

# NRG SOILING MEASUREMENT KIT

The NRG Soiling Measurement Kit provides users with the critical information needed to accurately and reliably quantify the site-specific impacts of soiling caused by dust, snow, and other particles on prospective as well as operating PV projects.

## Key Benefits:

- Accurately and reliably quantifies site-specific impacts of soiling losses
- Compliance with IEC 61742 ensures high performance and bankability
- Flexible configurations accommodate pre- and post-construction applications
- Integrates seamlessly with NRG FLARE Systems
- Measure short-circuit current, open circuit voltage, and back-of-module temperature with user's choice of statistical interval as well as optional 1 Hz sample data collection for flexible data analysis options



*Pulsed Soiling Module (PSM1)*

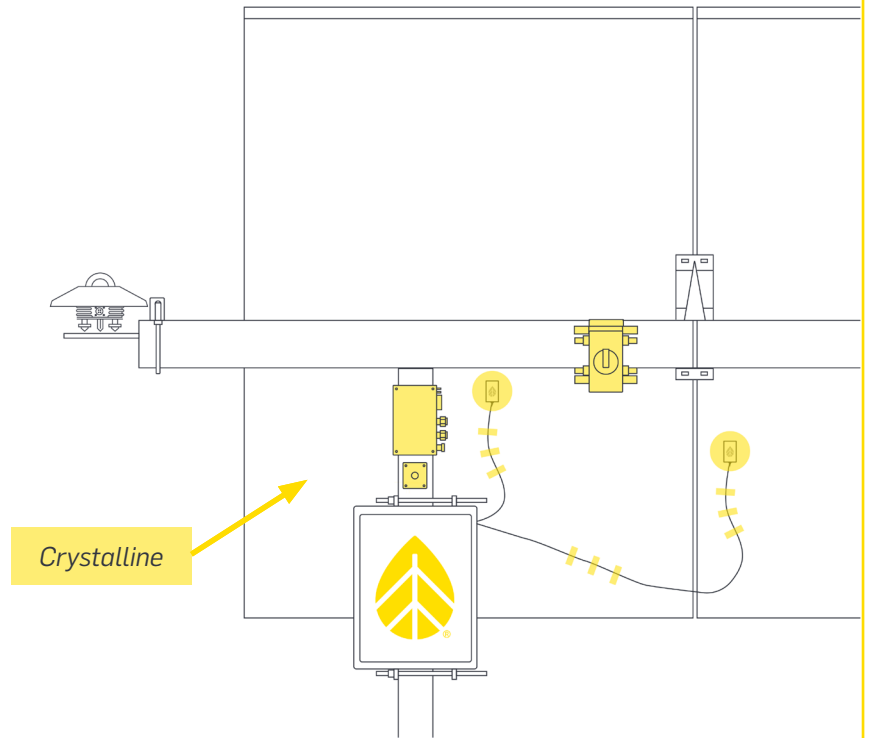
# CONFIGURATIONS

## KIT 19045

### SRM CRYSTALLINE 30A PSM

#### In the Box:

- One (1) Crystalline Pulsed Soiling Module (PSM1)
- Two (2) NRG PVT1 PV Temperature Sensors
- One (1) Solar Maintenance Button
- One (1) Isolator Assembly
- Related array mounting and wiring components

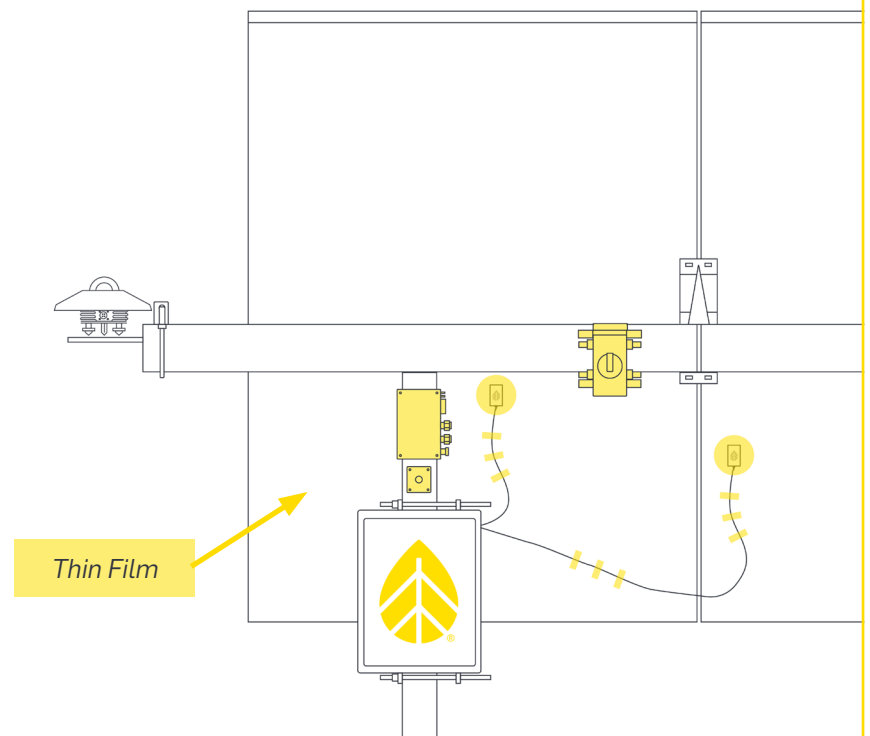


## KIT 19046

### SRM THIN FILM 300V PSM

#### In the Box:

- One (1) Thin Film Pulsed Soiling Module (PSM1)
- Two (2) NRG PVT1 PV Temperature Sensors
- One (1) Solar Maintenance Button
- One (1) Isolator Assembly
- Related array mounting and wiring components

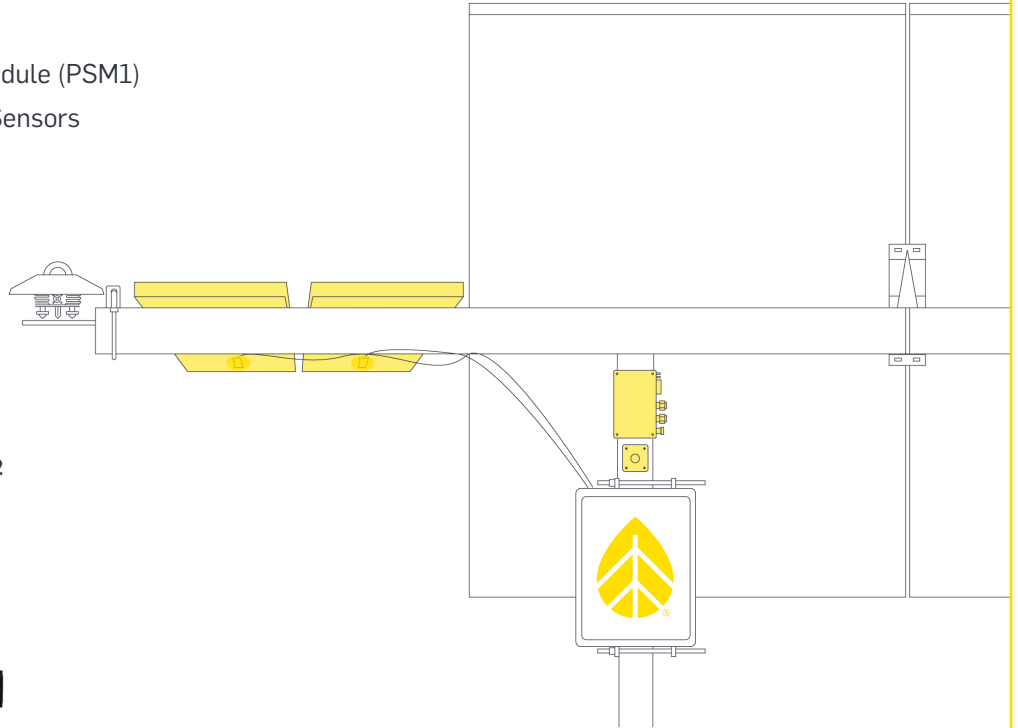
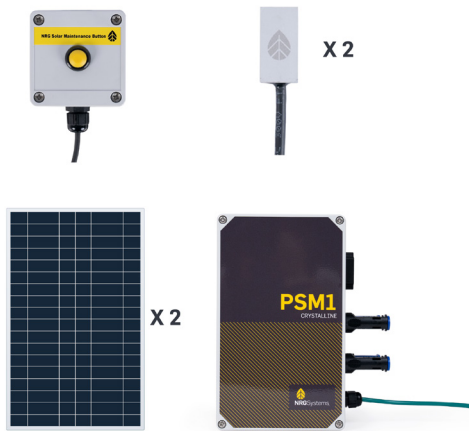


## KIT 19047

### SRM 30W ARRAY PSM

#### In the Box:

- One (1) Crystalline Pulsed Soiling Module (PSM1)
- Two (2) NRG PVT1 PV Temperature Sensors
- One (1) Solar Maintenance Button
- Two (2) 30 W PV panels
- Related array mounting and wiring components (not including PV mounting hardware)

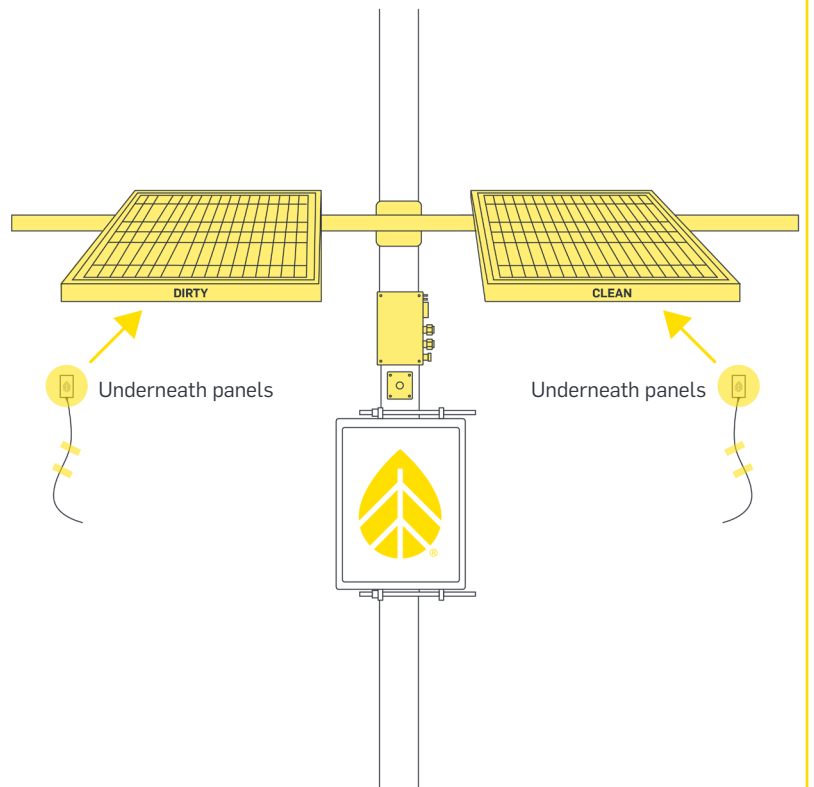
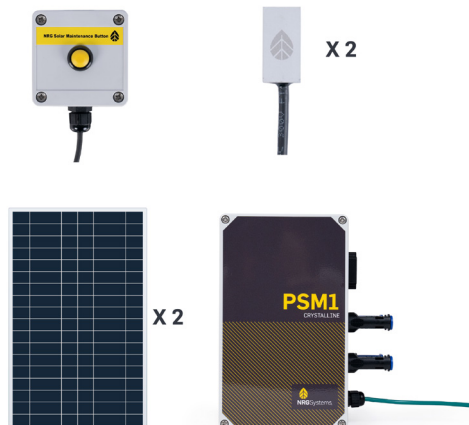


## KIT 19048

### SRA 30W TOWER PSM

#### In the Box:

- One (1) Crystalline Pulsed Soiling Module (PSM1)
- Two (2) NRG PVT1 PV Temperature Sensors
- One (1) Solar Maintenance Button
- Two (2) 30 W PV panels
- Related tower mounting and wiring components (including PV mounting hardware)



		19045 SRM Crystalline 30A	19046 SRM Thin Film 300V	19047 SRM 30W Array	19048 SRA 30W Tower
<b>Description</b>	<b>Instrument Compatibility</b>	LOGR-S & NRG SymphoniePRO	LOGR-S & NRG SymphoniePRO	LOGR-S & NRG SymphoniePRO	LOGR-S & NRG SymphoniePRO
	<b>Measurement Range</b>	VOC: 0 to 450 VDC ISC: 0 to 30 ADC	VOC: 0 to 450 VDC ISC: 0 to 5 ADC	VOC: 0 to 450 VDC ISC: 0 to 30 ADC	VOC: 0 to 450 VDC ISC: 0 to 30 ADC
<b>Output Signal</b>	<b>Signal Type</b>	VOC: 0 to 5.0 V ISC: 0 to 5.0 V	VOC: 0 to 5.0 V ISC: 0 to 5.0 V	VOC: 0 to 5.0 V ISC: 0 to 5.0 V	VOC: 0 to 5.0 V ISC: 0 to 5.0 V
	<b>Accuracy</b>	VOC: 1% of Reading ISC: 1% of Reading	VOC: 1% of Reading ISC: 1% of Reading	VOC: 1% of Reading ISC: 1% of Reading	VOC: 1% of Reading ISC: 1% of Reading
<b>Power Req.</b>	<b>Supply Voltage</b>	Soiling interface module: 6 VDC to 28 VDC	Soiling interface module: 6 VDC to 28 VDC	Soiling interface module: 5 VDC to 28 VDC	Soiling interface module: 5 VDC to 28 VDC
	<b>Supply Current</b>	Soiling interface module: 20 mA maximum	Soiling interface module: 20 mA maximum	Soiling interface module: 20 mA maximum	Soiling interface module: 20 mA maximum
<b>Installation</b>	<b>Mounting</b>	Modular mounting brackets allow mounting to NRG 3.5" dia. tubes or mounting to various solar array supports	Modular mounting brackets allow mounting to NRG 3.5" dia. tubes or mounting to various solar array supports	Modular mounting brackets allow mounting to NRG 3.5" dia. tubes or mounting to various solar array supports	Modular mounting brackets allow mounting to NRG 3.5" dia. tubes or mounting to various solar array supports
	<b>Wiring</b>	MC4 Connectors for Solar 8 Pin Logger connector Grounding cable with grounding screw	MC4 Connectors: See manual for details	MC4 Connectors: See manual for details	MC4 Connectors: See manual for details
<b>Environmental</b>	<b>Operating Temperature Range</b>	Soiling Interface Module: -40 °C to +65 °C PV temperature sensor: -40 °C to +105 °C	Soiling Interface Module: -40 °C to +65 °C PV temperature sensor: -40 °C to +105 °C	Soiling Interface Module: -40 °C to +65 °C PV temperature sensor: -40 °C to +105 °C	Soiling Interface Module: -40 °C to +65 °C PV temperature sensor: -40 °C to +105 °C
	<b>Operating Humidity Range</b>	0 to 100% Corrosion resistant, UV resistant	0 to 100% Corrosion resistant, UV resistant	0 to 100% Corrosion resistant, UV resistant	0 to 100% Corrosion resistant, UV resistant
	<b>IP Rating</b>	IP 65	IP 65	IP 65	IP 65
	<b>Electrical</b>	EN 61000-4-2 ESD	EN 61000-4-2 ESD	EN 61000-4-2 ESD	EN 61000-4-2 ESD
	<b>Compliance</b>	CE	CE	CE	CE

**For more information:**

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ISO 9001: 2015 Certified  
ISO 14001:2015 Self-Certified

