PV Power Analyzer

Type VK-PA-1000

I-V Tracing and Maximum Power Point Tracking
for solar cell modules up to 100 V & 1 A
Comes with state-of-the-art control software

Specifications

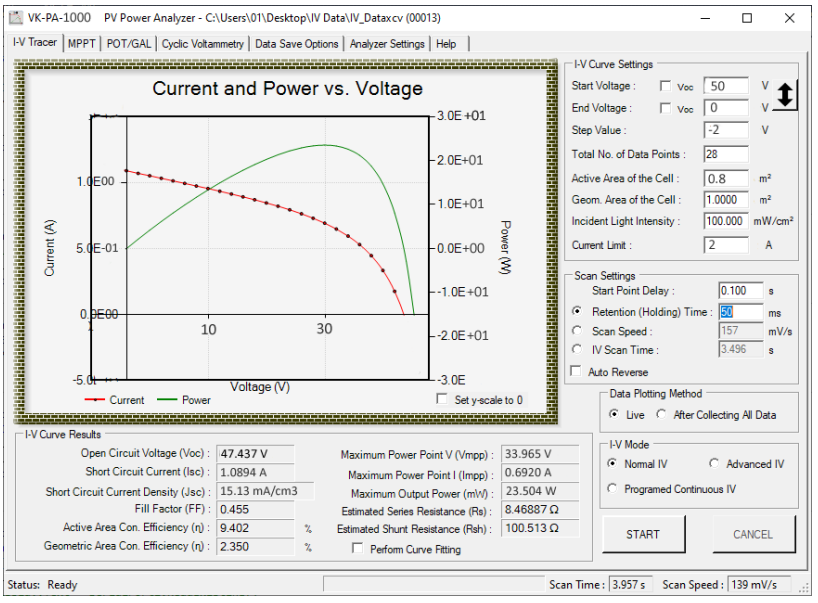
Measurement Range	Voltage: 100 V – 500 mV (8 Ranges) Current: 1 A – 50 uA (15 Ranges)
Minimum Resolution (Max. 6½-digits)	Set: 27 µV, 1.5 nA; Measure: 62 nV, 12 pA
Measuring Technique	Electronic Load Type
Inputs	Front: 4 probes for PV devise
A/D Converters	24 Bit (2 independent ADCs for V & I measurements)
User Interface and data collecting	Computer software is provided for control of all the functions and data logging. Measurement data can be saved as a text file (.csv or .txt) and directly plotted on ®Microsoft Excel graph. (Windows based PC required)
Communication	Bluetooth
Power Requirement	100 VAC (50-60 Hz) 230 VAC (50-60 Hz)
Electrical standard	CE RoHS compliant
Dimensions, Weight	260 mm(W) x 350 mm(D) x 133 mm(H) , 5 kg

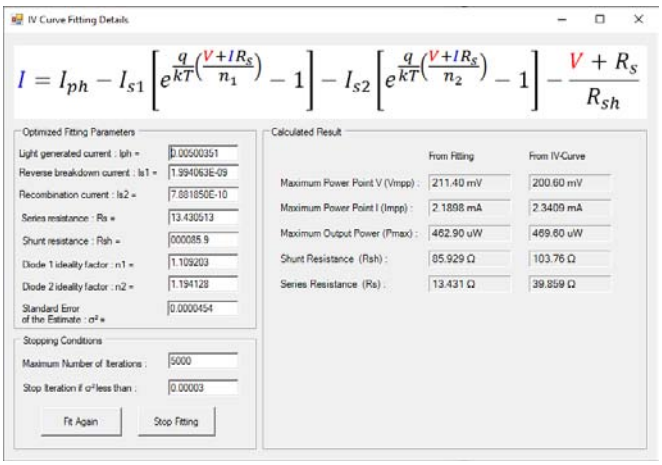
Features of Solar Cell I-V Tracer

User selectable START, END and STEP voltages. Plots current and power vs. voltage curves. Calculated results include V_{oc}, I_{sc}, J_{sc}, P_{max}, V_{mpp}, I_{mpp}, FF, R_s, R_{SH}, $\eta_{activeA}$, and η_{geoA}. User can set the desired scan speed, scan time, or holding time. Advanced I-V option allows initial, middle, and end point holding times. I vs. t transient plot for all data points and/or under a selected fixed voltage. "Programmed continuous I-V" function allows user to take series of IV curves on given time intervals.
Dedicated I-V curve fitting function included to the control software.

Features of Maximum Power Point Tracking (MPPT) Function

Analyzer acts like the best load for the cell to extract maximum power point (MPP) and keep tracking MPP continuously. Plots P_{max} ,V_{mpp} , I_{mpp} and Efficiency vs. time curves and also display current/power vs. voltage plots.





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