# SA **SATELLITE ASSEMBLY –** Central Control controller

| | | |
|---|---|---|
| **BL1** | **Baseline BL1000** | 100 stations |
| **BL2** | **Baseline BL3200** | 200 stations |

**UL APPROVED ENCLOSURES** – VIT Strong Box

| CODE | MODEL | DIMENSIONS | TYPE |
|---|---|---|---|
| **1** | SB-18SS | 18”w x 36”h x 12”d | Front Entry |
| **2** | SB-18DSS | 18”w x 36”h x 24”d | Front & Rear Door |
| **3** | SB-24SS | 24”w x 36”h x 12”d | Front Entry |
| **4** | SB-24DSS | 24”w x 36”h x 24”d | Front & Rear Door |
| **5** | MPE-A16-10K | 18”w x 52”h x 32”d | Meter & Companion Enclosure |
| **6** | SB-16SS | 16”w x 38”h x 15.5”d | Top Entry |
| **7** | SB-22SS | 24”w x 38”h x 17”d | Top Entry |
| **8** | SB-36SS | 36”w x 36”h x 12”d | Double Front Entry |
| **10** | BB-18SS | 16”w x 32”h | Backboard (SB-18SS) |
| **11** | BB-24SS | 22”w x 32”h | Backboard (SB-24SS) |
| **12** | LD-16SW | 16.75”w x 30”h x 8.25”d | Light Duty Wall Mount |
| **13** | LD-16S | 16.75”w x 30”h x 8.25”d | Light Duty Front Entry |
| **14** | LD-18SW | 18”w x 18”h x 8”d | Light Duty Wall Mount |
| **15** | LD-16STS | 16.75”w x 36”h x 12”d | Light Duty Top Entry |
| **16** | SB-18SSW | 18”w x 36”h x 12”d | Front Entry Wall Mount |
| **17** | SB-24SSW | 24”w x 36”h x 12”d | Front Entry Wall Mount |
| **18** | SB-36SSW | 36”w x 36”h x 12”d | Front Entry Wall Mount |

**EXAMPLE PART NUMBER**

**SA6-BL2-TW /** - Satellite Assembly; 16” top entry Strong Box stainless steel enclosure with Baseline BL3200 2Wire controller..

## ADDITIONAL YEARS OF BASEMANAGER™ SERVICE

Each BL-3200 satellite controller comes with 1 year of BaseManager™ Internet service included. The option will add additional years to the service plan. BaseManager™ is a Web-hosted service that provides central control capabilities and mobile access through any web browser.

**BM-1Y** **ONE ADDITIONAL YEAR OF BASEMANAGER™ SERVICE**
**BM-2Y** **TWO ADDITIONAL YEARS OF BASEMANAGER™ SERVICE**
**BM-5Y** **FIVE ADDITIONAL YEARS OF BASEMANAGER™ SERVICE**
**BM-10Y** **TEN ADDITIONAL YEARS OF BASEMANAGER™ SERVICE**

## COMMUNICATION MODULES

**BLCM** **BASELINE CELLULAR MODEM** – Baseline's cell modem communication module enables the controller to send and receive data over a wireless carrier's cellular network.

**BLER** **BASELINE ETHERNET RADIO MODEM** – Ethernet radios establish a wireless network across a large site, and all Baseline controllers can use this network to send and receive data.

**BLWF** **BASELINE WI-FI MODEM** – Baseline's Wi-Fi module sends and receives data over an existing Wi-Fi network

## BASELINE TWO WIRE COMPONENTS

Baseline's biCoders™ (two-wire decoders) operates a 24VAC irrigation valve via a biCoder™. Each biCoder includes water tight electrical connectors.

**BL01** **BASELINE 1-STATION biCODER**
**BL02** **BASELINE 2-STATION biCODER**
**BL04** **BASELINE 4-STATION biCODER**
**BL01DC** **BASELINE 1-STATION biCODER FOR LATCHING SOLENOID**
**BL02DC** **BASELINE 2-STATION biCODER FOR LATCHING SOLENOID**

**BLLA** **BASELINE LIGHTNING ARRESTOR** – One lightning arrestor to be used every 600' in conjunction with an 8' grounding rod along the two-wire path. BLLA Includes grounding rod, 15 feet of ground wire and clamp. (Required for Five-Year Warranty)

**BL308** **BASELINE FLOW SENSOR BICODER™ –** Baseline's Flow biCoders™ create compatibility between most third-party flow sensors and the Baseline 3200 satellite controller.

**BL315B** **BASELINE 15" biSENSOR™** – Baseline's 15" biSensor™ can be connected to a two-wire path or conventional wire and provide continuous measurements and real-time feedback for the controller to make irrigation decisions.

**BL311** **BASELINE 3" biSENSOR ™**– Baseline's 3" biSensor™ can be connected to a two-wire path or conventional wire and provide continuous measurements and real-time feedback for the controller to make irrigation decisions. The compact biSensor is ideal for greenroofs, greenwalls, and containers.

**BL01MV** **BASELINE MASTER VALVE biCODER™ –** Baseline's master valve biCoders™ provide 24VAC power to master valves



**BL01PR** **BASELINE PUMP START RELAY SWITCHING biCODER ™** – Baseline's Pump Start biCoder™ provides a dry contact signal to the pump system. The dry contact has both normally open and normally closed contacts for multipurpose applications.

**BL406** **BASELINE PRESSURE biCODER ™ –** Baseline's Pressure biCoder is capable of reading a 4-20mA when configured with a pressure transducer, allows the controller to start, stop, or pause programming based on PSI readings from the device. The system can also shut off pumps or master valves based on high or low pressure alerts.

**BL401** **BASELINE COACH'S BUTTON biCODER ™ –** Baseline's Coach's biCoder™ shall provide users an enclosed mechanical switch to remotely start, stop, or pause watering for a program or entire controller.

**BL402** **BASELINE EVENT biCODER ™ –** Baseline's Event biCoder™ provides an interface for any device that can be programmed to remotely start, stop, or pause watering for a program or entire controller.

## CONVENTIONAL WIRE AND RETROFIT

**BL200R Powered biCoder –** Baseline's Powered biCoder provides a conventional wire site to be compatible with Baseline controllers and sensors. The BL-5200R Series are available in 12, 24, 36, and 48 station configurations

**BL200R-12** **BASELINE 12 STATION POWERED biCODER**
**BL200R-24** **BASELINE 24 STATION POWERED biCODER**
**BL200R-36** **BASELINE 36 STATION POWERED biCODER**
**BL200R-48** **BASELINE 48 STATION POWERED biCODER**

## GROUNDING - Required for Five-Year Warranty

**GR-K**

**GROUNDING ROD –** Includes 8' ground rod, grounding clamp and 15' of 6-gauge bare copper wire.

**GRP-3**

**GROUNDING PLATE KIT** – Includes 4" X 36" copper plate with 10' of 10-gauge copper wire, 50lbs Paige Powerset.

**GRP-K**

**GROUNDING PLATE KIT** – Includes 4" X 96" copper plate with 25' 6-gauge copper wire, 100lbs Paige Powerset.

**GRPA**

**GROUNDING PLATE & ROD ASSEMBLY** – Includes 4" X 96" copper plate with 25' 6-gauge copper wire, 8' ground rod, Cadweld L connector, grounding clamp and 100lbs Paige Powerset earth grounding material

## RAIN, FREEZE and WIND SENSOR SHUT OFF OPTIONS

**RSE**

**RAIN SWITCH ENCLOSURE MOUNTED ASSEMBLY** - The Satellite Assembly shall be provided with a rain switch enclosure-mounted assembly to shut down the irrigation system during rainy weather conditions. This assembly shall consist of a Mini-Clik® in a vandal-resistant housing mounted on the enclosure. The rain switch interconnect wire harness shall be pre-wired to the controller's sensor terminals**.** The rain switch shall actuate after ¼", rainfall. For two Controllers in the same enclosure use RSE2.

**RS**

**RAIN SWITCH ASSEMBLY -** The Satellite Assembly shall be provided with a remote rain switch assembly to shut down the irrigation system during rainy conditions. This assembly shall consist of a Mini-Clik® and a mounting bracket (for installation on a nearby structure). The rain switch interconnect wire harness shall be pre-wired to the controller's sensor terminals**.** The rain switch shall actuate after user-selected rainfall set-points.

**RSP**

**RAIN SWITCH POLE MOUNTED ASSEMBLY** -The Satellite Assembly shall be provided with a rain switch pole-mounted assembly to shut down the irrigation system during rainy weather conditions. This assembly shall consist of a Mini-Clik® in a vandal-resistant housing for 2" Galvanized pole mount. The rain switch interconnect wire harness shall be pre-wired to the controller's sensor terminals.

**WRS**

**WIRELESS RAIN SWITCH ASSEMBLY** -The Satellite Assembly shall be provided with a wireless rain switch assembly to shut down the irrigation system during rainy weather conditions. This assembly shall consist of a Wireless Rain-Clik® and a mounting bracket (for installation of the sensor on a nearby structure). The receiver module is shall be pre-wired to the controller's sensor terminals.

**RFRZE** **RAIN & FREEZE SWITCH ENCLOSURE MOUNTED ASSEMBLY** - The Satellite Assembly shall be provided with a rain switch and freeze switch enclosure-mounted assembly to shut down the irrigation system during rainy & freezing weather conditions. This assembly shall consist of a Mini-Clik® & Freeze-Click® in a vandal-resistant housing mounted on the enclosure. The sensor interconnect wire harnesses shall be pre-wired to the controller's sensor terminals.

**FRZE** **FREEZE SWITCH ENCLOSURE MOUNTED ASSEMBLY** - The Satellite Assembly shall be provided with a freeze switch enclosure-mounted assembly to shut down the irrigation system during freezing weather conditions. This assembly shall consist of a Freeze-Click® in a vandal-resistant housing mounted on the enclosure. The sensor interconnect wire harness shall be pre-wired to the controller's sensor terminals.

**FRZ** **FREEZE SWITCH ASSEMBLY**- The Satellite Assembly shall be provided with a freeze switch assembly to shut down the irrigation system during freezing weather conditions. This assembly shall consist of a Freeze-Click® and a mounting bracket (for installation on a nearby structure). The sensor interconnect wire harness shall be pre-wired to the controller's sensor terminals.

**FRZP** **FREEZE SWITCH POLE MOUNTED ASSEMBLY** - The Satellite Assembly shall be provided with a freeze switch pole-mounted assembly to shut down the irrigation system during freezing weather conditions. This assembly shall consist of a Freeze-Clik® in a vandal-resistant housing for pole mount. The rain switch interconnect wire harness shall be pre-wired to the controller's sensor terminals

.**WRFZ** **WIRELESS RAIN & FREEZE SWITCH ASSEMBLY** - The Satellite Assembly shall be provided with a rain and freeze sensor assembly to shut down the irrigation system during rainy & freezing weather conditions. This assembly shall consist of a remote rain/freeze sensor with a mounting bracket (for installation on a nearby structure) and receiver module mounted in the satellite assembly. The module shall be pre-wired to the controller's sensor terminals.

**HWS** **HIGH WIND SHUT-OFF ASSEMBLY** - The Satellite Assembly shall be provided with a High Wind Shut-Off assembly to shut down the irrigation system during windy conditions. This assembly shall consist of a Wind-Clik® for pole mount. The wind sensor interconnect wire harness shall be pre-wired to an adjustable set point relay into the controller and to the controller's sensor terminals. The Wind Sensor shall actuate after winds of 12 mph to 35 mph are detected.

# FLOW SENSING

## FS-CAB

**16 GAUGE, 1 PAIR CABLE** – The flow sensor cable shall be 16-gauge, single pair. The construction shall include tin coated copper conductors, an aluminum shield to prevent cross-talk, a drain wire for grounding the cable, and an overall PE jacket. The cable shall be listed for direct burial.

## GTFS

**FLOW SENSING ASSEMBLY** – The Satellite Assembly shall be provided with a **Creative Sensor Technology** flow sensor for use with the purpose of receiving and reacting to flow data from flow sensor. The assembly consists of a tee mounted sensor. Master valve is required for each flow sensor in order to shut down the mainline when an abnormal or unwanted flow occurs.

| Part Number | Pipe Size / Sensor Tee | | Flow Range (GPM) |
|---|---|---|---|
| GTFS-100P | 1.0” | PVC | 1 - 52 |
| GTFS-150P | 1.5” | PVC | 2 - 108 |
| GTFS-150B | 1.5” | BRASS | 3 - 90 |
| GTFS-200P | 2.0” | PVC | 3 - 170 |
| GTFS-300S | 3.0” | PP Saddle | 6 - 300 |
| GTFS-400S | 4.0” | PP Saddle | 10 – 480 |
| GTFS-600S | 6.0” | PP Saddle | 45 - 1100 |

## FSDI

**FLOW SENSING ASSEMBLY** – The Satellite Assembly shall be provided with a **Data Industrial** flow sensor for use with the purpose of receiving and reacting to flow data from flow sensor. The assembly consists of a tee mounted sensor. Master valve is required for each flow sensor in order to shut down the mainline when an abnormal or unwanted flow occurs.

| Part Number | Pipe Size / Sensor Tee | | Flow Range (GPM) |
|---|---|---|---|
| FSDI-100B | 1.0” | Brass | 2 - 40 |
| FSDI-100P | 1.0” | PVC | 5 - 54 |
| FSDI-150B | 1.5” | Brass | 4 - 80 |
| FSDI-150P | 1.5” | PVC | 5 - 100 |
| FSDI-200B | 2.0” | Brass | 10 - 100 |
| FSDI-200P | 2.0” | PVC | 10 - 200 |
| FSDI-250B | 2.5” | Brass | 16 - 160 |
| FSDI-300P | 30” | PVC | 20 - 300 |
| FSDI-400P | 40” | PVC | 40 - 500 |
| FSDI-600S | 60” | PP Saddle | 90 – 1000 |

## SFS

**SONIC FLOW SENSOR -** Uses sonic pulses to accurately gauge water movement. Excellent for systems using a combination of low flow drip and high flow rotors on a single point of connection. Comes with digital readout display. Does not include master valve.

| Part Number | Pipe Size / Sensor Tee | | Flow Range |
|---|---|---|---|
| SFS-200 | 2.0 | Cast Iron | 0.01-120 |
| SFS-300 | 3.0” | Cast Iron | 0.01-300 |
| SFS-400 | 4.0” | Cast Iron | 2-500 |
| SFS-600 | 6.0” | Cast Iron | 5-1000 |

### SFM

**SONIC FLOW METER-** Uses sonic pulses to accurately gauge water movement. Excellent for systems using a combination of low flow drip and high flow rotors on a single point of connection. Does not include master valve.

| Part Number | | Pipe Size / Sensor Tee | Flow Range |
|---|---|---|---|
| SFM-100P | 1.0” | SCH80 PVC | 0.22 - 33 |
| SFM-150P | 1.5” | SCH80 PVC | 0.55 - 82 |
| SFM-200P | 2.0” | SCH80 PVC | 0.92 - 138 |
| SFM-300P | 3.0” | SCH80 PVC | 2.06 - 309 |
| SFM-400P | 4.0” | SCH80 PVC | 3.58 - 537 |

## FLOW SENSING & MASTER VALVE

### GTFSV

**FLOW SENSING ASSEMBLY WITH NORMALLY OPEN MASTER VALVE -** The Satellite Assembly shall be provided with a Flow Sensing Assembly for use with the purpose of receiving and reacting to flow data from flow sensor. The assembly consists of a tee mounted sensor and a **Superior 3300** normally open master valve. Master valve is required for each flow sensor in order to shut down the mainline when an abnormal or unwanted flow occurs.

| Part Number | Pipe Size / Sensor Tee | | Flow Range (GPM) |
|---|---|---|---|
| GTFSV-100B | 1.0” | Brass | 2 - 30 |
| GTFSV-100P | 1.0” | PVC | 1 - 52 |
| GTFSV-150B | 1.5” | Brass | 4 - 80 |
| GTFSV-150P | 1.5” | PVC | 2 - 108 |
| GTFSV-200B | 2.0” | Brass | 10 - 100 |
| GTFSV-200P | 2.0” | PVC | 3 - 170 |
| GTFSV-250B | 2.5” | Brass | 16 - 160 |
| GTFSV-300P | 3.0” | Brass | 20 - 300 |

### GTFSVC

**FLOW SENSING ASSEMBLY WITH NORMALLY CLOSED MASTER VALVE**
The Satellite Assembly shall be provided with a Flow Sensing Assembly for use with the purpose of receiving and reacting to flow data from flow sensor. The assembly consists of a tee mounted sensor and a **Superior 3200** normally closed master valve. Master valve is required for each flow sensor in order to shut down the mainline when an abnormal or unwanted flow occurs.

| Part Number | Pipe Size / Sensor Tee | | Flow Range (GPM) |
|---|---|---|---|
| GTFSVC-100B | 1.0” | Brass | 2 - 30 |
| GTFSVC-100P | 1.0” | PVC | 1 - 52 |
| GTFSVC-150B | 1.5” | Brass | 4 - 80 |
| GTFSVC-150P | 1.5” | PVC | 2 - 108 |
| GTFSVC-200B | 2.0” | Brass | 10 - 100 |
| GTFSVC-200P | 2.0” | PVC | 3 - 170 |
| GTFSVC-250B | 2.5” | Brass | 16 - 160 |
| GTFSVC-300P | 3.0” | PVC | 20 - 300 |

## NFS-PD

**NETAFIM PHOTO DIODE HYDROMETER** - Combines a master valve, flow sensor and analog volumetric water meter into a single unit. Saves space by not requiring any premeasured distances between pipe inlet and outlet. Uses a Photo Diode register for higher flow resolution. Ideal for high pressure and/or low flow systems.

**Normally Closed** – NFS-PDC-(size)
**Normally Open** – NFS-PD-(size)
**With PR Option, Normally Closed** – NFS-PDPRC-(size)
**With PR Option, Normally Open** – NFS-PDPR-(size)

| Size | Valve Size | Flow Range (GPM) |
|---|---|---|
| 150 | 1.5” | 0.02-60 |
| 200 | 2.0” | 0.02–120 |
| 300 | 3.0” | 2-300 |
| 400 | 4.0” | 5–500 |
| 600 | 6.0” | 10-1000 |

## ENCLOSURE MOUNTING PAD, PEDESTALS & COOLING FAN

**EMP**

**ENCLOSURE MOUNTING PAD** - The Satellite Assembly shall be provided with an Enclosure Mounting Pad assembly for the purpose of mounting to a "Strong Box" enclosure. This assembly consists of a reinforced plastic support base, a three-sixteenth inch thick 5052 H32 Marine Grade Aluminum mounting pad, and 304-grade stainless steel fastening brackets. The support base shall be installed and compacted in earth allowing the top two inches of the support base to be exposed above the grade.

| Part Number | Assembly# | Enclosure Model# |
|---|---|---|
| EMP-18 | CA1 | SB-18SS |
| EMP-18D | CA2 | SB-18DSS |
| EMP-24 | CA3 | SB-24SS |
| EMP-24D | CA4 | SB-24DSS |
| EMP-MT | CA5 | MPE |
| EMP-16 | CA6 | SB-16SS |

**PED**

**OPTIONAL PEDESTAL** – The Satellite Assembly shall be provided with an optional 12" high pedestal for the purpose of mounting to a "Strong Box" enclosure.

| Part Number | Enclosure Model |
|---|---|
| PED-16SS | SA6 (Top Entry) |
| PED-18SS | SA1 (Front Entry 18") |
| PED-18DSS | SA2 (Back to Back 18") |
| PED-24SS | SA3 (Front Entry 24") |
| PED-24D | SA4 (Back to Back 24") |
| PED-36SS | SA8 (Side-by-Side 36") |

**FAN**

**THERMOSTATICALLY CONTROLLED FAN** - Factory set at 90 degrees Fahrenheit the thermostat can be adjusted in the field to help maintain desired enclosure temperature. This option is for all Front Entry assemblies

**FAN-16**

**THERMOSTATICALLY CONTROLLED FAN** - Factory set at 90 degrees Fahrenheit the thermostat can be adjusted in the field to help maintain desired enclosure temperature. This FAN option is specifically built for the SA6 assembly.