

# Solar Data Systems

Solar solutions for monitoring, visualization, evaluation, troubleshooting & control



## Solar Monitoring as a Service

# emazys

### Cost-Effective High-Functionality PV Troubleshooting



Pinpoint Faults & Failures Fast  
Save PV Troubleshooting Time!

The **emazys Z200 PV Analyzer** is a portable, battery-powered PV troubleshooter that not only detects plant faults and failures, but also pinpoints the exact location of the failure within the array. It makes troubleshooting PV arrays fast by saving an average of 2.5 hours per troubleshooting task.

The **emazys Z200 PV Analyzer** will perform impedance spectroscopy between connected string terminals, as well as measure the terminal voltages and currents flowing under various DC loads introduced by the instrument. By combining the results from these various measurements using the on-board computer, critical faults in the system can be easily located.

*"The emazys Z200 has helped me to secure additional business, provide my clients with confidence in our abilities, better understand fault recognition and finding, reduce the time to locate faults, and discuss new ways of fault finding with insurers."*

- Robert, Helios Solar O&M (UK)

### Major benefits of the **emazys Z200 PV Analyzer** include:

- Super-fast verification of overall PV systems health
- Find ground faults and disconnects in less than 5 minutes
- Detect potential failures, enhance preventative maintenance, and ensure safety
- PID/TID estimates without dismantling modules
- Measure  $R_s$ , Riso, Voc, Isc, and impedance
- Built-in tone generator and cable fault finder (1000 V)
- Multi-function tester and military-grade components



The **emazys Z200 PV Analyzer** was designed for photovoltaic troubleshooting, diagnostics and O&M applications. It comes with a range of testing features to help solve in-field problems. The **emazys Z200 PV Analyzer** has an ideal combination of relatively low-cost and very high O&M test functionality, making it the perfect choice for solar energy field technicians.

**Quickly learn what the problem is, where it is, and why you aren't getting expected returns.**

# Different Instrument Categories

String testers and IV curve tracers cannot define what or where the fault is. The **emazys Z200 PV Analyzer** includes fault finding in the testing procedure!

## emazys Z200 PV Analyzer

- Specially designed to troubleshoot and diagnose PV module strings in the field
- Actually measures precise position of faults
- Will detect early signs of degradation
- Helps field technicians and improves cost efficiency in PV O&M

## Thermal Cameras

- Captures infrared photos using thermal imaging, representing temperature of the object
- Detects hot spots in the PV system when fully energized

## IV Curve Tracer

- Specialized PV performance test equipment connected to solar module or string
- Measures current and voltage at multiple points during the sweep
- Deduces conversion efficiency of the array, in optimal weather

## String Testers

- Typical electrical tests as required by IEC 62446 standard
- Record irradiance and temperature while testing electrical parameters (voltage, current and isolation resistance)

Save an average  
2½ hours per task



Save time, money  
and truck rolls

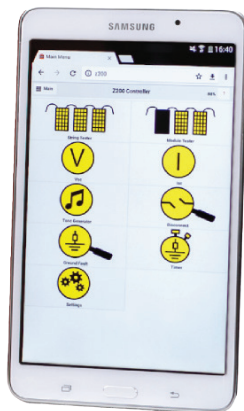
Clear reports make  
next steps simple



Work efficiently  
in low irradiance

**emazys**

Download the  
emazys App!



- Connects remotely to any mobile device
- Operated over smartphone or computer via WiFi
- Data is securely stored in the cloud
- Ease of use by one person with minimal training
- Built-in PDF report generator
- Designed to avoid complex user calculations



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iOS Coming Soon

Simple · Effective · Time Saving

- String Tester
- Volt/Ampere Meter
- Tone Generator
- Ground Fault Locator
- Module Tester
- Disconnects Locator
- Timer
- Reports/Settings

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