



IVS Series PV Array IV Simulator

DC source mode

Support parallel operation

IV curve simulation: daylight scaling, shadow etc.

Static & dynamic MPPT tests

Summary

IVS Series is a DC power supply based on power conversion technology, software simulation algorithm, and measurement & control technologies, featuring high precision and high dynamic response. It provides the turnkey solution to PV inverter testing on MPPT efficiency, especially for those of high-power levels.

Advantages

Wide voltage/current output

High precision & resolution

High dynamic response

Low ripple

High conversion efficiency: Max. 94%

Complete safety protection: OVP/OCP/OTP etc.

Standard communication interfaces: RS485/LAN

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Specifications

Models	Rated Power [kW]	Rated Current [A]	Rated Voltage [V]	Voltage Range [V]
IVS-60-1000	60	133	450	50-1000
IVS-120-1500	120	160	750	100-1500
IVS-200-1500	200	350	570	100-1500
IVS-300-1500	300	550	620	100-1500
IVS-400-1500	400	600	666	100-1500
IVS-500-1500	500	600	832	100-1500
IVS-600-1500	600	750	800	100-1500
IVS-800-1500	800	1000	800	100-1500
IVS-1000-1500	1000	1200	832	100-1500
IVS-200-2000	200	350	570	100-2000
IVS-300-2000	300	550	620	100-2000
IVS-400-2000	400	600	666	100-2000
IVS-500-2000	500	600	832	100-2000
IVS-600-2000	600	750	800	100-2000
IVS-800-2000	800	1000	800	100-2000
IVS-1000-2000	1000	1200	832	100-2000

Note: *Only when PWM modulation is used can the PV and THD in the above table be met.

Input Characteristics		Safety & Ambient Conditions	
Phase	3φ3W + PE	Insulation Resistance	≥20MΩ (500Vdc)
Voltage	380V±15%	Protection Level*	IP21 (Indoor)
Frequency	50Hz±5Hz	Cooling	Fan cooling
pF*	≤0.9%	Ambient temperature	-10~40°C
(THD)*	≤3%	Relative Humidity*	0~90%RH (Non-condensing at 25°C)
		Altitude	<2000m

NOTE: *Only when PWM modulation is used can the PV and THD in the above table be met.

Output Characteristics		IV Curve	
Voltage Precision	±0.1% FS±1digit	Voltage Range (OC)	50-1000V/100-1500V/100-2000V
Current precision	±0.1% FS±1digit	Current Range (SC)	1-10A*
Response Time	≤10ms	Fill Factor Range	0.5-0.92
Voltage Ripple (rms)	≤0.5% FS	Types of Solar Panels	Monocrystalline/Multicrystalline/Thin-film
Load Regulation	≤0.1% FS	IV Curve	Editable
Type of compensation coefficient of constant voltage & current	±0.05%/K	IV Curve Update	41000ms
Protection	DVP/OCP/OTP/Emergency stop etc.	Single Curve Points	s4396

NOTE: *Rate varies against the current range of power supply.

IV Functions		Software Simulation	
IV simulation/Constant voltage/Current limiting/Power limiting		IV simulation/Constant voltage/Current limiting/Power limiting	
Parameter setting for IV curve: VOC/ISC/FF/Pm (editable)		IV curve data base: ±10%	
IV curve static simulation		IV curve static state simulation	
IV curve simulation under altered conditions		IV curve simulation based on environmental factors: Temperature/Light intensity	
EN61853 dynamic IV curve test program			

Communication & Interfaces	
Touchscreen	LCD
Remote Communication	RS485/LAN
Other Interfaces	External emergency stop/Fault signal

NOTE: Protection Level* & Ambient Temperature* can be customized.

Software Interfaces

