

# LEVEL MONITORING CONTROL SOLUTIONS

Using Patented  
C-Level™ Sensor  
Floatless Technology



## SJE RHOMBUS®

[www.sjerrhombus.com](http://www.sjerrhombus.com)

## C-LEVEL™ SENSOR

### Innovative Floatless Technology

The simple and accurate C-Level™ Sensor converts the water pressure in a tank into a low voltage electrical signal that is read by a variety of level monitoring products manufactured exclusively by SJE Rhombus. This innovative technology provides for continuous level monitoring of tank applications and is backed by an industry-leading five-year limited warranty.

#### C-Level™ Sensor Features:

- Operates on low voltage
- Compact, non-moving design works well in wastewater pump tanks, confined space applications and systems with a high grease content
- One sensor replaces up to four floats
- Easy to install
- Available in cable lengths up to 300 ft. (91.44 m)
- Excellent alternative to mercury floats

#### C-Level™ Sensor is available for:

- Installer Friendly Series® control panels
- Installer Friendly Series® In-Site® control panels
- EZ Series® In-Site® CL control panels
- C-Con™ converter box
- SJE Level Monitor™ CL system

#### C-Level™ Sensor Models

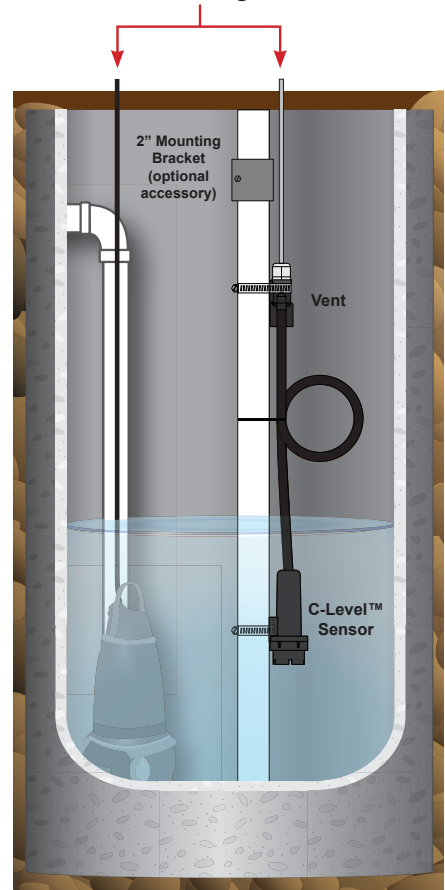
**CL40** - sensing range up to 40 inches (101.6 cm)

**CL100** - sensing range up to 100 inches (254 cm)

US Patent No. 8,567,242; 8,336,385 and 8,650,949.



Connects to a  
Level Monitoring Product



## LEVEL MONITORING PRODUCTS



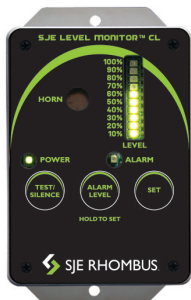
### C-Con™ Converter Box\*

**Converts most control panels to floatless technology.**

The C-Con™ converts the signal from the C-Level™ sensor to simulate up to 4 float levels:

- NEMA 1 rated for indoor use
- Can be mounted inside a control panel
- Green power on indicator
- Four adjustable setpoints with red LED status indicators
- Adjust pump start/stop and alarm levels from converter box
- Simulate button for testing proper wiring of outputs
- Factory-installed input/output wires
- Excellent for systems with a high grease content or confined space applications

\* C-Con™ Box available with CL40 model only



### SJE Level Monitor™ CL System With a glance, see the level in your tank.

The SJE Level Monitor™ CL system uses the C-Level™ sensor to monitor the level in the tank:

- 10 segment LED scalable bar graph displays level as percentage of full tank
- Green power on LED indicator
- Red alarm LED indicator; audible alarm
- Alarm level and set buttons for adjusting alarm setpoint
- Test/silence button
- Auxiliary contacts (NO/NC)



## Installer Friendly Series® Control Panels

### Single Phase, Three Phase; Simplex, Duplex; Demand or Timed Dose

IFS control panels provide greater control of septic systems via a simple-to-use touch pad for programming and monitoring pump and float operation in on-site applications. IFS panels read the electrical signal from the C-Level™ sensor and displays this level in inches or centimeters on the panel display for easier monitoring of the system. The **touch pad display** allows the user to easily view and adjust system settings from the control panel, eliminating the need to go into the tank for manual adjustment:

- Pump activation levels
- Alarm levels
- Pump run indicators
- Status indicators (including low water alarm)
- HOA switch(es)
- Hand mode safety features
- Elapsed time meter(s)
- Cycle counter(s)
- Alarm counter
- Lead/lag selector (toggles pump operation in duplex models)
- Override counter (timed dose mode)
- Can be easily set to demand or timed dose in the field



## Installer Friendly Series® In-Site® Data Logging Control Panels

### Single Phase; Simplex, Duplex; Demand or Timed Dose

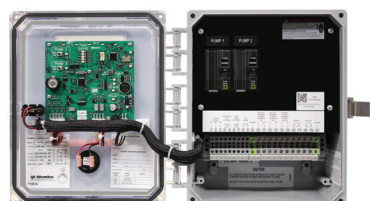
IFS In-Site® control panels offer all the features of an IFS panel, **PLUS data logging!** Monitor system events by plugging a flash drive into the USB port located on the inner door to download system history. The pre-loaded software on the flash drive formulates the data for you, creating easy-to-read reports so system conditions can be quickly identified and corrected.

#### Logged events include:

- Pump run times
- Pump cycles
- Alarm conditions
- Power outages
- Service calls

In-Site IN-SITE FOR ON-SITE SYSTEM MONITORING									
On Site	Pump 1	Pump 2	Pump 3	Pump 4	Pump 5	Pump 6	Pump 7	Pump 8	Pump 9
Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
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Event Log Screen



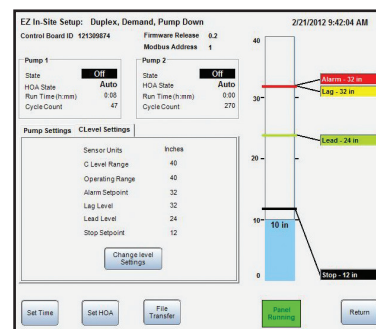
## EZ Series® In-Site® CL Control Panels

### Single Phase; Simplex, Duplex; Demand or Timed Dose

#### In-Site to On-site Just Got Easier!

The EZ Series® In-Site® CL data logging control panel is now available with **wireless Bluetooth® connection** for your smartphone or tablet. Now there is no need to open the panel for configuration, viewing status or downloading data using the new **EZ Connect™ Mobile App**.

- Data logging up to 4,000 system events
- Continuous level monitoring using the C-Level™ sensor (optional back up alarm floats)
- Demand or timed dose (easily converted in the field)
- Configurable via Windows® PC and serial cable
- Includes Bluetooth® Smart module
  - Enables wireless connection to Adnroid or iOS device
  - Eliminates need for PC
  - Eliminates need to open panel for configuration, viewing status or data download
  - Enables safe and secure access to the control panel in all weather conditions



EZ Connect Programming Screen

## C-LEVEL™ SENSOR SPECIFICATIONS

### ELECTRICAL:

**Input Power:** 12 VDC 100 mA max.

**Output:** Variable Frequency Signal

### CABLE LENGTH:

20 Gauge Cable, 300 feet (91 meters) maximum spliced length

NOTE: Cable splicing permitted only if done in dry water proof enclosure and shielded wires are used.

### PHYSICAL:

**Sensor Length:** 5.0 inches (12.7 cm)

**Sensor Diameter:** 2.0 inches (5 cm)

**Mounting:** Stainless steel cable clamp on sensor and vent housing

### OPERATING:

**Fluid Compatibility's:** water, sewage

**Maximum Submersion Depth Sensor:** 10 ft. water (3 m water)

**Maximum Environment Temperature:** 120°F (50°C) wet or dry

**Sensor Zero Point:** Approximately 2 inches from bottom of sensor

**Recommended Minimum Operation Level:**

3 inches water measured from sensor zero point

**Repeatability:** +/- 5% full scale

**Range:** 40 inch or 100 inch (depending on model)

### COMPONENT PARTS:

Sensor and Vent Housing

**Material:** PVC

**Color:** Black

### ISOLATION BLADDER:

Bellow design to increase surface area and reduce effect of temperature change

Oil filled to isolate sensor from sewage or corrosive environment

### VENT TUBING:

**Material:** PVC

Electrical cable ran inside vent tube to increase kink resistance of tube preventing plugging of vent

### VENT:

Breathable membrane which stops water intrusion

### ELECTRIC CABLE:

**Jacket Type:** Type CM 3 wire 20AWG with Shield

**Jacket Material:** PVC



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In addition to many state on-site and rural water associations, SJE Rhombus® is proud to be members of these national industry associations:

