Portable Solutions for
Solar Simulator Classification

SR-1901PT

PORTABLE SPECTRORADIOMETER

Fast, Accurate Classification of Pulsed Solar Simulators

The SR-1901PT is purpose-built for the fast and accurate measurement of pulsed (flash) solar simulators. With an integrated phototrigger, dual detector technology, and full spectral coverage from 280-1900 nm in a single flash, it delivers reliable data for spectral match, uniformity, and temporal stability testing in accordance with IEC and ASTM classification standards.

Pulsed Simulator Measurement

Integrated phototrigger captures short or long pulses with precision.

Full Spectrum 280-1900 nm

Dual detector technology measures the entire spectrum in a single flash.

IEC & ASTM Compliant

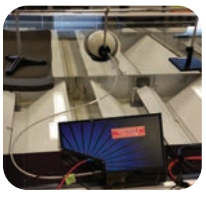
Generate classification reports for spectral match, uniformity, and stability.

Fast, Accurate Portable

Lightweight, portable design for lab use.

COMPLETE WORKFLOW FOR PULSED SOLAR SIMULATOR CLASSIFICATION

1 Solar Simulator



Pulsed (flash) simulator testing

2 SR-1901PT

Captures full spectrum in a single pulse

3 DARWin SP Software

Analyze spectral match, uniformity & stability

4 Classification Report

IEC & ASTM compliant reports

SPECTRAL EVOLUTION

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BUILT FOR ACCURATE PULSED SOLAR SIMULATOR TESTING

KEY FEATURES

280-1900 nm Spectral Range
Measure the entire solar spectrum in a single flash.

1 ms Minimum Integration Time
Capture short or long pulses with high temporal resolution.

Integrated Phototrigger
Built into the cosine-corrected right angle diffuser for precise timing.

External TTL Trigger
Sync with simulator pulse output for reliable measurements.

NIST-Traceable Calibration
Factory calibrated to NIST-traceable irradiance standards.

Dual Detector Technology
Silicon (280-1000 nm) and InGaAs (970-1900 nm) detectors.

USB & Wireless Connectivity
Works with laptops and tablets for flexible use.

Portable & Rugged Design
Lightweight (7.5 lbs) and built for lab or field environments.

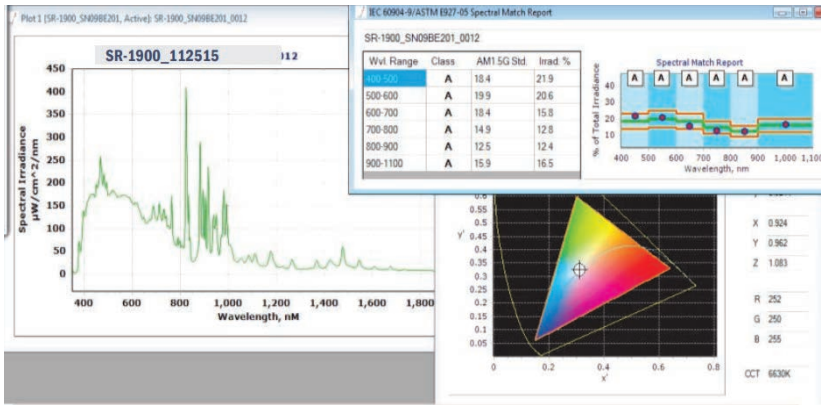
SPECIFICATIONS

Spectral Range	280–1900 nm
Spectral Resolution	4 nm (280–1000 nm)10 nm (1000–1900 nm)
Spectral Sampling Bandwidth (nm)	Data output in 1 nm increments (1,621 channels reported)
Silicon Detector	512-element Si photodiode array (280–1000 nm)
InGaAs Detector (TE-cooled)	256-element extended wavelength array (970–1900 nm)
Suggested FOV Options	Right-angle diffuser with integrated phototrigger; integrating sphere
Calibration	Spectral and radiometric calibration for irradiance measurements using NIST traceable sources
Integration Time	1–50 ms
Wavelength Reproducibility	0.1 nm
Wavelength Accuracy	±0.5 bandwidth
Interface	USB, Wireless Bluetooth® Connection
Dimensions (L × W × H)	8.5 × 11 × 3.5 in (216 × 279 × 89 mm)
Weight	7.5 lb (3.4 kg)
Power Requirements	7.5 V DC, 15 W
Spectral Match Standards	AM0, AM1.5, AM1.5 Global Tilt
TTL Trigger Input	Yes
Integrated Phototrigger	Yes

POWERFUL DARWin SP SOFTWARE

Included DARWin SP Data Acquisition software provides everything you need to classify pulsed solar simulators to **IEC 60904-9** and **ASTM E927-05** standards.

- Spectral match grading (Class A,B, C)
- Spatial uniformity measurements
- Temporal stability over time
- Custom reports and data export
- CIE Color chart and pull-down menus for quick access



APPLICATIONS


PV Module & Panel Manufacturers


IEC & ASTM Compliance Testing


Quality Control & Production Testing


R&D Laboratories & Test Facilities

SPECTRAL EVOLUTION - ACCURATE. RELIABLE. TRUSTED.

For fast, accurate classification of pulsed solar simulators, trust the SR-1901PT.