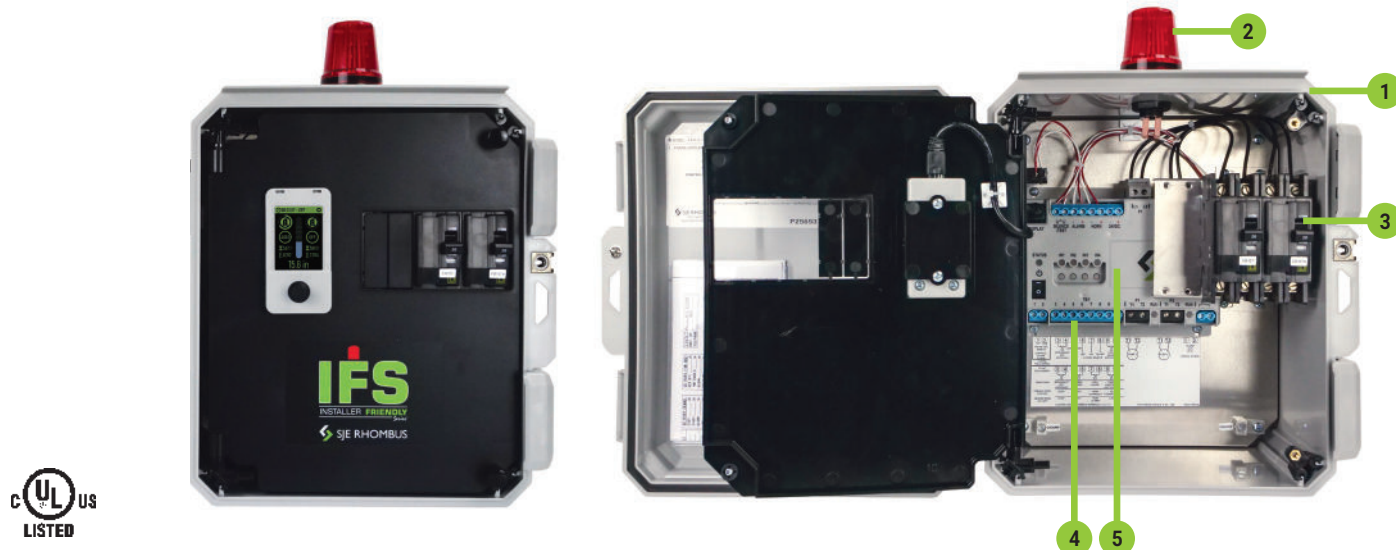


# INSTALLER FRIENDLY SERIES® (IFS)

## SINGLE PHASE DUPLEX

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 duplex control panel utilizes an innovative circuit board design enclosed in a touch-safe housing to control two 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 DUPLEX - Demand or timed dose system for pump control and system monitoring.

Part #	Pre-configured Panels for Easy Ordering	List Price
1071431	IFN41W114X6A8AC10E	\$1,588.26
1071430	IFN41W114H6A8AC10E17G	\$1,708.77

IFN	4	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	✓	4	Single Phase Duplex (includes Options 6A, 8AC and 10E as standard)					\$1,588.26
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					\$139.05
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 Duplex Base Price	\$1,588.26
Alarm Package	
Enclosure Rating	
Starting Device	
Pump Full Load Amps	
Pump Disconnects	
Level Control Application	
Total Options	
<b>TOTAL LIST PRICE</b>	

**\*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	\$41.07
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