WARNING: Substitution of components may impair intrinsic safety.

Choose peripheral devices and associated apparatuses such that the following conditions are met:

- \( U_{i}/V_{\text{max}} \)
- \( U_{o}/V_{\text{oc}} \)
- \( I_{i}/I_{\text{max}} \)
- \( I_{o}/I_{\text{sc}} \)
- \( P_{i} \)
- \( P_{o} \)
- \( C_{o}/C_{a} \)
- \( C_{i} + C_{\text{cable}} \)
- \( L_{o}/L_{a} \)
- \( L_{i} + L_{\text{cable}} \)

WARNING: Connect only the internal battery pack OR the external solar system/external power source

When replacing the internal battery, only use SignalFire lithium battery model number 810-0008-02

See SignalFire Instruction manual number 960-0034-01 for installation requirements

Install the internal battery pack only when external power is not used

Class I, Division 1, Groups C and D

Ambient Temperature Limit: -40°C to +60°C

Temperature Code: T3
WARNING: Substitution of components may impair intrinsic safety.

Choose peripheral devices and associated apparatuses such that the following conditions are met:

- $UI/\text{V}_{\text{max}}$ ≤ $Uo/\text{Voc}$
- $Ii/\text{Imax}$ ≥ $Io/\text{Isc}$
- $P_i$ ≥ $P_o$
- $C_i/C_o$ ≥ $C_o + C_{\text{cable}}$
- $L_i/L_o$ ≥ $L_o + L_{\text{cable}}$

When replacing the internal battery, only use SignalFire lithium battery model number 810-0008-02

See SignalFire Instruction manual number 960-0058-01 for installation requirements

Install the internal battery pack only when external power is not used

### Ambient Temperature Limit
- -40°C to +60°C
- Temperature Code: T3

### External Power Source
- $U_i/V_{\text{max}}$: 5.9 VDC
- $I_i$: 3.1 A
- $P_i$: 0.8 W
- $C_i$: 29.43 μF
- $L_i$: 13.5 μH

### Thermocouple Sensor Output
- $U_o/V_{\text{oc}}$: 14.7 VDC
- $I_o/I_{\text{sc}}$: 119.14 mA
- $P_o$: 0.44 W
- $C_o$: 1.45 μF
- $L_o$: 10.02 μH
WARNING: Substitution of components may impair intrinsic safety. Choose peripheral devices and associated apparatuses such that the following conditions are met:

- \( U_i/V_{\text{max}} \)
- \( U_o/V_{\text{ooc}} \)
- \( I_i/I_{\text{max}} \)
- \( I_o/I_{\text{sc}} \)
- \( P_i \)
- \( P_o \)
- \( C_o/C_{\text{a}} \)
- \( C_{i} + C_{\text{cable}} \)
- \( L_o/L_{\text{a}} \)
- \( L_i + L_{\text{cable}} \)

When replacing the internal battery, only use SignalFire lithium battery model number 810-0008-02. See SignalFire Instruction manual number 960-0058-01 for installation requirements. Install the internal battery pack only when external power is not used.
SignalFire Sentinel Modbus with Float Stick Interface
Model: SENTINEL-FS-XXX

WARNING: Substitution of components may impair intrinsic safety.
Choose peripheral devices and associated apparatuses such that the following conditions are met:

- $U_{i}/V_{\text{max}} \geq U_{o}/V_{\text{o}}$
- $I_{i}/I_{\text{max}} \geq I_{o}/I_{\text{sc}}$
- $P_{i} \geq P_{o}$
- $C_{o}/C_{a} \geq C_{o}/C_{\text{cable}}$
- $L_{o}/L_{a} \geq L_{i} + L_{\text{cable}}$

When replacing the internal battery, only use SignalFire lithium battery model number 810-0008-02
See SignalFire Instruction manual number 960-0058-01 for installation requirements
Install the internal battery pack only when external power is not used

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- **External Solar Battery System** (SENTINEL-SOLAR-XXX) OR external Power source
- **Internal Lithium Battery** (810-0008-02)
- **J1**
- **J2**
- **J11 MODBUS**
- **Float Stick Interface PCB** PN: 840-0127-01

### External Power Source
- $U_{i}/V_{\text{max}}$: 5.9 VDC
- $I_{i}$: 3.1 A
- $P_{i}$: 0.8 W
- $C_{i}$: 29.43 uF
- $L_{i}$: 13.5 uH

### Float Stick Sensor Output
- $U_{o}/V_{\text{oc}}$: 7.71 VDC
- $I_{o}/I_{\text{sc}}$: 119.14 mA
- $P_{o}$: 0.44W
- $C_{a}$: 130 uF
- $L_{a}$: 10.02 mH

### Ambient Temperature Limit
- -40°C to +60°C
- Temperature Code: T3

PCB ASSY: 840-0094-02