

# **Description**

BECSys2 water chemistry controls provide continuous monitoring and control of sanitizers and pH in a simple-to-use configuration.

The controller has the option of a derived chlorine ppm reading on a 0.6 to 6.0 or 0.2 to 3.0 scale or displaying the ORP and pH readings only. Operational settings are password-protected for system security.

The BECSys2 can be networked with other BECSys systems for data-logging, remote access, and alarm notification purposes.

Every controller comes complete with BECSys pH and ORP sensors, flow switch, machined flow cell, and factory-trained start-up and support provided by local distribution.

# BECSys2

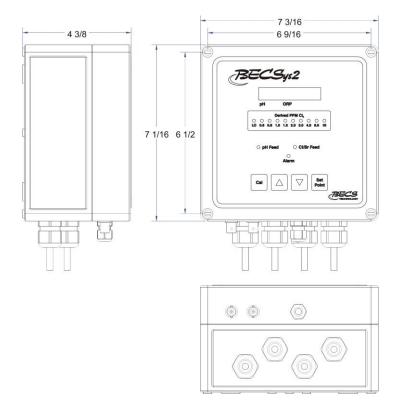
**Water Chemistry Controller** 















## **Features**

## **Control Options**

- Suitable for gas chlorine, sodium and calcium hypochlorite, bromine, and ozone applications
- Dual Setpoint Booster Mode (DSBM) Provides configurable alternate setpoint for a secondary sanitizer feed, especially useful in controlling salt-chlorine generation systems
- pH control output configurable as feed-up, feed-down, or dual control
- Feed outputs configurable as ON/OFF or Time-Based Proportional
- Configurable failsafe overfeed timers (1, 2, 4 hours or disabled through internal DIP switch)

#### **System Security**

Two levels of security access codes – Operator and Rep

#### **System Inputs**

- BECSys pH and ORP sensors featuring inorganic electrolyte for extended sensor life
- Optional RTD temperature sensor

#### **Data-Logging and Remote Access**

- Standard integral RS-485 serial communications port
- Optional BECSysRCM Remote Communications module, provides remote access and historical data logs for up to 32 connected BECSys2's (or BECSys3's)
- BECSys for Windows<sup>TM</sup> compatible (included with BECSysRCM)

#### **Display**

- 16 character front panel backlit LCD display
- Front panel available with derived chlorine ppm level light bar (3 options)
  - o 0.2 to 3.0 ppm (with independent high and low ppm Indicator LEDs)
  - 0.6 to 6.0 ppm (with independent high and low ppm Indicator LEDs)
  - No ppm scale
- Display language is field programmable (English, Spanish, French)
- pH feed and chlorine/bromine feed status indicator LEDs

### **Flow Cell**

- Round PVC flow cell with pressure gauge, sample tap, and two ball valves for cell isolation
- Two flow switch options:
  - Reed flow switch (standard)
  - o Rotary flow switch with inline check-valve (optional upgrade)

#### Warranty

• 2 years electronics, 2 years sensors

#### **Regulatory Approvals**

NSF: NSF Certified and Listed to NSF/ANSI Standard 50

USA: ETL Listed ANSI/UL 61010-1

Canada: <u>ETL Listed</u> CAN/CSA C22.2 #61010-1

Europe/CE: CENELEC EN 61010-1

European Community Low Voltage Directive 73/23/EEC

- Electromagnetic compatibility
  - o FCC part 15 sub part B: Radio frequency devices, unintentional radiators
  - EN 61326: EMC requirements for measurement and control equipment
  - European Community EMC Directive 89/336/EEC





# **BECSys2 Water Chemistry Control**

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Specifications			
Part Number	1100187		
Firmware version	v1.30		
Physical			
Enclosure Material	Glass Reinforced Polycarbonate, NEMA 4X (IP66)		
Overlay Material	UV Stabilized Polyester		
Flow Cell Material	PVC Body, Clear Acrylic Window, Stainless Steel Hardware		
Display	1 Row, 16 Character Back-Lit Alpha/Numeric LCD		
pH and ORP Sensor Connection Type	BNC		
Input Power and Relay Output Cords (115 VAC	SJTW Type		
Controller)	Note: 230 VAC Controller is supplied without power cords		
Enclosure Dimensions	Width: 7.17" Height: 7.09" Depth: 4.37"		
Environmental			
Storage Temperature	-30 to 60 Degrees C		
Ambient Operating Temperature	-18 to 40 Degrees C		
Ambient Humidity	95% non condensing maximum		
Electrical			
Voltage	115/230 VAC, 50/60 Hz (Specify Input Voltage at Time of Order)		
Phase	Single		
Current			
115 VAC Input:	9.25 Amps Full Load (0.25 Amps: Controller, 9 Amps: Relay Outputs, 3A x 3)		
230 VAC Input:	9.125 Amps Full Load (0.125 Amps: Controller, 9 Amps: Relay Outputs, 3A x 3)		
Performance			
pH Range / Resolution	0 to 14 pH / 0.1 pH Units		
ORP Range / Resolution	-1500 to +1500 mV / 1mV		
Temperature (optional) Range / Resolution	32 to 150 degrees F (0 to 66 degrees C) /		
	1 degree (F or C)		
RS-485	9600 bps at distances up to 4000 ft.		
Relay 1 Output (pH Control)	Same as Controller Input Voltage (115 VAC or 230 VAC)		
Relay 2 Output	Jumper Selectable to:		
(Chlorine/Bromine/Oxidizer Control)	Same as Controller Input Voltage (115 VAC or 230 VAC)		
D 1 00 1 1	Or Dry Contact (Supports 24 to 280 VAC)		
Relay 3 Output	Same as Controller Input Voltage (115 VAC or 230 VAC)		
(User Selectable as: Sensor Wash, Dual pH Feed,			
Alarm, or Cl/Br Booster Feed)			
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# **BECSys2 Water Chemistry Control**

Related Documents			
Included in standard configuration	Part Number	Data Sheet	
BECSys pH Sensor	9660013	ENG-4321-DOC	
BECSys ORP Sensor	9660022	ENG-4317-DOC	
Round PVC flow cell assembly with clear acrylic window, and stainless steel hardware	1210147	ENG-4315-DOC	
Flow Cell connecting kit includes reed flow switch, oil-filled pressure gauge, sample tap, isolation valves, and connecting PVC hardware	1210148	ENG-4315-DOC	
Reed flow switch	9660006	ENG-4328-DOC	
Operator's Manual	8620009	n/a	
Installation & Technical Manual	8620010	n/a	
Laminated Quick Reference Card:			
0.2 – 3.0 ppm scale	8620028	ENG-4284-CDR	
0.6 – 6.0 ppm scale	8620029	ENG-4285-CDR	
No ppm display	8620030	ENG-4286-CDR	
Options	Part Number	Data Sheet	
Temperature Sensor	9660016	ENG-4327-DOC	
Feed-through Teflon flow cell with clear acrylic window, and stainless steel hardware	1210137	ENG-4337-DOC	
Rotary flow switch w/ check valve (replaces Reed flow switch)	9660007	ENG-4329-DOC	
BECSys RCM Remote Communications Module	1100236	ENG-4380-DOC	
Reference Information	Format(s)	Document #	
BECSys2 Bid Specification	.doc, .pdf	ENG-4265-DOC	
BECSys2 Line Drawing	.dxf, .jpg	ENG-4338-CDR	
BECSys2 Sales Brochure	.pdf	SLS-4661-CDR	
BECSys Family Sales Brochure	.pdf	SLS-4336-CDR	

