 mm) FPT x ¾" (19,05 mm) GHT
- 8812
1" (25,4 mm) FPT x 1" (25,4 mm) GHT



MODELS

- 7640**
Quick Coupling Key
- 7641**
Quick Coupling Key
- 7642**
Quick Coupling Valve 1" (25,4 mm)
- 7642B**
Yellow Non-Locking 1" (25,4 mm) BSP
- 7643**
Quick Coupling Valve with locking cover 1" (25,4 mm)
- 7643B**
Yellow Locking 1" (25,4 mm) BSP
- 7644**
Quick Coupling Valve with lavender cap 1" (25,4 mm)
- 7644B**
Lavender Non-Locking 1" (25,4 mm) BSP
- 7645**
Quick Coupling Valve with non-potable locking cover 1" (25,4 mm)
- 7645B**
Lavender Locking 1" (25,4 mm) BSP

- 7650**
1½" (38,1 mm) Long handle Quick Coupler Key
- 7651**
Yellow Non-Locking 1½" (38,1 mm) NPT
- 7651B**
Yellow Non-Locking 1½" (38,1 mm) BSP
- 7652**
Yellow Locking 1½" (38,1 mm) NPT
- 7652B**
Yellow Locking 1½" (38,1 mm) BSP
- 7653**
Lavender Non-locking 1½" (38,1 mm) NPT
- 7653B**
Lavender Non-locking 1½" (38,1 mm) BSP
- 7654**
Lavender Locking 1½" (38,1 mm) NPT
- 7654B**
Lavender Locking 1½" (38,1 mm) BSP

QUICK COUPLING KEYS

Model	For Valve Models	ENGLISH		METRIC			
		Thread Size		Height	Thread Size		Height
		MALE	FEMALE		MALE	FEMALE	
7640	All models	1"	¾"	5 1/4"	25,4 mm	19,05 mm	13,3 cm
7641	All models	¾"	1/2"	5 1/4"	19,05 mm	12,7 mm	13,3 cm
7650	All models	1"	¾"	9 1/4"	25,4 mm	19,05 mm	23,5 cm

QUICK COUPLING VALVES

Quick Coupler Model	Rubber Cover	Locking Cover	Warning Cover	ENGLISH			METRIC		
				Max Capacity GPM	Bottom Pipe Thread	Overall Height	Max Capacity l/m	Bottom Pipe Thread	Overall Height
7642 & B	•			20	1"	3 3/4"	75,7	25,4mm	9,5 cm
7643 & B	•	•		20	1"	3 3/4"	75,7	25,4mm	9,5 cm
7644 & B	•		•	20	1"	3 3/4"	75,7	25,4mm	9,5 cm
7645 & B	•	•	•	20	1"	3 3/4"	75,7	25,4mm	9,5 cm
7651 & B	•			60	1 1/2"	4 1/2"	227,1	38,1 mm	11,4 cm
7652 & B	•	•		60	1 1/2"	4 1/2"	227,1	38,1 mm	11,4 cm
7653 & B	•		•	60	1 1/2"	4 1/2"	227,1	38,1 mm	11,4 cm
7654 & B	•	•	•	60	1 1/2"	4 1/2"	227,1	38,1 mm	11,4 cm





SENSORS

PRODUCT OVERVIEW

8501



- Easily installs on any Galaxy or Constellation satellite.
- Includes 25 ft (7,6 m) of 20 AWG two-conductor wire.
- Maintenance-free patented sensing mechanism.
- Automatically shuts off and starts irrigation based on local parameters.

ACASI ACANSC



- Easily installs on any Galaxy or Constellation satellite.
- Includes 10 ft (3 m) of 20 AWG two-conductor wire.
- Maintenance-free patented sensing mechanism.
- Automatically shuts off and starts irrigation based on local parameters.
- Tough polycarbonate construction for direct burial
- 4-20 mA Sensing board required (sold separately).

ACNS1 ACNS2 ACNS3 ACNS4 ACNS5 ACNS6 ACNS7



- Easily installs on any Galaxy or Constellation satellite (Firmware v6.00+).
- Includes 10 ft (3 m) of 20 AWG two-conductor wire.
- Maintenance-free patented sensing mechanism.
- Automatically shuts off and starts irrigation based on local parameters.
- Tough polycarbonate construction for direct burial.
- Variety of sensing programming parameters

FEATURES

- Unit ready for bracket mount or ½" (12,7 mm) conduit/pipe thread mount at bottom
- Adjusts easily from ⅛" (3,2 mm) to 1" (25,4 mm) rainfall
- Compatible with most controller brands (Ready for normally-closed or normally-open hookup)
- Supplied with 25 (7,6 m) ft of hookup wire
- Saves unneeded watering
- Designed to be used with low voltage irrigation systems only



MODELS

8501
Rain-Trip®

- Provides linear measure of soil moisture content
- Works on any Constellation® firmware



ACASI
Soil Moisture Sensor
Analog Output

ACANSC
Sensor Card
(required for 4-20mA
linear sensors)

- Can broadcast up to four outputs (soil moisture, EC, soil temperature and wetted front) across the network and trigger any program on any controller in the network to either start or stop based on adjustable targets set in a program for any of the four sensor outputs
- The firmware allows for the selection of any one output or a combination of the four outputs in one sensor
- The firmware can be upgraded from the controller without having to dig up the sensor
- Each controller can have a maximum of 2 1,000 ft runs of 18 AWG 4 conductor / 2 pair wire connecting up to 15 sensors
- Up to 999 controllers and/or sensors on one network
- The PRO-sense design makes it easy to install with little or no soil or root disruption

NOTE:

Constellation Firmware v6.00 or higher required



ACNSI
Soil Moisture Sensor

ACNS2
Soil EC (Electrical
Conductivity) Sensor

ACNS3
Soil Temperature Sensor

ACNS4
Soil Wetted Front Sensor

ACNS5
Soil Moisture, Soil EC

ACNS6
Soil Moisture, EC, Temperature

ACNS7
Soil Moisture, EC, Temp &
Wetted Front Sensor



WORLD HEADQUARTERS

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Fax (949) 580-3645

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