# PV Panel/Solar Array Simulator

Aplab SAS12010 Modular Solar Array Simulator is a programmable DC Power Source that simulates output characteristics of a solar array. Model SAS12010 is primarily a current source with very low output capacitance and is capable of simulating I-V curve of solar arrays under different conditions like temperature, irradiance etc. SAS is supported with intelligent front-end software that simulates any curve with Voc, Isc, Vmp, Imp parameters or manually programmed points. It provides simulation of Voc (open circuit voltage) up to 121V and Isc (short circuit current) up to 10.5A. The solar array simulator is highly stable and has a fast transient response design, which are both advantageous for MPPT performance evaluation on PV inverter devices.

The Soft Panel
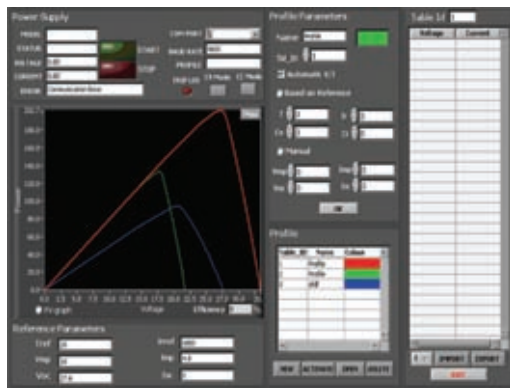
Features:

- Accurate simulation of any type of solar panel/array
- Fast I-V curve change and fast recovery switching time
- Easy to simulate environmental conditions
- Real time analysis of PV inverters MPPT tracking via soft panel
- Testing MPPT tracking efficiency
- Captured data from instrument recorded via soft panel
- Four point simulation based on reference parameters
- Facility to enter user defined curve manually
- V-I/P-V curve display in soft panel
- LAN, USB, and GPIB interfaces standard
- Extremely useful in mass production and problem debug scenarios
- Series panel simulation

Specifications

Input Line voltage	95 to 264VAC, 45-63Hz, 1Ph		
Output Ratings	Maximum Power	1200W	
	Maximum open Circuit Voltage (Voc)	121V	
	Maximum Voltage Point (Vmp)	120V	
	Maximum short circuit Current (Isc)	10.5A	
	Maximum Circuit Point (Imp)	10A	
	Minimum Impedance	1¿	
	(ΔV/ΔVI)		
	Voltage	0-120V	
	Current	0-10A	
	Operating Temp	0-50°C	
	Output Voltage Ripple & Noise	20mV P-P	
Programming Accuracy	Voltage	0.2% of F.S. ± 1lsb	
	Current	0.5% of F.S. ± 1 lsb	
Read back Accuracy	Voltage	0.2% of F.S	
	Current	0.2% of F.S	
Load Regulation	Constant voltage	0.1%	
	Constant voltage	0.1%	
Line Regulation	Constant voltage	0.1%	
	Constant voltage	0.1%	

ORDERING INFORMATION:

SAS12010 - R – RS232 Interface

SAS12010 - E – Ethernet Interface

SAS12010 - G – GPIB Interface

POWER CONTROLS & CONVERSION DIVISION

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