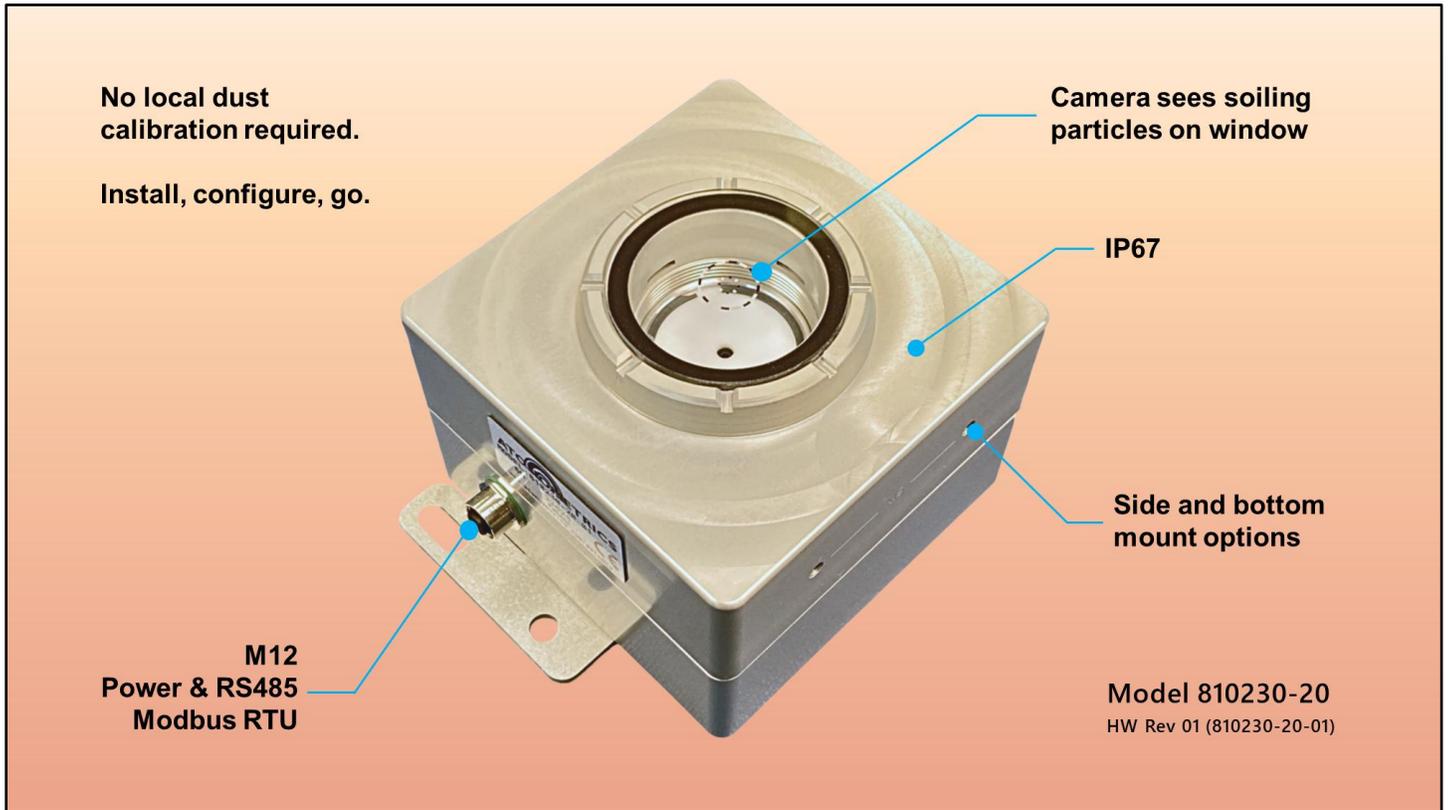


ATONOMETRICS
MARS
Soiling Sensor

Maintenance-Free Solution For PV Soiling Monitoring



Maintenance-free measurement

- Install, configure, go.

No water, washing, or moving parts

- Does not require cleaning or water.
- No moving parts.

Unique all-optical technology

- Unique all-optical technology captures images of the sensor surface and performs image analysis to calculate soiling loss.

No site-specific calibration required

- Mars™ technology does not require site-specific or dust-type-specific calibration.
- No color-dependence of calibration.

Ideal for a range of PV plants

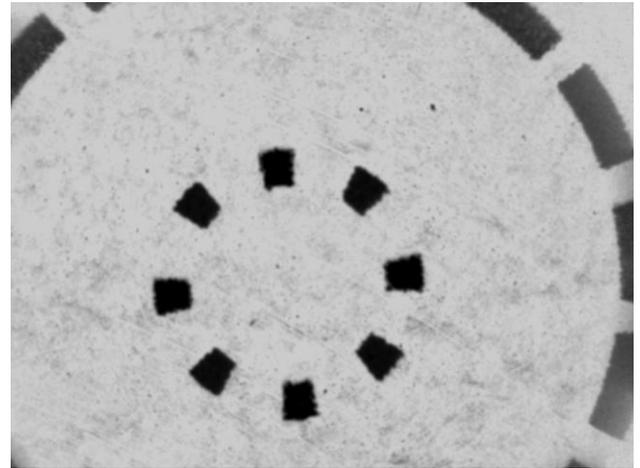
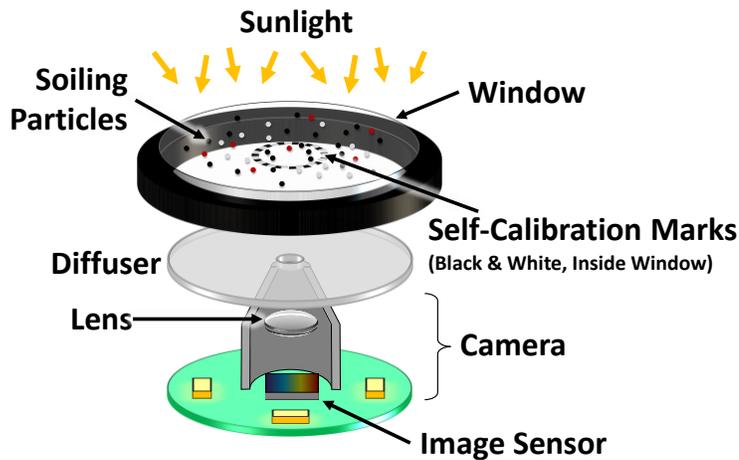
- Suitable for commercial-scale or utility-scale PV.
- Cost-effective for multi-point measurement.

Easy installation

- Compact sensor mounts anywhere in solar array.
- Quick setup.

Mars™ Technology

- Patented technology sees soiling particles on the sensor window and does not require any dust-specific calibration.
- Internal image processing calculates transmission loss due to soiling.



Specifications

General	Model name	Mars Soiling Sensor™
	Part number	810230-20, HW Rev 01 (810230-20-01)
	Ambient working temperature	-20 to +60 °C
	Input power	10 to 30 VDC
	Power consumption	~3 W average (up to 6 W transient)
	Accuracy (@ 5% soiling loss)	± 1%
	Detection Limit	0.3%
	Resolution	0.01%
	Local dust calibration	Not required
	Communication protocol	Modbus RTU (RS-485)
Mechanical	Material	Anodized aluminum housing
	Ingress protection	IP67
	Dimensions	4.53 x 4.53 x 3.86 in. / 115.0 x 115.0 x 98.1 mm without connectors and mounting plate
	Weight	3.27 lbs. / 1.48 kg
	Mounting	Multiple mounting configurations Standard mounting plate accessory included
Connector	Power & RS485	M12 connector, IP67
Cable	Power & RS485	Shielded, weather resistant, UV-rated, 24 AWG / 0.2 mm ² , M12 connector, IP67, multiple lengths sold separately

Contact Us

www.atonometrics.com