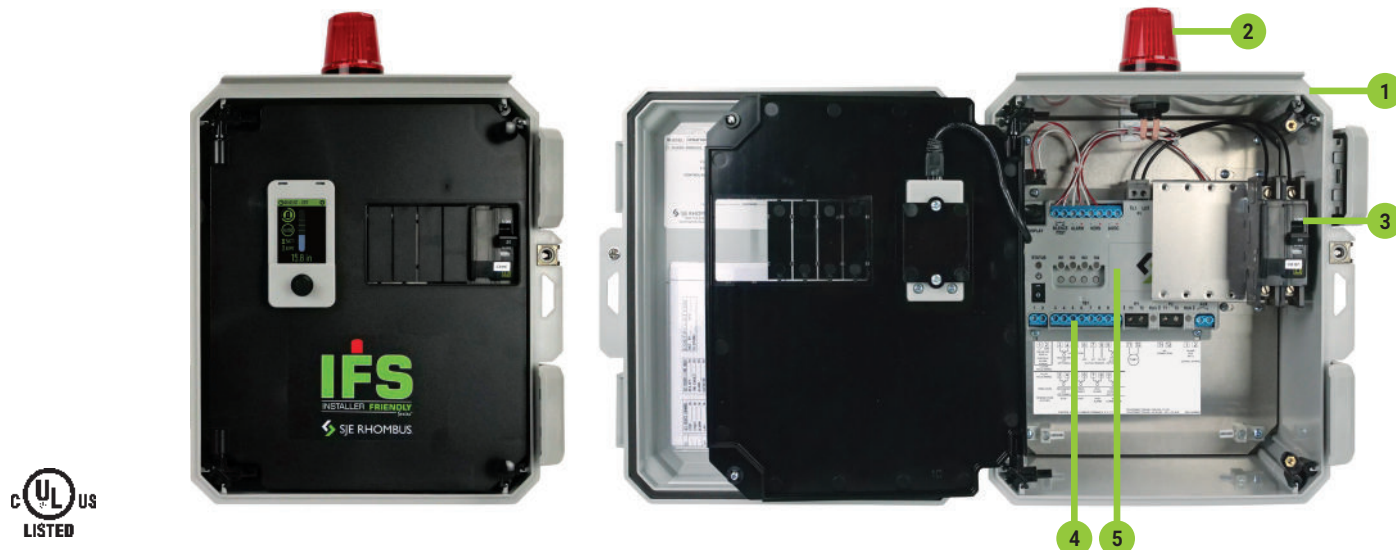


INSTALLER FRIENDLY SERIES® (IFS)

SINGLE PHASE SIMPLEX

Demand Dose or Timed Dose, Float, Sensor or Transmitter Controlled System for Pump Control and System Monitoring



Panel layout may vary with options.

Reg. Cdn Pat. & TM Off

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

The Next Generation IFS simplex control panel utilizes an innovative circuit board design enclosed in a touch-safe housing to control one 120/208/240 VAC single phase pump in water and sewage applications. These newly redesigned IFS panels feature an easy-to use color LCD interface located on the inner door for programming and system monitoring. The panel configuration can be easily converted in the field to either a timed dose or demand dose through the LCD interface.

The panel can easily be changed in the field to utilize floats, Sub-X™ LT Transmitter or the C-Level™ Sensor for continuous level monitoring. The Sub-X™ LT Transmitter and the C-Level™ Sensor sense the level in the tank and sends a signal to the panel. Pump activation levels can be adjusted by using the LCD interface.

- Five-year limited warranty on panel
- Two-year limited warranty on C-Level™ Sensor and Sub-X™ LT Transmitter

LCD INTERFACE FEATURES

- Full color graphics and menu navigation encoder for easy setup
- Touch safe housing
- Pump Hand/Off/Auto Control selectable via menu navigation
- Sub-X™ LT Transmitter, C-Level™ Sensor or float operation selectable
- Demand or Timed Dose operation selectable via menu navigation
- Tank Level Indication and setpoint monitoring at-a-glance
- Lead pump is easily identified by a graphic ring around the current lead pump regardless of control mode (timed dose or demand)
- Displays remaining time in Timed Dose mode
- RJ45 communication connector
- Flashing function for alarm beacon and horn (configurable)
- Manual alarm reset (configurable)
- Thermal cutout and seal failure module (optional)



COMPONENTS

1. Enclosure measures 12 x 10 x 6 inches (30.48 x 24.4 x 15.24) NEMA 4X (ultraviolet stabilized thermoplastic, padlockable with integral mounting flanges, drip shield, heavy duty cover latches, and stainless steel ¼ turn set screw; for outdoor or indoor use)
2. Red Alarm Beacon provides 360° visual check of alarm condition
3. Circuit breakers provides pump power disconnect and branch circuit protection included as standard on all panels
4. Sub-X™ LT Transmitter, C-Level™ Sensor and float connection terminal blocks
5. Controller Features:
 - a. Incoming Control/Alarm Power terminal blocks
 - b. Control/Alarm Power/System Status green LED indicators illuminate if control/alarm power is present and controller is operating*
 - c. Controller status green LED indicators for: Power/Active, Float Input Status, Pump Run, C-Level Active*
 - d. Normally open auxiliary alarm contacts included as standard
 - e. Control Power On/Off switch
 - f. Green LED Pump Run indicators illuminate when pump is called to run*
 - g. Control panel able to operate if LCD interface fails or is disconnected
 - h. Touch safe housing
6. Alarm Horn provides audible warning of alarm condition (not shown)
7. Exterior Alarm Test/Silence push button allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared (not shown)
8. Modbus Port (RJ45) for future expansion - eg. remote monitoring, valve control, In-Site®, logging, etc. (not shown)

*In fault condition, LED indicators will be red.

INSTALLER FRIENDLY SERIES® SINGLE PHASE SIMPLEX - Demand or timed dose system for pump control and system monitoring.

| Part # | Pre-configured Panels for Easy Ordering | List Price |
|---------|---|------------|
| 1071427 | IFN21W114X6A8AC10E | \$1,240.12 |
| 1071416 | IFN21W114H6A8AC10E17G | \$1,360.63 |

| IFN | 2 | 1 | W | 1 | | 4 | | 6A8AC10E |
|---------------|------------|---------------|------------------|-----------------|---------------------|------------------|---------------------------|------------------------|
| CONTROL PANEL | MODEL TYPE | ALARM PACKAGE | ENCLOSURE RATING | STARTING DEVICE | PUMP FULL LOAD AMPS | PUMP DISCONNECTS | LEVEL CONTROL APPLICATION | OPTIONS (LISTED BELOW) |

| | | | | | | | | |
|---------------------------|---|-----|--|--|--|--|-------------|--|
| CONTROL PANEL | ✓ | IFN | | | | | | |
| MODEL TYPE | ✓ | 2 | Single Phase Simplex (includes Options 6A, 8AC and 10E as standard) | | | | \$1,240.12 | |
| ALARM PACKAGE | ✓ | 1 | Alarm Package (includes test/silence switch, red light, & horn) | | | | Base | |
| ENCLOSURE RATING | ✓ | W | Weatherproof, NEMA 4X (engineered thermoplastic) | | | | Base | |
| STARTING DEVICE | ✓ | 1 | 120/208/240V | | | | Base | |
| PUMP FULL LOAD AMPS | | 0 | 0 - 7 FLA | | | | Base | |
| | | 1 | 7 - 15 FLA | | | | Base | |
| | | 2 | 15 - 20 FLA | | | | \$114.33 | |
| PUMP DISCONNECTS | ✓ | 4 | Circuit Breaker 120/208/240V | | | | Base | |
| LEVEL CONTROL APPLICATION | | H | Floats - Pump Down (select Option 17 below) Timed dose = redundant off, timer enable, alarm / Demand dose = stop, start, alarm (all systems will ship with 3 floats by default) | | | | See Options | |
| | | E | EZconnex® Float Switch System | | | | See Options | |
| | | X | No Floats, Transmitter or Sensor | | | | Base | |
| | | C | C-Level™ Sensor (select Option 24 or 29)* Select Option 3E and/or 4D for high water alarm and/or redundant off floats | | | | See Options | |
| | | T | Sub-X™ LT Transmitter (select Option 31)* Select Option 3E and/or 4D for high water alarm and/or redundant off floats. | | | | See Options | |

PRICING WORKSHEET

IFS Simplex Base Price **\$1,240.12**

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

***NOTE:** When using the Sub-X™ LT Transmitter or C-Level™ Sensor: Operation is for Pump down applications only.
Industry practices suggest that a secondary device, such as a float switch, be used for redundant activation of the high level alarm and pump shut off.

| OPTIONS | DESCRIPTION | LIST PRICE |
|---------|--|------------|
| 1J | Duo Alarm Inputs | \$41.20 |
| 3E | High Water Alarm Float (must also select Option 17)** Only Available with Level Control Application = C or T | \$40.17 |
| 4D | Redundant Off Float (must also select Option 17)** Only Available with Level Control Application = C or T | \$40.17 |
| 5AE | Thermal Cutout/Heat Sensor & Seal Failure Circuit (2 wire) | \$322.39 |
| ✓ 6A | Auxiliary Alarm Contact, Form A (included as standard) | \$0.00 |
| ✓ 8AC | Display Board - Includes: ETM Counter, Events (Cycles) Counter, Alarm Counter, and Override Counter (Timed Dose Only) (included as standard) | \$0.00 |
| ✓ 10E | Lockable Latch - NEMA 4X (included as standard) | \$0.00 |
| 10F | Lightning Arrestor (must also select Option 15A) | \$309.00 |
| 10K | Anti-condensation Heater (must also select Option 15A) | \$149.35 |
| 10P | Panel Mounting Post - Factory Installed (max. enclosure size 14" x 12" x 6") | \$231.75 |
| 15A | Control/Alarm Circuit Breaker | \$97.85 |
| 16C | 30' Cord in Lieu of 20' Cord (per Float) | \$8.24 |
| 16D | 40' Cord in Lieu of 20' Cord (per Float) | \$16.48 |
| 16E | 50' Cord in Lieu of 20' Cord (per Float) | \$24.72 |
| 16G | 100' Cord in Lieu of 20' Cord (per Float) | \$65.92 |

| OPTIONS | DESCRIPTION | LIST PRICE |
|---------|--|------------|
| 17C | Sensor Float® / Internally Weighted (3 Floats) - Mercury** | \$170.10 |
| 17D | Sensor Float® / Externally Weighted (3 Floats) - Mercury** | \$176.40 |
| 17G | SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical** | \$120.51 |
| 17H | SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical** | \$148.32 |
| 17J | Sensor Float® / Pipe Clamp (3 Floats) - Mercury** | \$144.90 |
| 19F | 4th Float for Timer Override Only Available with Level Control Application = H | \$40.17 |
| 24E | C-Level™ CL40 Sensor with 25' Vented Cable | \$341.25 |
| 24F | C-Level™ CL40 Sensor with 50' Vented Cable | \$393.75 |
| 24P | C-Level™ CL40 Sensor with 100' Vented Cable | \$498.75 |
| 29A | C-Level™ CL100 Sensor with 25' Vented Cable | \$341.25 |
| 29B | C-Level™ CL100 Sensor with 50' Vented Cable | \$393.75 |
| 29C | C-Level™ CL100 Sensor with 100' Vented Cable | \$498.75 |
| 31A | Sub-X™ LT Transmitter 25' (4-20mA) | \$334.75 |
| 31B | Sub-X™ LT Transmitter 50' (4-20mA) | \$386.25 |
| 31C | Sub-X™ LT Transmitter 100' (4-20mA) | \$489.25 |
| 33D | EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp | \$350.27 |
| 35D | EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp | \$424.73 |

**For 3E and 4D options, there is no charge when selecting any of the 17 options.

For additional level control and control panel options, please contact Technical Support at techsupport@sjeinc.com.

Note: Added options, voltage, and amp range selected may change enclosure size and enclosure features, and component layout. Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

| SENSOR/TRANSMITTER | OPERATING RANGE |
|--------------------------------|-----------------|
| C-Level™ CL40 | 0-39.9 inWC |
| C-Level™ CL100 | 0-99.9 inWC |
| Sub-X™ LT Transmitter (4-20mA) | 0-100 inWC |