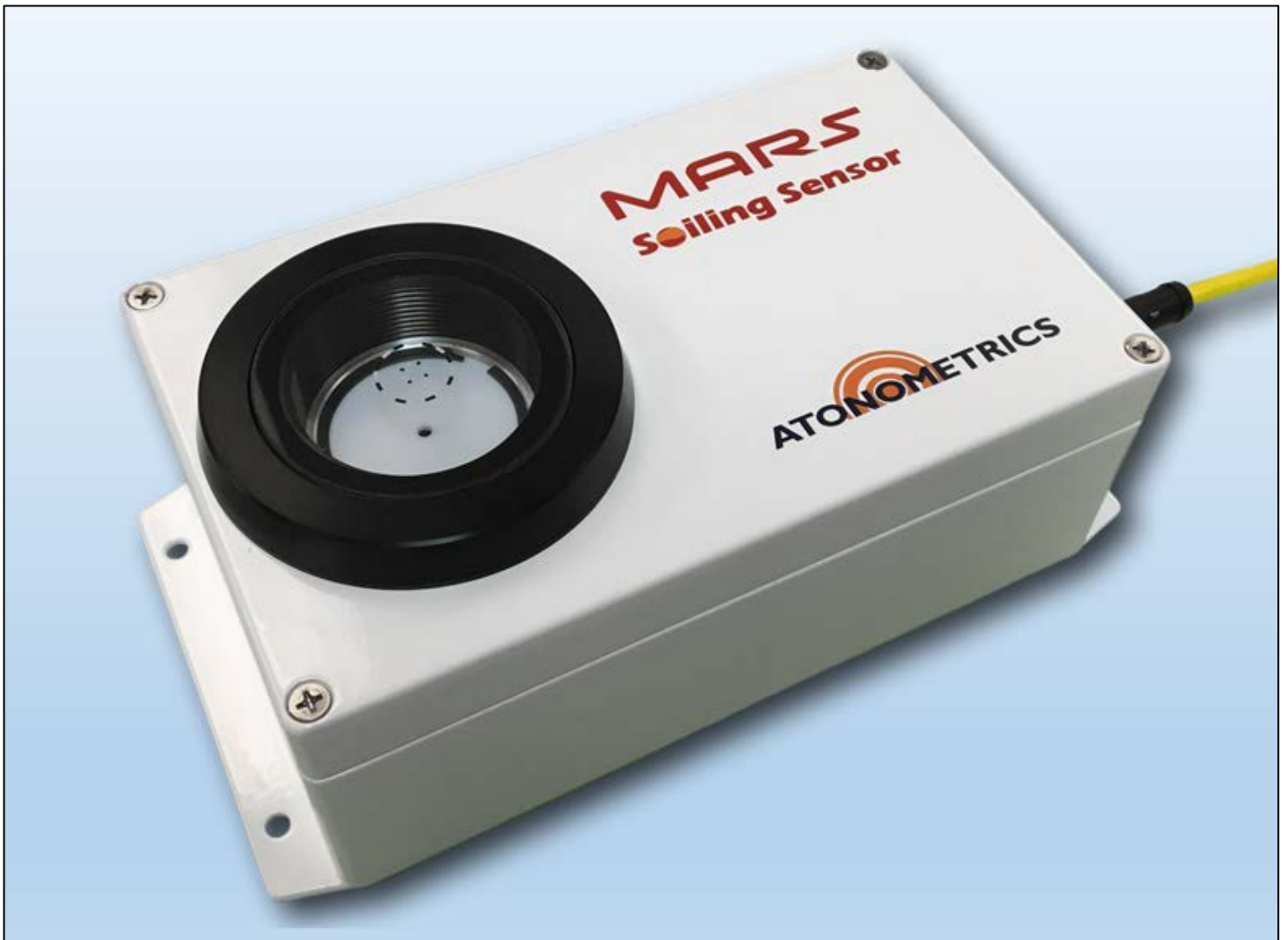




Mars Soiling Sensor™

Maintenance-Free Solution for PV Soiling Monitoring



Maintenance-free measurement

- Specifically designed for low-cost, maintenance-free measurement of PV soiling – with no on-site staff

No water, washing, or moving parts

- Does not use water, does not require cleaning, has 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

- Fits budgets and constraints of even small PV plants
- Cost-effective solution for multi-point measurement

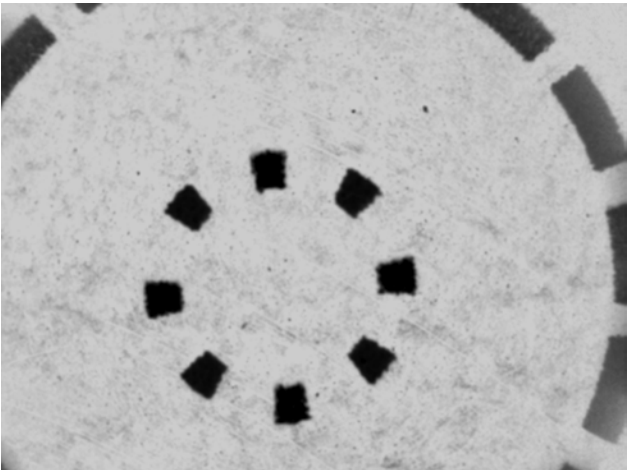
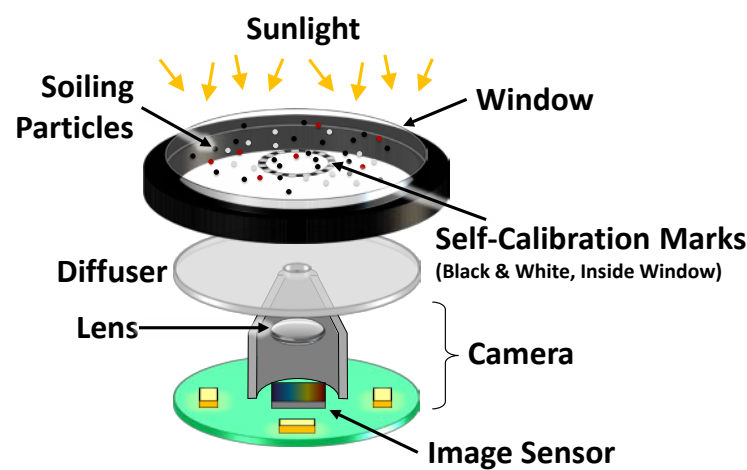
Easy installation

- Compact sensor mounts anywhere in solar array
- Quick setup



Mars™ Technology

- Patent-pending 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™ |
| | Ambient working temperature | -20 to +60 °C |
| | Input power | 10 to 30 VDC |
| | Power consumption | <3 W typ. |
| | Inrush current | <300 mA |
| | Transmission loss accuracy | ± 1% |
| | Local dust calibration | Not required |
| Enclosure | Material | Powder-coated cast aluminum housing |
| | Outdoor rating | IP67 |
| | Dimensions | 9.13 x 4.80 x 3.43 in. / 231.92 x 121.92 x 87.22 mm |
| | Weight | 3.00 lb / 1.35 kg |
| | Mounting | 4 mounting holes, dia. 0.22 in. / 5.50 mm Mounting plate accessory available |
| Cables | Power & RS485 | Shielded, weather resistant, UV-rated, 24 awg / 0.2 mm ² M12 circular connector, IP67 |
| | Ethernet | Shielded, weather resistant, UV-rated, RJ45, IP67 |

Contact Us

info@atonometrics.com | www.atonometrics.com | +1 (512) 377-6982
8900 Shoal Creek Blvd., Suite 116, Austin, Texas 78757, USA

