



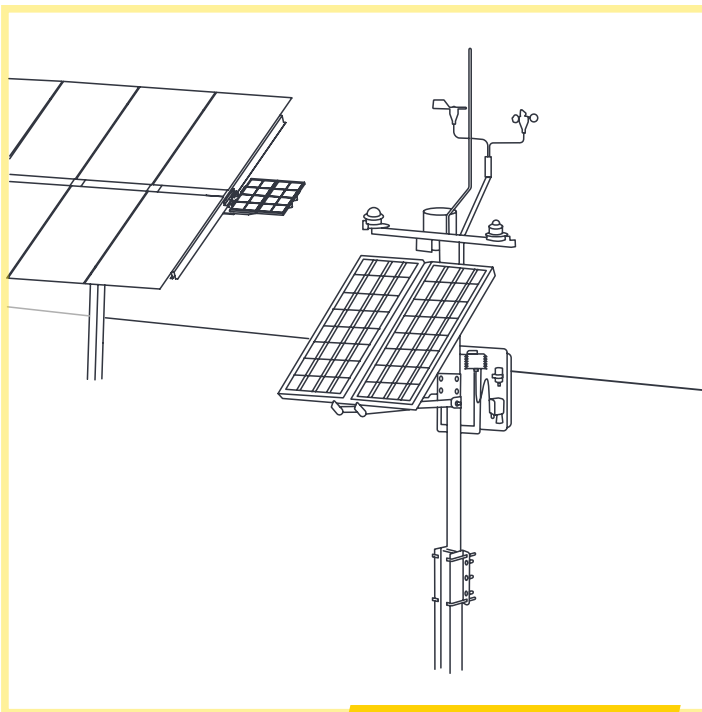
FLARE

Solar Resource Measurement

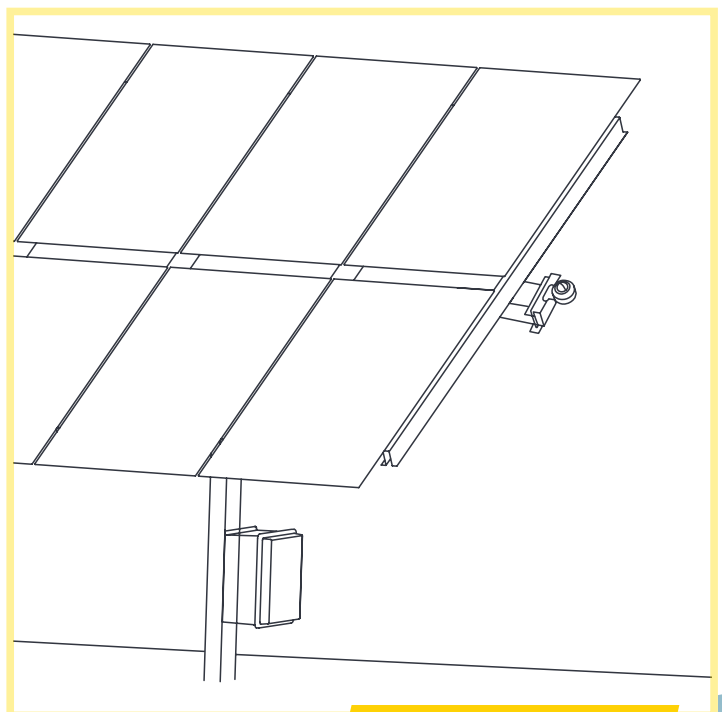
NRG Flare is a portfolio of solar solutions that provide the data you need to successfully plan and operate your utility-scale photovoltaic projects. Encompassing everything from standardized hardware to data management tools and installation and maintenance support, our turnkey systems ensure reliable and repeatable performance, every time.

Flare Systems

NRG offers the Flare SRM System (Tower and Array options) for performance monitoring per IEC 61724-1:2021 . This system helps operators monitor and optimize the output from their utility-scale PV plants. Whether a project is tracked or fixed, mono- or bifacial, we help users detect inefficiencies at the module, string, and system-wide levels so they can launch real-time field service and build long-term preventative maintenance and cleaning programs.



SRM Systems - Tower



SRM Systems - Array

How Flare Systems Work for You

NRG Systems' Flare Solar Resource Measurement solutions and end-to-end field and data services work in tandem to deliver a turnkey approach to solar resource monitoring – supporting confident decision-making and efficient execution at every stage of the project lifecycle.



Solar Resource Measurement Systems

System Anatomy

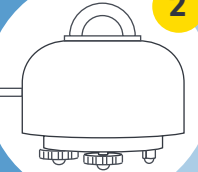
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Data Logging

Advanced measurement capabilities for bankable data

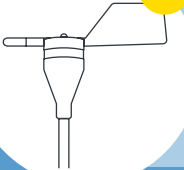
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Solar Irradiance

Industry-leading irradiance sensors

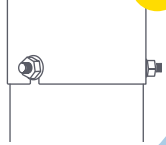
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Meteorological Sensors

Highly reliable, discrete sensors

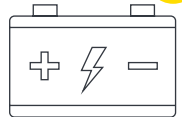
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Tubular Tower

Quickly to ship, preassembled, easy to install

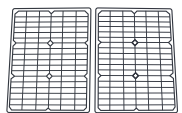
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Auxiliary Power

Autonomous power in any setting

6



Soiling Measurement

Performance monitoring for full-size PV

Turnkey Installation Services

Support for all stages of project development

Factory Pre-Assembly and Configuration

Faster installation and consistent results, every time

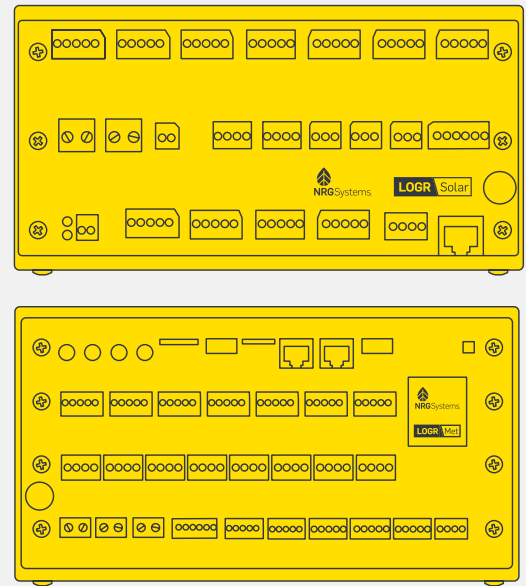


Solar Solutions | Component Details

Data Logging

NRG LOGR FAMILY AND CAMPBELL CR1000XE DATA LOGGERS

- High-resolution, high-accuracy measurements
- Unparalleled security and ease of use
- Long-term data storage
- Supports wide range of sensor types (analog, digital, serial)
- Calculated channels for additional solar information (solar position, direct normal irradiance (DNI), albedo)
- Easily configurable – no programming required (for NRG LOGR Family)
- Modular accessories for global communications & autonomous power support (Modbus TCP, Cellular, Satellite)



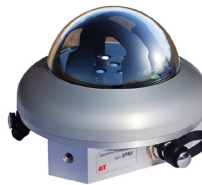
Solar Irradiance

ACCURATELY CAPTURE THE PRIMARY MEASUREMENT OF INTEREST IN A SOLAR RESOURCE CAMPAIGN

- All irradiance components (Global, Diffuse, Direct, & Albedo) are supported
- Class A, B, or C pyranometer options
- System compatibility with all industry-leading sensor brands
- Output options: analog vs. serial ("smart") sensors
- Thermopile pyranometer or PV reference cell
- Mounting flexibility for horizontal vs. plane-of-array irradiance capture
- Pyranometer heating & ventilation options

FEATURED SENSORS

The Hukx SR300-D1 Class A pyranometer measures solar irradiance with unparalleled reliability and accuracy.



Innovative Delta T SPN1 class A "smart" sensor with internal heat & ventilation

The NRG R2 is a class A pyranometer that provides highly accurate solar irradiance data

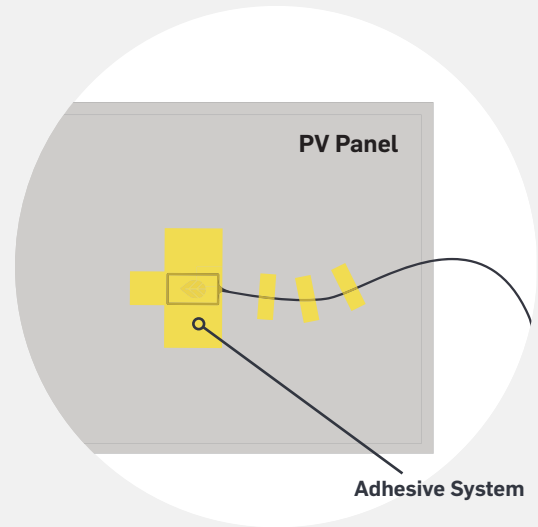


The NRG SP200 System protects solar monitoring stations from electrical surges (including lightning-induced transients) and electrical noise.

PV Module Temperature

ACHIEVE IEC CLASS A MEASUREMENTS USING OUR HIGH-ACCURACY 0.2 C INTERCHANGEABLE 10K NTC THERMISTOR OR NRG PT1000 SENSORS

- Our 0.2 C interchangeable 10K NTC Thermistor sensor delivers Class A accuracy per IEC 61724-1:2021
- 4-wire configuration maintains measurement quality over any cable length and allows flexible sensor placement across the array
- Specially engineered cable ties and adhesive system ensures quick, repeatable installation and long-term performance in the field



Meteorological Sensors

COST-EFFECTIVE AND INDIVIDUALLY REPLACEABLE MET SENSORS CAPTURE:

- Wind Speed
- Barometric Pressure
- Wind Direction
- Precipitation
- Ambient Temperature
- Relative Humidity

Tower & Mounting

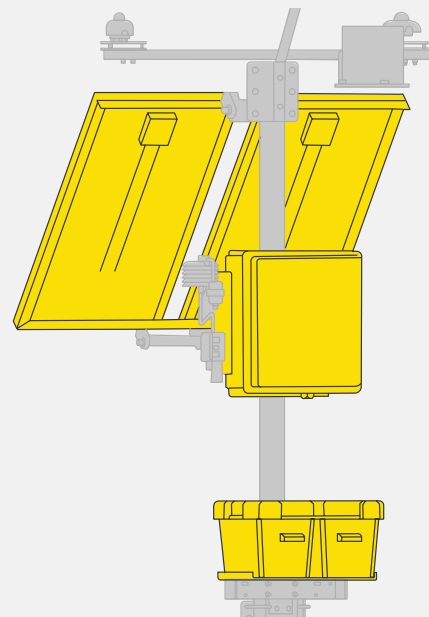
FLEXIBLE SOLUTIONS FOR ALL SETTINGS

- Tubular Tower – 2.2 m (7 ft) height for optimal sensor positioning
- Permanent (pad- or pile-mounted) base options for site flexibility
- Pre-assembled system streamlines setup and reduces on-site labor
- Innovative mounting design minimizes installation errors and prevents costly schedule delays
- Robust materials ensure long-term durability

Uninterruptable Power Supplies

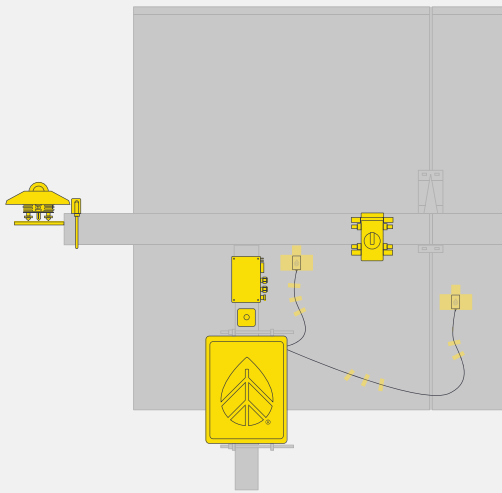
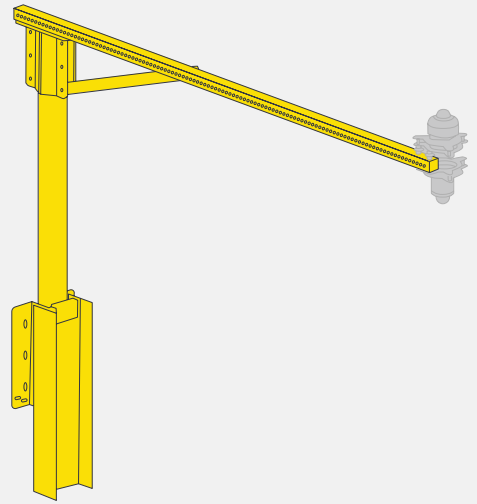
SCALABLE, MODULAR POWER OPTIONS

- Integrated, preconfigured, and pre-assembled to streamline installation and ensure predictable, repeatable outcomes at every site
- FAT certifications provided for each system



Albedo Measurement Kit

- Unobstructed horizontal albedo measurements for bifacial PV modules
- Supports full range of pyranometers
- Special mounting fixture supports fixed or tracking installations
- Option for integration with Flare SRM System or as standalone solution
- Integrated grounding and surge protection for system reliability and safety
- Optimized mounting options for both SRA and SRM deployments, with tripod and pile-mounted configurations



Soiling Performance Kit

ACCURATELY AND RELIABLY MEASURE THE IMPACT OF SOILING ON PV MODULE PERFORMANCE

- IEC 61724-1:2021 Method-2 compliant
- Flexible configurations accommodate a variety of PV panels and mounting arrangements, and are compatible with the electrical ratings of both thin-film and crystalline technologies
- Key outputs include short-circuit current, open circuit voltage, back-of-module temperature, effective irradiance, soiling ratio, and daily soiling-loss index, ensuring precise performance analysis and optimization
- Robust data storage capabilities and standardized Modbus map

Services from NRG Systems

- Pre-configuration & engineering documentation – Simplify deployment with fully prepared systems and comprehensive technical records
- O&M training – Equip your team to operate and maintain systems for maximum performance and longevity
- Project management support – Keep projects on track with expert oversight, clear communication, and coordinated execution from start to finish
- Commissioning services – Verify every component is installed, tested, and performing to specification before going live
- Data services – Optimize operations with streamlined data delivery, processing, site monitoring, and quality assurance



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