

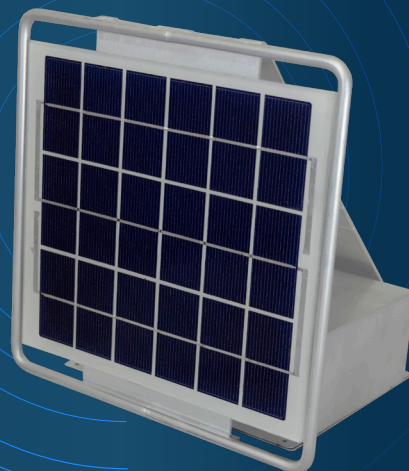
HC SOLAR POWER SYSTEMS

Reliable off-grid power for Sentinel, AirQ Scout-LCD, RANGER, and A2 installations

COMPACT ALL-IN-ONE PACKAGE: SOLAR PANEL, CHARGE CONTROLLER & RECHARGEABLE BATTERIES

INDUSTRIAL DESIGN FOR HARSH & HAZARDOUS LOCATIONS

PURPOSE-BUILT TO POWER COMPATIBLE SIGNALFIRE DEVICES



FEATURES

- Integrated solar charging system and 9.0 Ah battery
- Class I, Division 1 and Class I, Division 2 configurations
- Compatible with Sentinel, AirQ Scout-LCD, RANGER, and A2 platforms
- Reduces dependence on replaceable primary batteries
- Supports frequent measurements, transmissions, and sensor power
- Optional pole-mount and instrument mounting bracket kits available

DESCRIPTION

SignalFire HC Solar Power Systems provide a compact, field-ready power solution for remote wireless instrumentation where line power is unavailable or impractical. Each system combines a 4 W solar panel, integrated 9.0 Ah battery, charging electronics, and a rugged mounting interface into a single outdoor assembly.

These products support SignalFire Sentinel, AirQ Scout-LCD, RANGER, and A2 platforms in hazardous-area applications.

One Platform, Two Electrical Configurations

HCSolar-C1D1-Sentinel is designed for compatible low-power Sentinel and AirQ Scout-LCD applications requiring an intrinsically safe power source. Its output is current limited to maintain intrinsic safety.

HCSolar-C1D2-RANGER and HCSolar-C1D2-A2 use the same Class I, Division 2 HC Solar configuration. The A2 version supports all A2 models. The RANGER version supports all RANGER models except DIN RANGER and includes a cable-entry tee fitting for RANGER enclosures with a single cable entry.

Typical Applications	Ideal When
Remote well sites and pipelines	Utility power is unavailable or impractical
Tank and remote process monitoring	Frequent reporting increases battery demand
Water and wastewater assets	Sensors require higher power or longer warm-up time

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COMMON HC SOLAR SPECIFICATIONS

Solar panel power:	4.0 W	Battery capacity:	9.0 Ah
Solar panel dimensions:	9.5 in H × 8.0 in W	Overall width:	8.1 in (206 mm)
Overall height:	11.8 in (299 mm)	Overall depth:	6.1 in (154 mm)
Mounting interface:	Integral rear mounting plate. Pole mounting hardware not included.		

Model-Specific Rating and Certifications

Characteristic	HCSolar-C1D1-Sentinel	HCSolar-C1D2-RANGER / A2
Hazardous-area rating	Class I, Div. 1, Groups C & D	Class I, Div. 2, Groups A, B, C & D
Temperature class	T3	T5
Ambient temperature	-40°C to +60°C (-40°F to +140°F)	-40°C to +85°C (-40°F to +185°F)
Protection concept	Intrinsically safe; Ex ia IIB T3 Ga	Nonincendive
Standards	UL 913; CSA C22.2 No. 60079-11; CSA C22.2 No. 60079-0	UL 121201; CSA C22.2 No. 213
Output voltage	3.3 to 5.5 VDC	3.3 to 5.5 VDC
Output current	80 mA fused	500 mA max

PLATFORM COMPATIBILITY

AirQ Scout-LCD

Sentinel: Compatible with Sentinel Digital, HART, RTD, Turbine, Thermocouple, and supported Analog and Modbus configurations.

Sentinel Analog: 1-5 V mode only, sensor draw < 8 mA

Sentinel Modbus: sensor draw < 14 mA

Not compatible with Sentinel Analog in 4-20 mA mode.

A2: Compatible with all A2 configurations.

RANGER: Compatible with all RANGER configurations except DIN RANGER

MOUNTING OPTIONS

The base unit includes an integral rear mounting plate. U-bolts/pole hardware are not included. Optional bracket kits work with all HC Solar configurations.

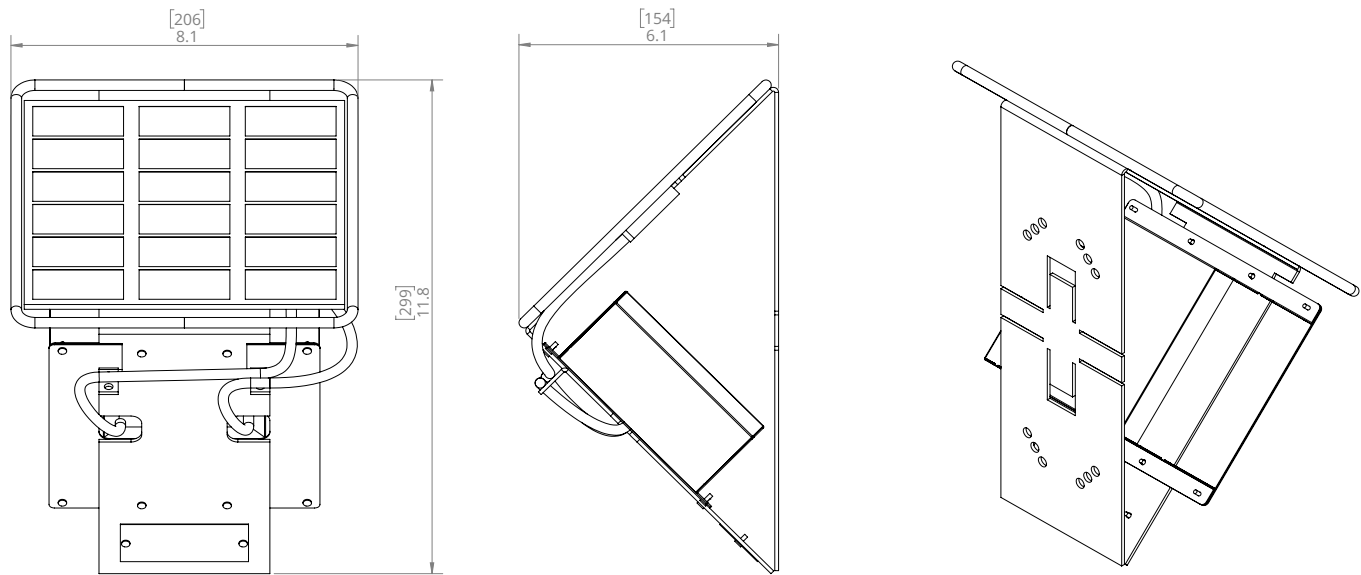
BKT-Sentinel-Pole_MT	Pole-mount bracket kit
BKT-Sentinel-YokeEJA	Yokogawa EJA Series
BKT-Sentinel-Vega	VEGA single-chamber radar
BKT-Sentinel-Mag706	Magnetrol 706 radar
BKT-Sentinel-MagR86	Magnetrol R86 radar
BKT-Sentinel-EH	Endress+Hauser single-chamber instrument

Pole-mount kit includes two 2-7/16 in. ID U-bolts.

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DIMENSIONS



ORDERING INFORMATION

Order Code	Description
HCSolar-C1D1-Sentinel	High Capacity Intrinsically Safe Solar System, 9.0 Ah
HCSolar-C1D2-RANGER	Class I, Division 2 High Capacity Solar System, 9.0 Ah, with cable-entry tee fitting
HCSolar-C1D2-A2	Class I, Division 2 High Capacity Solar System, 9.0 Ah