



## ADVANCED AND VERSATILE MET SYSTEM FOR SOLAR RESOURCE ASSESSMENT

The GroundWork Rey MET System is a rugged, revenue-grade weather station that accelerates solar adoption by providing superior MET data to reduce the uncertainty of energy production assessments.

The Rey is smart and configurable with options for soiling measurement and albedo irradiance. Designed for multiple redeployments, the value of the Rey MET System can be realized year after year.

Together with GroundWatch®, our best-in-class data quality program, the Rey offers the highest measurement accuracy and availability to produce a ground dataset. When combined with satellite data, the result is a bullet-proof resource assessment and correlated long-term solar resource dataset.

- Revenue-grade MET data availability and accuracy
- Automated data retrieval and storage
- Additional measurements such as albedo and soiling
- For use in all weather conditions
- Industrial grade
- Rugged and mobile for multiple deployments
- Self-powered



Serving the United States, Canada, Mexico, Central and South America

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### GENERAL SPECIFICATIONS

|                             |  |
|-----------------------------|--|
| Data Storage                | > 90 days                                      |
| Data Storage Interval       | 1 minute, hourly                               |
| Scan Rate                   | 3 seconds                                      |
| Communications              | Cellular or satellite modem                    |
| Wind Rating                 | 28 m/s (62 mph); 36 m/s (81 mph) 3-second gust |
| Tripod Height               | 10'  |
| Typical Dimensions          | 20'x20'*                                       |
| Instrument Enclosure Rating | UL 746C (25 years)                             |

### POWER SPECIFICATIONS

|                         |  |
|-------------------------|--|
| Remote Power Unit (RPU) | PV Module, MPPT Charge Regulator, Battery* |
| Battery                 | 10 days without charge                     |

### OPERATING SPECIFICATIONS

|                             |                             |
|-----------------------------|-----------------------------|
| Operating Temperature       | -35 to 70°C                 |
| Operating Relative Humidity | 0 to 100% (non-condensing)* |

\*RPU size and fencing footprint dependent on site and climate.

| MEASUREMENT                  | ACCURACY  | RANGE                         | RESOLUTION              | STANDARD | OPTIONAL |
|------------------------------|---|-------------------------------|-------------------------|----------|----------|
| Global Horizontal Irradiance | ISO 9060 spectrally flat Class A (ventilated and heated)* | -400 to 4000 W/m <sup>2</sup> | < 0.05 W/m <sup>2</sup> | 2        |          |
| GHI, DHI, DNI                | ± 5% (daily integral)**                                   | 0 to 2000 W/m <sup>2</sup>    | 0.6 W/m <sup>2</sup>    |          | 1        |
| Albedometer Irradiance       | ISO 9060 spectrally flat Class A                          | -400 to 4000 W/m <sup>2</sup> | < 1 W/m <sup>2</sup>    |          | 1        |
| Wind Speed                   | ± 0.3 m/s   | 0 to 75 m/s                   | 0.1 m/s                 | 1        |          |
| Wind Direction               | < 3° RMSE > 1.0 m/s                                       | 0 to 359.9°                   | 0.1°                    | 1        |          |
| Ambient Temperature          | ± 0.2°C   | -50 to 60°C                   | 0.1°C                   | 1        |          |
| Relative Humidity            | ± 2%  | 0 to 100%                     | 0.1%                    | 1        |          |
| Barometric Pressure          | ± 0.5 mbar  | 300 to 1200 mbar              | 1 mbar                  | 1        |          |
| Rain                         | ± 1% (up to 2.54 mm/hr)                                   | 0 to 7.62 mm/hr               | 0.254 mm                | 1        |          |
| Soiling System - Isc         | ± 1%  | 0 to 2 Amps                   | 0.001 Amps              |          | 1        |
| Soiling System – BOM Temp    | ± 0.15°C (1000 Ohm Class A RTD)                           | -40 to 105°C                  | < 1°C                   |          | 1        |
| Snow Depth                   | ±1 cm or 0.4%   | 0.5 to 10 m                   | 0.25 mm                 |          | 1        |
| Reference Cell Irradiance    | ± 5%  | 0 to 1400 W/m <sup>2</sup>    | < 1 W/m <sup>2</sup>    |          | 1        |

\*Calibration Uncertainty < 1.2% (K=2), sensor temperature and directional response characterized by manufacturer.

\*\* ± 5% (± 10 W/m<sup>2</sup>) for hourly average; ± 8% (± 10 W/m<sup>2</sup>) for individual readings.