



Fluke PVA-1500 Series PV Analyser I-V Curve Tracer



INDUSTRY LEADING FEATURES

- Measures and displays I-V curves up to 1500V and 30A, including on high efficiency modules
- Advanced built-in PV model provides immediate PV performance checking
- Sweep-to-sweep delay of 9 seconds to measure 3.5MW in <1hr
- Uninterrupted measurements even in hot environments
- Automates data management, analysis, and reporting
- Database of more than 70,000 modules with automatic updates
- Wireless interfaces for faster setup, safer work environment, and freedom of movement during PV troubleshooting
- In-the-field firmware update ready

SAVE TIME, REDUCE RISK AND MAXIMISE RETURN ON IRRADIANCETM

- Commissioning
- Operations and maintenance
- Auditing
- Troubleshooting

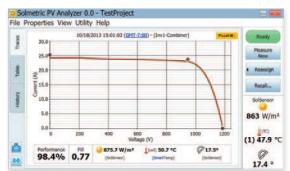
Measure your solar PV system performance

The Fluke Solmetric PVA-1500 is a cutting-edge I-V curve tracer kit designed to measure PV system performance. With this high-precision testing equipment, you can reliably assess the health and performance of solar modules and arrays, making informed decisions to enhance their output and longevity.

The PVA-1500 kit offers an array of advanced features, including high throughput I-V curve tracing, providing quick and detailed performance data. Its intuitive user interface enables easy navigation and real-time analysis, allowing for immediate identification of potential issues. By pinpointing problems early, you can maximise your solar energy production and minimise downtime.

Comprehensive measurements and efficient analysis

For commissioning, operations, maintenance, and troubleshooting of PV arrays, I–V curve testing is the most complete solar module performance measurement. Quick analysis of curve datasets aids in detecting outliers, and the stored data functions as a baseline for future performance inquiries.



Accurate I-V curve tracing

The PVA measures the I-V (current versus voltage) curve of a PV string or module using a capacitive load. The measurement is typically performed at the string level by connecting directly to the string or at a combiner box using the fuses to select the string under test. The number of I-V curve points can be selected at 100 or 500. Additionally, the PVA generates the P-V (power versus voltage) curve, Isc, Voc, Imp, Vmp, Pmax, fill factor, and performance factor (the ratio of measured to expected maximum power).

Time-saving interface

With a tablet or laptop (Windows only) as the user interface, perform more tests per hour and display the data in multiple, easy to read formats.

Save your measurements by touching your customised array tree at the branch you are measuring. The software automatically calculates the expected I–V curve and displays the performance factor.

Specifications

	PVA-1500T2	PVA-1500HE2
Voltage Range (Voc)	20 to 1500V DC	
Voltage Accuracy	±(0.5% + 0.25V)	
Current Accuracy	±(0.5% + 0.04A)	
Power Accuracy	±(1.7% + 1.0W) (current ≥3A, module efficiency <19%)	
I-V Trace Points	100 or 500 (selectable)	
I-V Sweep Duration	0.05 to 2 seconds (typically 0.2 seconds for PV strings)	
Operating Temperature (ambient)	0 to 45 °C (32 to 113 °F)	
Safety and Regulatory	CAT III 1500V, CE, UKCA, TUV	
Maximum Current (Isc)		
Module Efficiency <19%	30A DC	
Module Efficiency ≥19%	10A DC	30A DC
Measurement Throughput		
Sweep-to-sweep delay (@VOC ≤ 1350V)	<9 seconds	
Max number of I-V sweeps per hour (@VOC \leq 1350V)	400 sweeps/hr	
Max megawatts measured per hour	3.5 MW/hr	
Thermal Capacity - Number of I-V sweeps before	re the PVA must cool down	
25 °C (77 °F) Ambient, 9 or 18 second sweep-to-sweep delay	Unlimited	
$45\ ^{\circ}\text{C}$ (113 °F) Ambient, 18 second sweep-to-sweep delay	550	
45 °C (113 °F) Ambient, 9 second sweep-to-sweep delay	330	
SolSensor™		
Irradiance Accuracy	±2 % when used to predict the performance poly- and monocrystalline PV modes >600W/m2. Contact Fluke for modes irradiance measurements	lules with direct irradiance re information on accurate
Cell Temperature Accuracy	±2 °C (not including limits of error of thermocouple)	
Tilt Accuracy	±2° typical (0 to 45°)	
Update Interval	Typically, 3.5 s	
Wireless Range	100 m (open line of sight)	









Fluke PVZ-1500 Series Kits



FLUSOL-TI9HZ-KIT I-V Curve Tracer with TiS75+ Infrared Camera



FLUSOL-INS37-KIT I-V Curve Tracer with 1537 Insulation Tester



FLUSOL-INS87-KIT I-V Curve Tracer with 393 Clamp Meter and 87V Multimeter



FLUSOL-DMM87V-KIT I-V Curve Tracer with 1587 Insulation Multimeter, 393 Clamp Meter & 87V Industrial Multimeter

CALL FOR PRICE

Part No.	Description
FLUPVA-1500HE2	Solmetric PVA IV Curve Tracer High Efficiency
FLUPVA-1500T2	Solmetric PVA IV Curve Tracer
FLUSOL-TI9HZ-KIT	Solmetric PVA IV Curve Tracer with Fluke TIS75-Plus 9HZ
FLUSOL-INS37-KIT	Solmetric PVA IV Curve Tracer Tracer with Fluke 1537
FLUSOL-INS87-KIT	Solmetric PVA IV Curve Tracer with Fluke 1587FC, 393, 87V
FLUSOL-DMM87V-KIT	Solmetric PVA IV Curve Tracer with Fluke 393, 87V

Valid from 1st May, 2024.





