

CV-CC Solar Array Simulator

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed CV-CC Solar Array Simulator (SAS). It is designed to simulate the V-I characteristics of solar arrays.



Front View CV-CC SAS



Top View CV-CC SAS

Salient Features

This unit features open circuit voltage of 60V or 100V & programmable short circuit current (0.5 – 5A) with current settling time of less than $3\mu\text{S}$ to respond to a dynamic load that can vary from nominal load to short circuit and vice versa.

Major Specifications

Parameter	Specifications
Input Voltage	230V AC, $\pm 10\%$, 50 Hz, 1Phase
Output Voltage	60V DC $\pm 2\text{V DC}$, 100V DC $\pm 2\text{V DC}$
Output Current	0.5A to 5.0 A in steps of 500mA Short circuit current is adjustable through remote programming on RS-485
Ripple & Noise	Current :100 mA pk-pk (max) , < 50mA rms
Output Response	1. When output is shorted and short is removed output voltage will rise to 60V/100V in less than $3\mu\text{S}$. 2. For switching response test, from 10Hz to 25KHz and for duty cycles from 10% to 90% transient response time is less than $3\mu\text{S}$
Protections	OVP, OCP and OTP
Remote Interface	RS-485
Dimensions	19" standard instrument rack mountable , 1U (44mm)

Technology Transfer

URSC/ISRO offers to transfer of CV-CC Solar Array Simulator developed by URSC to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

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