

Controller Assembly Options

Specifications For BASELINE™ CONTROLLER OPTIONS

BASEMANAGER™ SYSTEM CLOUD ACCESS SERVICES

PART#	DESCRIPTION
BL-BMLSP-1	BASEMANAGER LITE – 1 CONTROLLER FOR 1 YEAR OF DATA SERVICE (FREE)
BL-BMPLUSSP-1	BASEMANAGER PLUS – 1 CONTROLLER FOR 1 YEAR OF DATA SERVICE (ADVANCED)

BASELINE™ CELLULAR DATA SERVICE PLANS (Does not include Modem)

PART#	DESCRIPTION
BLSP-1	BASELINE CELLULAR MODEM 1 YEAR SERVICE PLAN FOR 1 CONTROLLER
BLSP5-1	BASELINE CELLULAR MODEM 1 YEAR SERVICE PLAN FOR UP TO 5 CONTROLLERS
BLSP20-1	BASELINE CELLULAR MODEM 1 YEAR SERVICE PLAN FOR UP TO 20 CONTROLLERS

BASELINE™ SYSTEM COMMUNICATION OPTIONS (Cellular, WiFi)

PART#	DESCRIPTION
BLCMPH	BASELINE CELLULAR MODEM WITH PHANTOM (Salt Shaker) ANTENNA
BLCMO	BASELINE CELLULAR MODEM WITH OMNI ANTENNA
BLCMOP	BASELINE CELLULAR MODEM WITH OMNI AND POLE ANTENNA
BLCMY	BASELINE CELLULAR MODEM WITH YAGI ANTENNA
BLCMYP	BASELINE CELLULAR MODEM WITH YAGI AND POLE ANTENNA
BLGWPH	BASELINE CELLULAR MODEM GATEWAY WITH PHANTOM (Salt Shaker) ANTENNA

WIFI MODEMS AND ANTENNAS FOR BL3200™ CONTROLLER

PART#	DESCRIPTION
BL32WFPH	BASELINE WIFI MODEM WITH PHANTOM (Salt Shaker) ANTENNA
BL32WFO	BASELINE WIFI MODEM WITH OMNI ANTENNA
BL32WFOP	BASELINE WIFI MODEM WITH OMNI AND POLE ANTENNA
BL32WFY	BASELINE WIFI MODEM WITH YAGI ANTENNA
BL32WFYP	BASELINE WIFI MODEM WITH YAGI AND POLE ANTENNA

BASELINE™ SYSTEM COMMUNICATION OPTIONS (Spread Spectrum Radio)

PART#	DESCRIPTION
BLSSPH	BASELINE 900 MHz SPREAD SPECTRUM RADIO WITH PHANTOM (Salt Shaker) ANTENNA
BLSSO	BASELINE 900 MHz SPREAD SPECTRUM RADIO WITH OMNI ANTENNA
BLSSOP	BASELINE 900 MHz SPREAD SPECTRUM RADIO WITH OMNI AND POLE ANTENNA
BLSSY	BASELINE 900 MHz SPREAD SPECTRUM RADIO WITH YAGI ANTENNA
BLSSYP	BASELINE 900 MHz SPREAD SPECTRUM RADIO WITH YAGI AND POLE ANTENNA
BLGWSSPH	BASELINE ETHERNET GATEWAY MODEM WITH PHANTOM (Salt Shaker) ANTENNA

Controller Assembly Options

Specifications For BASELINE™ CONTROLLER OPTIONS

BICODERS - VALVE

PART#	DESCRIPTION
BLDEC1	BASELINE SINGLE VALVE FIELD BICODER
BLDEC2	BASELINE TWO VALVE FIELD BICODER
BLDEC4	BASELINE FOUR VALVE FIELD BICODER
BLDEC1-DC	BASELINE SINGLE VALVE FIELD BICODER FOR DC LATCHING SOLENOID
BLDEC2-DC	BASELINE TWO VALVE FIELD BICODER FOR DC LATCHING SOLENOID

This is important to know when determining the number of Decoders necessary. ie., if you have 40 total valves using a 200 station BASELINE 3200 controller and have 20 single valve locations, 4 double valve locations (two valves adjacent to each other) and 3 quadruple valve locations, you would need 20BLDEC1, 4BLDEC2, and 3BLDEC4.

BICODERS – SENSORS (Master Valve, Hydrometer, Flow, Pump, Event, & Pressure)

PART#	DESCRIPTION
BLDECMV	BASELINE MASTER VALVE FIELD BICODER
BLDECFS	BASELINE FLOW SENSOR/FLOW METER FIELD BICODER W/ PULSE OUTPUT
BLDECFSPD	BASELINE FLOW SENSOR/FLOW METER FIELD BICODER W/ ELECTROMAGNETIC OUTPUT
BLDECPS	BASELINE PUMP START/STOP FIELD BICODER
BLDECEV	BASELINE EVENT FIELD BICODER (FLOW, RAIN, WIND, & PSI SENSOR)
BLDECPR	BASELINE PRESSURE FIELD BICODER
BLDECPRTR	BASELINE PRESSURE WITH PRESSURE TRANSDUCER FIELD BICODER

SURGE ARRESTOR

PART#	DESCRIPTION
BLLA	BASELINE TWO WIRE PATH SURGE ARRESTOR PROTECTION

BISENSORS (Soil & Temperature)

PART#	DESCRIPTION
BLSS15	BASELINE 1.5" SOIL BISENSOR
BLSS5	BASELINE 5" SOIL BISENSOR
BLTS	BASELINE EXTERNAL AIR TEMPERATURE BISENSOR

TWO WIRE DECODER CABLE

PART#	DESCRIPTION
BLLA	PAIGE ELECTRIC COMMUNICATION CABLE – 14 AWG/2 Conductor "MAXI" Cable with two type UF wires with a PE outer jacket. The colors of the outer jacket shall be as called-for in the irrigation plans and specifications. Multiple colors available.

Other acceptable cables include Paige #P7296D, #P7350D, and #P7354D; Regency 14/2 and 12/2 Maxi Cable, Toro Decoder Cable, and Hunter Decoder Cable, Jacketed.

The Maximum Critical path for:
 14AWG is 5000 feet (Star pattern) and 10,000 feet (Loop pattern).
 12AWG is 8,000 feet (Star) and 15,000 feet (Loop).
 Total wire allowed for one controller is 16,000 feet on either 12 or 14 gauge.

**It is recommended that Communication Cable be installed in conduit with pull boxes located every 250' and at all crossings. Please refer to the customer's requirements for specific conduit size and pull box requirements.

Controller Assembly Options

Specifications For Baseline™ Controller Options

Communications Equipment

BaseManager™ System Cloud Access Services

PART#	DESCRIPTION
BL-BMLSP-1	<p>BASEMANAGER LITE – ONE CONTROLLER FOR ONE YEAR (Included with controller)</p> <p>The Controller Assembly shall be provided with the BL-BMLSP-1 web access platform for user access. Includes mobile access via web enables mobile device. Does not require a dedicated computer. Must communicate to one or all of the following communication – Ethernet, Cellular, or WIFI to access controller via web. To set up controller(s), user must access: https://www.baselinesystems.com/support.php/BaseManager2_Account_Setup.</p>
BL-BMPLUSSP-1	<p>BASEMANAGER PLUS – One controller for 1 year includes Account and Mobile Access Advanced</p> <p>The Controller Assembly shall be provided with the BL-BMPLUSSP-1 web access platform for user access. Includes advanced mobile access via web enables mobile device for real-time soil moisture and flow monitoring plus valve diagnostics and geo-locate features. Also includes WeatherAccess to select custom weather stations. Does not require a dedicated computer. Must communicate to one or all of the following communication – Ethernet, Cellular, or WIFI to access controller via web. To set up the controller(s), user must access: https://www.baselinesystems.com/support.php/BaseManager2_Account_Setup.</p>

Baseline™ Cellular Data Service Plans (Does not include Cellular Modem)

PART#	DESCRIPTION
BLSP-1	<p>CELLULAR DATA SERVICE PLAN – ONE (1) CONTROLLER FOR ONE YEAR</p> <p>The Controller Assembly shall be provided with a 1 year Wireless Data Service Plan for the purpose of allowing one controller cellular two-way communication between the server and controller. Includes SIM card and 12 months pre-paid data service. Does not include LiveView access.</p>
BLSP-5	<p>CELLULAR DATA SERVICE PLAN – FIVE (5) CONTROLLERS FOR ONE YEAR</p> <p>The Controller Assembly shall be provided with a 1 year Wireless Data Service Plan for the purpose of allowing five controllers shared cellular two-way communication between the server and controller. Includes SIM card and 12 months pre-paid data service. Does not include LiveView access.</p>
BLSP-20	<p>CELLULAR DATA SERVICE PLAN – TWENTY (20) CONTROLLERS FOR ONE YEAR</p> <p>The Controller Assembly shall be provided with a 1 year Wireless Data Service Plan for the purpose of allowing twenty controllers shared cellular two-way communication between the server and controller. Includes SIM card and 12 months pre-paid data service. Does not include LiveView access.</p>

Controller Assembly Options

Specifications For Baseline™ Controller Options

Communications Equipment

Baseline™ Cellular Modem Communication (Includes Modem, Antenna, and 1 year Data Service)

PART#	DESCRIPTION
BL-BMLSP-1	<p>CELLULAR MODEM WITH PHANTOM ANTENNA</p> <p>The Controller Assembly shall be provided with a 3G Cellular Modem and 3dB Phantom type Antenna for the purpose of receiving cellular communication from the BaseManager based server software to a BaseStation 1000™ or 3200™ controller located on site. Single BaseStation 1000™ controllers may utilize cellular communication. Multiple SubStation™ controllers may be utilized on site on a single cellular based BaseStation 3200™ controller via multiple communication methods. The BLCMPH Modem will require a 3G Cellular data service plan with static IP address from Cellular Service Provider. The SIM Card and 1 year of data service are included with the BLCMPH.</p>
BL-BMPLUSSP-1	<p>CELLULAR MODEM WITH OMNI MULTI-DIRECTIONAL ANTENNA</p> <p>The Controller Assembly shall be provided with a 3G Cellular Modem and Omni type Antenna for the purpose of receiving cellular communication from the BaseManager based server software to a BaseStation 1000™ or 3200™ controller located on site. Single BaseStation 1000™ controllers may utilize cellular communication. Multiple SubStation™ controllers may be utilized on site on a single cellular based BaseStation 3200™ controller via multiple communication methods. The BLCMO Modem will require a 3G Cellular data service plan with static IP address from Cellular Service Provider. The SIM Card and 1 year of data service are included with the BLCMO.</p>
BLCMOP	<p>CELLULAR MODEM WITH OMNI MULTI-DIRECTIONAL and POLE ANTENNA</p> <p>The Controller Assembly shall be provided with a 3G Cellular Modem and Omni type with Pole Antenna for the purpose of receiving cellular communication from the BaseManager based server software to a BaseStation 1000™ or 3200™ controller located on site. Single BaseStation 1000™ controllers may utilize cellular communication. Multiple SubStation™ controllers may be utilized on site on a single cellular based BaseStation 3200™ controller via multiple communication methods. The BLCMOP Modem will require a 3G Cellular data service plan with static IP address from Cellular Service Provider. The SIM Card and 1 year of data service are included with the BLCMOP. A two (2) inch x 15 foot pole and mounting brackets shall be provided with #BLCMOP.</p>
BLCMY	<p>CELLULAR MODEM WITH YAGI DIRECTIONAL ANTENNA</p> <p>The Controller Assembly shall be provided with a 3G Cellular Modem and Yagi type Antenna for the purpose of receiving cellular communication from the BaseManager based server software to a BaseStation 1000™ or 3200™ controller located on site. Single BaseStation 1000™ controllers may utilize cellular communication. Multiple SubStation™ controllers may be utilized on site on a single cellular based BaseStation 3200™ controller via multiple communication methods. The BLCMY Modem will require a 3G Cellular data service plan with static IP address from Cellular Service Provider. The SIM Card and 1 year of data service are included with the BLCMY.</p>
BLCMYP	<p>CELLULAR MODEM WITH YAGI DIRECTIONAL and POLE ANTENNA</p> <p>The Controller Assembly shall be provided with a 3G Cellular Modem and Yagi type with Pole Antenna for the purpose of receiving cellular communication from the BaseManager based server software to a BaseStation 1000™ or 3200™ controller located on site. Single BaseStation 1000™ controllers may utilize cellular communication. Multiple SubStation™ controllers may be utilized on site on a single cellular based BaseStation 3200™ controller via multiple communication methods. The BLCMYP Modem will require a 3G Cellular data service plan with static IP address from Cellular Service Provider. The SIM Card and 1 year of data service are included with the BLCMYP. A two (2) inch x 15 foot pole and mounting brackets shall be provided with #BLCMYP.</p>
<p>To activate a Cellular Modem, contact Baseline Systems to complete form for activation: https://www.baselinesystems.com/support.php/wireless-data-activation</p>	
BLGWPH	<p>CELLULAR MODEM GATEWAY WITH PHANTOM (Salt Shaker type) ANTENNA</p> <p>The Controller Assembly shall be provided with a 3G Cellular Modem Gateway, 3dB Phantom type Antenna, Ethernet 5-port Ethernet Switch, and integrated transformer for the purpose of receiving cellular to Ethernet communication from the BaseManager based server software to a BaseStation 1000™ or 3200™ controller located on site. The BLGWPH Modem will require a 3G Cellular data service plan with static IP address from Cellular Service Provider. The BLGWPH includes hardware only. Data service is not included and must be purchased separately. Up to 20 controllers may be connected to a Gateway with Spread Spectrum Ethernet Radio.</p>

Controller Assembly Options

Specifications For Baseline™ Controller Options

Communications Equipment

Baseline™ WiFi Modem Communication for Baseline™ 1000 Controller Only

PART#	DESCRIPTION
BL10WFPH	<p>WiFi MODEM WITH PHANTOM (Salt Shaker type) ANTENNA</p> <p>The Controller Assembly shall be provided with a Wifi Modem and 3dB Phantom type Antenna for the purpose of receiving Wifi communication from the BaseManager based server software over a WiFi network to a BaseStation 1000™ controller located on site. Single BaseStation 1000™ controllers may utilize WiFi communication.</p>
BL10WFO	<p>WiFi MODEM WITH OMNI MULTI-DIRECTIONAL ANTENNA</p> <p>The Controller Assembly shall be provided with a Wifi Modem and Omni type Antenna for the purpose of receiving WiFi communication from the BaseManager based server software over a WiFi network to a BaseStation 1000™ controller located on site. Single BaseStation 1000™ controllers may utilize WiFi communication.</p>
BL10WFOP	<p>WiFi MODEM WITH OMNI MULTI-DIRECTIONAL and POLE ANTENNA</p> <p>The Controller Assembly shall be provided with a Wifi Modem and Omni type with Pole Antenna for the purpose of receiving WiFi communication from the BaseManager based server software over a WiFi network to a BaseStation 1000™ controller located on site. Single BaseStation 1000™ controllers may utilize WiFi communication.</p>
BL10WFY	<p>WiFi MODEM WITH YAGI DIRECTIONAL ANTENNA</p> <p>The Controller Assembly shall be provided with a Wifi Modem and Yagi type Antenna for the purpose of receiving WiFi communication from the BaseManager based server software over a WiFi network to a BaseStation 1000™ controller located on site. Single BaseStation 1000™ controllers may utilize WiFi communication.</p>
BL10WFYP	<p>WiFi MODEM WITH YAGI DIRECTIONAL and POLE ANTENNA</p> <p>The Controller Assembly shall be provided with a Wifi Modem and Yagi type with Pole Antenna for the purpose of receiving WiFi communication from the BaseManager based server software over a WiFi network to a BaseStation 1000™ controller located on site. Single BaseStation 1000™ controllers may utilize WiFi communication.</p>

Baseline™ WiFi Modem Communication for Baseline™ 3200 Controller Only

PART#	DESCRIPTION
BL32WFPH	<p>WiFi MODEM WITH PHANTOM (Salt Shaker type) ANTENNA</p> <p>The Controller Assembly shall be provided with a Wifi Modem and 3dB Phantom type Antenna for the purpose of receiving wireless communication from the BaseManager based server software over a WiFi network to a BaseStation 3200™ controller located on site.. Multiple SubStation™ controllers may be utilized on site on a single WiFi based BaseStation 3200™ controller via multiple communication methods.</p>
BL32WFO	<p>WiFi MODEM WITH OMNI MULTI-DIRECTIONAL ANTENNA</p> <p>The Controller Assembly shall be provided with a Wifi Modem and Omni type Antenna for the purpose of receiving wireless communication from the BaseManager based server software over a WiFi network to a BaseStation 3200™ controller located on site.. Multiple SubStation™ controllers may be utilized on site on a single WiFi based BaseStation 3200™ controller via multiple communication methods.</p>
BL32WFOP	<p>WiFi MODEM WITH OMNI MULTI-DIRECTIONAL and POLE ANTENNA</p> <p>The Controller Assembly shall be provided with a Wifi Modem and Omni type with Pole Antenna for the purpose of receiving wireless communication from the BaseManager based server software over a WiFi network to a BaseStation 3200™ controller located on site.. Multiple SubStation™ controllers may be utilized on site on a single WiFi based BaseStation 3200™ controller via multiple communication methods.</p>

Controller Assembly Options

Specifications For Baseline™ Controller Options

Communications Equipment

Baseline™ Cellular Modem Communication (Includes Modem, Antenna, and 1 year Data Service)

PART#	DESCRIPTION
BLCMPH	<p>CELLULAR MODEM WITH PHANTOM ANTENNA</p> <p>The Controller Assembly shall be provided with a 3G Cellular Modem and 3dB Phantom type Antenna for the purpose of receiving cellular communication from the BaseManager based server software to a BaseStation 1000™ or 3200™ controller located on site. Single BaseStation 1000™ controllers may utilize cellular communication. Multiple SubStation™ controllers may be utilized on site on a single cellular based BaseStation 3200™ controller via multiple communication methods. The BLCMPH Modem will require a 3G Cellular data service plan with static IP address from Cellular Service Provider. The SIM Card and 1 year of data service are included with the BLCMPH.</p>
BLCMO	<p>CELLULAR MODEM WITH OMNI MULTI-DIRECTIONAL ANTENNA</p> <p>The Controller Assembly shall be provided with a 3G Cellular Modem and Omni type Antenna for the purpose of receiving cellular communication from the BaseManager based server software to a BaseStation 1000™ or 3200™ controller located on site. Single BaseStation 1000™ controllers may utilize cellular communication. Multiple SubStation™ controllers may be utilized on site on a single cellular based BaseStation 3200™ controller via multiple communication methods. The BLCMO Modem will require a 3G Cellular data service plan with static IP address from Cellular Service Provider. The SIM Card and 1 year of data service are included with the BLCMO.</p>
BLCMOP	<p>CELLULAR MODEM WITH OMNI MULTI-DIRECTIONAL and POLE ANTENNA</p> <p>The Controller Assembly shall be provided with a 3G Cellular Modem and Omni type with Pole Antenna for the purpose of receiving cellular communication from the BaseManager based server software to a BaseStation 1000™ or 3200™ controller located on site. Single BaseStation 1000™ controllers may utilize cellular communication. Multiple SubStation™ controllers may be utilized on site on a single cellular based BaseStation 3200™ controller via multiple communication methods. The BLCMOP Modem will require a 3G Cellular data service plan with static IP address from Cellular Service Provider. The SIM Card and 1 year of data service are included with the BLCMOP. A two (2) inch x 15 foot pole and mounting brackets shall be provided with #BLCMOP.</p>
BLCMY	<p>CELLULAR MODEM WITH YAGI DIRECTIONAL ANTENNA</p> <p>The Controller Assembly shall be provided with a 3G Cellular Modem and Yagi type Antenna for the purpose of receiving cellular communication from the BaseManager based server software to a BaseStation 1000™ or 3200™ controller located on site. Single BaseStation 1000™ controllers may utilize cellular communication. Multiple SubStation™ controllers may be utilized on site on a single cellular based BaseStation 3200™ controller via multiple communication methods. The BLCMY Modem will require a 3G Cellular data service plan with static IP address from Cellular Service Provider. The SIM Card and 1 year of data service are included with the BLCMY.</p>
BLCMYP	<p>CELLULAR MODEM WITH YAGI DIRECTIONAL and POLE ANTENNA</p> <p>The Controller Assembly shall be provided with a 3G Cellular Modem and Yagi type with Pole Antenna for the purpose of receiving cellular communication from the BaseManager based server software to a BaseStation 1000™ or 3200™ controller located on site. Single BaseStation 1000™ controllers may utilize cellular communication. Multiple SubStation™ controllers may be utilized on site on a single cellular based BaseStation 3200™ controller via multiple communication methods. The BLCMYP Modem will require a 3G Cellular data service plan with static IP address from Cellular Service Provider. The SIM Card and 1 year of data service are included with the BLCMYP. A two (2) inch x 15 foot pole and mounting brackets shall be provided with #BLCMYP.</p>
	<p>To activate a Cellular Modem, contact Baseline Systems to complete form for activation: https://www.baselinesystems.com/support.php/wireless-data-activation</p>
BLGWPH	<p>CELLULAR MODEM GATEWAY WITH PHANTOM (Salt Shaker type) ANTENNA</p> <p>The Controller Assembly shall be provided with a 3G Cellular Modem Gateway, 3dB Phantom type Antenna, Ethernet 5-port Ethernet Switch, and integrated transformer for the purpose of receiving cellular to Ethernet communication from the BaseManager based server software to a BaseStation 1000™ or 3200™ controller located on site. The BLGWPH Modem will require a 3G Cellular data service plan with static IP address from Cellular Service Provider. The BLGWPH includes hardware only. Data service is not included and must be purchased separately. Up to 20 controllers may be connected to a Gateway with Spread Spectrum Ethernet Radio.</p>

Controller Assembly Options

Specifications For Baseline™ Controller Options

Communications Equipment

Baseline™ WiFi Modem Communication for Baseline™ 1000 Controller Only

PART#	DESCRIPTION
BL10WFPH	<p>WiFi MODEM WITH PHANTOM (Salt Shaker type) ANTENNA The Controller Assembly shall be provided with a Wifi Modem and 3dB Phantom type Antenna for the purpose of receiving Wifi communication from the BaseManager based server software over a WiFi network to a BaseStation 1000™ controller located on site. Single BaseStation 1000™ controllers may utilize WiFi communication.</p>
BL10WFO	<p>WiFi MODEM WITH OMNI MULTI-DIRECTIONAL ANTENNA The Controller Assembly shall be provided with a Wifi Modem and Omni type Antenna for the purpose of receiving WiFi communication from the BaseManager based server software over a WiFi network to a BaseStation 1000™ controller located on site. Single BaseStation 1000™ controllers may utilize WiFi communication.</p>
BL10WFOP	<p>WiFi MODEM WITH OMNI MULTI-DIRECTIONAL and POLE ANTENNA The Controller Assembly shall be provided with a Wifi Modem and Omni type with Pole Antenna for the purpose of receiving WiFi communication from the BaseManager based server software over a WiFi network to a BaseStation 1000™ controller located on site. Single BaseStation 1000™ controllers may utilize WiFi communication.</p>
BL10WFY	<p>WiFi MODEM WITH YAGI DIRECTIONAL ANTENNA The Controller Assembly shall be provided with a Wifi Modem and Yagi type Antenna for the purpose of receiving WiFi communication from the BaseManager based server software over a WiFi network to a BaseStation 1000™ controller located on site. Single BaseStation 1000™ controllers may utilize WiFi communication.</p>
BL10WFYP	<p>WiFi MODEM WITH YAGI DIRECTIONAL and POLE ANTENNA The Controller Assembly shall be provided with a Wifi Modem and Yagi type with Pole Antenna for the purpose of receiving WiFi communication from the BaseManager based server software over a WiFi network to a BaseStation 1000™ controller located on site. Single BaseStation 1000™ controllers may utilize WiFi communication.</p>

Baseline™ WiFi Modem Communication for Baseline™ 3200 Controller Only

PART#	DESCRIPTION
BL10WFPH	<p>WiFi MODEM WITH PHANTOM (Salt Shaker type) ANTENNA The Controller Assembly shall be provided with a Wifi Modem and 3dB Phantom type Antenna for the purpose of receiving Wifi communication from the BaseManager based server software over a WiFi network to a BaseStation 1000™ controller located on site. Single BaseStation 1000™ controllers may utilize WiFi communication.</p>
BL32WFO	<p>WiFi MODEM WITH PHANTOM (Salt Shaker type) ANTENNA The Controller Assembly shall be provided with a Wifi Modem and 3dB Phantom type Antenna for the purpose of receiving wireless communication from the BaseManager based server software over a WiFi network to a BaseStation 3200™ controller located on site.. Multiple SubStation™ controllers may be utilized on site on a single WiFi based BaseStation 3200™ controller via multiple communication methods.</p>
BL32WFOP	<p>WiFi MODEM WITH OMNI MULTI-DIRECTIONAL ANTENNA The Controller Assembly shall be provided with a Wifi Modem and Omni type Antenna for the purpose of receiving wireless communication from the BaseManager based server software over a WiFi network to a BaseStation 3200™ controller located on site.. Multiple SubStation™ controllers may be utilized on site on a single WiFi based BaseStation 3200™ controller via multiple communication methods.</p>

Controller Assembly Options

Specifications For Baseline™ Controller Options

Communications Equipment

Baseline™ WiFi Modem Communication for Baseline™ 3200 Controller Only (cont.)

PART#	DESCRIPTION
BL32WFY	<p>WiFi MODEM WITH YAGI DIRECTIONAL ANTENNA</p> <p>The Controller Assembly shall be provided with a Wifi Modem and Yagi type Antenna for the purpose of receiving wireless communication from the BaseManager based server software over a WiFi network to a BaseStation 3200™ controller located on site.. Multiple SubStation™ controllers may be utilized on site on a single WiFi based BaseStation 3200™ controller via multiple communication methods.</p>
BL32WFYP	<p>WiFi MODEM WITH YAGI DIRECTIONAL and POLE ANTENNA</p> <p>The Controller Assembly shall be provided with a Wifi Modem and Yagi type with Pole Antenna for the purpose of receiving wireless communication from the BaseManager based server software over a WiFi network to a BaseStation 3200™ controller located on site.. Multiple SubStation™ controllers may be utilized on site on a single WiFi based BaseStation 3200™ controller via multiple communication methods.</p>

Baseline™ 900 MHz Spread Spectrum Ethernet Radio Communication (1 mile maximum distance)

PART#	DESCRIPTION
BLSSPH	<p>900 MHz SPREAD SPECTRUM RADIO WITH 3dB PHANTOM (Salt Shaker) TYPE ANTENNA</p> <p>The Controller Assembly shall be provided with a 900 MHz Spread Spectrum Radio and 3dB Phantom Antenna for the purpose of communicating directly to a Baseline™ 1000 or to and from a Baseline™ 3200 controller or SubStation. For controller to controller communication, all controllers must have Spread Spectrum Radio communication and at least one radio needs to be configured as a gateway. 35 maximum total radios (including Gateway) can communicate in a network.</p>
BLSSO	<p>900 MHz SPREAD SPECTRUM RADIO WITH OMNI MULTI-DIRECTIONAL ANTENNA</p> <p>Assembly shall be provided with a 900 MHz Spread Spectrum Radio and Omni Antenna for the purpose of communicating directly to a Baseline™ 1000 or to and from a Baseline™ 3200 controller or SubStation. For controller to controller communication, all controllers must have Spread Spectrum Radio communication and at least one radio needs to be configured as a gateway. 35 maximum total radios (including Gateway) can communicate in a network.</p>
BLSSOP	<p>900 MHz SPREAD SPECTRUM RADIO WITH OMNI MULTI-DIRECTIONAL ANTENNA & POLE Assembly shall be provided with a 900 MHz Spread Spectrum Radio and Omni with Pole Antenna for the purpose of communicating directly to a Baseline™ 1000 or to and from a Baseline™ 3200 controller or SubStation. For controller to controller communication, all controllers must have Spread Spectrum Radio communication and at least one radio needs to be configured as a gateway. 35 maximum total radios (including Gateway) can communicate in a network.</p>
BLSSY	<p>900 MHz SPREAD SPECTRUM RADIO WITH YAGI DIRECTIONAL ANTENNA</p> <p>Assembly shall be provided with a 900 MHz Spread Spectrum Radio and Yagi Antenna for the purpose of communicating directly to a Baseline™ 1000 or to and from a Baseline™ 3200 controller or SubStation. For controller to controller communication, all controllers must have Spread Spectrum Radio communication and at least one radio needs to be configured as a gateway. 35 maximum total radios (including Gateway) can communicate in a network.</p>

Controller Assembly Options

Specifications For Baseline™ Controller Options

Communications Equipment

Baseline™ 900 MHz Spread Spectrum Ethernet Radio Communication (1 mile maximum distance) (cont.)

PART#	DESCRIPTION
BLSSYP	<p>900 MHz SPREAD SPECTRUM RADIO WITH YAGI DIRECTIONAL and POLE ANTENNA Assembly shall be provided with a 900 MHz Spread Spectrum Radio and Yagi with Pole Antenna for the purpose of communicating directly to a Baseline™ 1000 or to and from a Baseline™ 3200 controller or SubStation. For controller to controller communication, all controllers must have Spread Spectrum Radio communication and at least one radio needs to be configured as a gateway. 35 maximum total radios (including Gateway) can communicate in a network.</p>
BLGWSPH	<p>SPREAD SPECTRUM MODEM GATEWAY RADIO WITH PHANTOM (Salt Shaker type) ANTENNA The Controller Assembly shall be provided with a Spread Spectrum (Ethernet) Gateway Radio, 3dB Phantom type Antenna, Ethernet 5-port Ethernet Switch, and integrated transformer for the purpose of receiving cellular to Ethernet communication from the BaseManager based server software to a BaseStation 1000™ or 3200™ controller located on site. The BLGWPH Modem will require a 3G Cellular data service plan with static IP address from Cellular Service Provider. The BLGWPH includes hardware only. Data service is not included and must be purchased separately. Up to 20 controllers may be connected to a Gateway with Spread Spectrum Ethernet Radio.</p>

Note: For Spread Spectrum Radio communication, antenna selection shall be determined at time of specification based on anticipated communication range. A radio survey must be conducted to best determine the correct selection of antenna type and height (Omni or Dome type). A radio survey is included with the purchase of all Assemblies including Baseline™ controllers and radio equipment. 1 mile is a maximum distance, however, interference with terrain and buildings may affect actual distance.

Controller Assembly Options

Specifications For Baseline™ Controller Options

BASELINE™ DECODER SYSTEM OPTIONS

biCoders™ - Valve

PART#	DESCRIPTION
BLDEC1	<p>SINGLE VALVE FIELD BICODER™</p> <p>The Baseline™ Decoder System Assembly shall be provided with a Single Valve Field biCoder™ for the purpose of providing an interface between Base Station 1000™ or 3200™ controllers to each valve. Each Base Station 1000™ or Base Station 3200™ controller shall be capable of learning the field address of each biCoder™. The BLDEC1 is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR. For two additional Field biCoders™ use # 2BLDEC1, for three, use # 3BLDEC1 etc., up to a maximum of # 100BLDEC1 for Base Station 1000 or # 200BLDEC1. This is based on the number of valves controlled by the Base Station controllers. The BLDEC1 may be used in separately or in combination with other Field biCoder™ models such as the BLDEC2, and BLDEC4 (see descriptions). The Field biCoder™ may be installed in a valve box or direct buried.</p>
BLDEC2	<p>TWO VALVE FIELD BICODER™</p> <p>The Baseline™ Decoder System Assembly shall be provided with a Two Valve Field biCoder™ for the purpose of providing an interface between Base Station 1000™ or 3200™ controllers for up to two valves per BLDEC2. Each Base Station 1000™ or Base Station 3200™ controller shall be capable of learning the field address of each biCoder™. The BLDEC2 is capable of a two output with two valves maximum. The recommended splice kit shall be 3M #DBR. For two additional Field biCoders™ use # 2BLDEC2 (4 valves), for three, use # 3BLDEC2 (for 6 valves) etc., up to a maximum of # 50BLDEC2 for Base Station 1000 or # 100BLDEC2. This is based on the number of valves controlled by the Base Station controllers. The BLDEC2 may be used in separately or in combination with other Field biCoder™ models such as the BLDEC1, and BLDEC4 (see descriptions). The Field biCoder™ may be installed in a valve box or direct buried.</p>
BLDEC4	<p>FOUR VALVE FIELD BICODER™</p> <p>The Baseline™ Decoder System Assembly shall be provided with a Four Valve Field biCoder™ for the purpose of providing an interface between Base Station 1000™ or 3200™ controllers for up to four valves per BLDEC4. Each Base Station 1000™ or Base Station 3200™ controller shall be capable of learning the field address of each biCoder™. The BLDEC4 is capable of a four output with four valves maximum. The recommended splice kit shall be 3M #DBR. For two additional Field biCoders™ use # 2BLDEC4 (8 valves), for three, use # 3BLDEC4 (for 12 valves) etc., up to a maximum of # 25BLDEC1 for Base Station 1000 or # 50BLDEC1. This is based on the number of valves controlled by the Base Station controllers. The BLDEC4 may be used in separately or in combination with other Field biCoder™ models such as the BLDEC1, and BLDEC2 (see descriptions). The Field biCoder™ may be installed in a valve box or direct buried.</p>
<p>Note: 1, 2, and 4 station Field biCoders™ may be placed a maximum of 150' from valve location using 14. ga. wire.</p>	
BLDEC1-DC	<p>SINGLE VALVE FIELD BICODER™ DC LATCHING SOLENOID</p> <p>The Baseline™ Decoder System Assembly shall be provided with a Single Valve Field biCoder™- DC Latching for the purpose of providing an interface between Base Station 1000™ or 3200™ controllers to each DC latching solenoid valve. Each Base Station 1000™ or Base Station 3200™ controller shall be capable of learning the field address of each biCoder™. The BLDEC1-DC is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR. For two additional Field biCoders™ use # 2BLDEC1-DC, for three, use # 3BLDEC1-DC etc., up to a maximum of # 100BLDEC1-DC for Base Station 1000 or # 200BLDEC1-DC. This is based on the number of valves controlled by the Base Station controllers. The BLDEC1-DC may be used in separately or in combination with other Field biCoder™ models such as the BLDEC2-DC (see descriptions). The Field biCoder™ may be installed in a valve box or direct buried.</p>

Controller Assembly Options

Specifications For Baseline™ Controller Options

BASELINE™ DECODER SYSTEM OPTIONS

biCoders™ – Sensors (Master Valve, Hydrometer, Flow, Pump, Event, & Pressure)

PART#	DESCRIPTION
BLDECMV	<p>SENSOR BICODER™ - MASTER VALVE</p> <p>The Baseline™ Decoder System Assembly shall be provided with a Master Valve Field biCoder™ for the purpose of providing an interface between Base Station 1000™ or 3200™ controllers to a master valve. The BLDECMV is capable of a single output to a single master valve. The Master Valve Field biCoder™ may be placed 250' from master valve.</p>
BLDECFS	<p>SENSOR BICODER™ - FLOW SENSOR W/ PULSE OUTPUT</p> <p>The Baseline™ Decoder System Assembly shall be provided with a Flow Sensor Field biCoder™ for the purpose of providing an interface between Base Station 1000™ or 3200™ controllers to a flow sensor. The BLDECFS is capable of a single output to a single flow sensor and is used specifically for sensors with pulse output (Data Industrial, Creative Sensor Technology (CST), Netafim Water Meters and Hydrometers with pulse output, and Bermad Hydrometer with pulse output)</p>
BLDECSPD	<p>SENSOR BICODER™ - FLOW SENSOR W/ ELECTROMAGNETIC OUTPUT (PHOTO DIODE)</p> <p>The Baseline™ Decoder System Assembly shall be provided with a Flow Sensor Field biCoder™ for the purpose of providing an interface between Base Station 1000™ or 3200™ controllers to a flow sensor. The BLDECSPD is capable of a single output to a single flow sensor and is used specifically for sensors with electromagnetic output (Netafim Water Meters and Hydrometers with photo diode output)</p>
BLDECPS	<p>SENSOR BICODER™ - PUMP START/STOP</p> <p>The Baseline™ Decoder System Assembly shall be provided with a Pump Start/Stop biCoder™ for the purpose of providing an interface between Base Station 1000™ or 3200™ controllers to a normally open or closed pump start relay and 24V transformer. The BLDECPS may also be used to open or close a switch type device (no relay or transformer).</p>
BLDECEV	<p>SENSOR BICODER™ - EVENT</p> <p>The Baseline™ Decoder System Assembly shall be provided with an Event Field biCoder™ for the purpose of providing an interface between Base Station 1000™ or 3200™ controllers to a normally closed or open Pause Switch ("click") such as Rain, Flow (not pulse type), Wind, or Pressure type Sensors.</p>
BLDECPR	<p>SENSOR BICODER™ - PRESSURE</p> <p>The Baseline™ Decoder System Assembly shall be provided with a Pressure Sensor Field biCoder™ for the purpose of providing an interface between Base Station 1000™ or 3200™ controllers to a Pressure Sensor for monitoring pressure readings.</p>
BLDECPR	<p>SENSOR BICODER™ - PRESSURE W/ PRESSURE TRANSDUCER</p> <p>The Baseline™ Decoder System Assembly shall be provided with a Pressure Sensor Field biCoder™ and Pressure Transducer for the purpose of providing an interface between Base Station 1000™ or 3200™ controllers to a Pressure Sensor for monitoring pressure readings.</p>

Two Wire Path Surge Arrestor

PART#	DESCRIPTION
BLLA	<p>TWO WIRE PATH SURGE ARRESTOR</p> <p>The Baseline™ Decoder System Assembly shall be provided with a Line Surge Arrestor for the purpose of providing a surge protection interface between the between Base Station 1000™ or 3200™ controllers to each valve and ground rod or ground plate. The Line Surge Protection shall protect an area of ~500 feet in diameter and at dead end runs. The BLLA Surge Arrestor shall be installed every 500 feet on the 2-wire path. A ground rod kit (#GR-K) or ground plate (#GP3-K) must also be installed at each BLLA location. The #GR-K or GP3-K must be included separately with each BLLA.</p>

Controller Assembly Options

Specifications For Baseline™ Controller Options

BASELINE™ DECODER SYSTEM OPTIONS

biSensors™ – Sensors (Soil Moisture and Temperature Sensors)

PART#	DESCRIPTION
BLSS15	<p>BISENSOR™ - 1.5" MOISTURE SENSOR</p> <p>The Baseline™ Decoder System Assembly shall be provided with a 1.5" Soil Moisture biSensor™ for the purpose of providing an interface between Base Station 1000™ or 3200™ controllers to a 1.5" compact Soil Moisture bioSensor suited for applications such as green roof, green wall, and containers. May be used for in ground applications as well where root zones may be shorter or smaller. The BLSS15 is installed at a 2-3" depth of effective root zone. See installation instructions for specific placement of sensor(s). The BLSS15 includes 50' of 18 ga. direct burial, dual conductor irrigation cable to connect directly to two wire path. If additional cable is needed, use polyethylene double-jacketed or UF-B UL PVC double-jacketed two conductor solid core wire.</p>
BLSS5	<p>BISENSOR™ - 5" MOISTURE SENSOR</p> <p>The Baseline™ Decoder System Assembly shall be provided with a 5" Soil Moisture biSensor™ for the purpose of providing an interface between Base Station 1000™ or 3200™ controllers to a 5" Soil Moisture bioSensor suited for applications such as turf, shrubs, and trees. The BLSS5 is installed at a 2-3" depth of effective root zone. See installation instructions for specific placement of sensor(s). The BLSS5 includes 50' of 18 ga. direct burial, dual conductor irrigation cable to connect directly to two wire path. If additional cable is needed, use polyethylene double-jacketed or UF-B UL PVC double-jacketed two conductor solid core wire.</p>
BLTS	<p>BISENSOR™ - AIR TEMPERATURE SENSOR</p> <p>The Baseline™ Decoder System Assembly shall be provided with an Air Temperature Sensor for the purpose of providing an interface between Base Station 1000™ or 3200™ controllers to an Air Temperature Sensor for monitoring and reacting to air temperature thresholds such as high heat or freeze. The BLTS Air Temperature Sensor is pre-mounted in a plastic enclosure for wall or pole mounting. Pole is provided separately.</p>