



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

HEFEI KEWELL POWER SYSTEM CO., Ltd.

China Headquarter Taiwan Branch Korea Branch Germany Branch sales2@kewell.com.cn
 We are constantly searching for internal business partners! Visit our web: www.kewelltest.com

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	180	750	100-1500
IVS-200-1500	200	350	570	100-1500
IVS-300-1500	300	500	600	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	500	600	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

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*	≥0.99	Ambient temperature	-10~40℃
iTHD*	≤3%	Relative Humidity*	0-90%RH (Non-condensing at 25℃)
		Altitude	≤2000m

Note: *Only when PWM rectification is used can the PF and iTHD in the above table be met.

Output Characteristics		IV Curve	
Voltage Precision	±(0.1% FS+5dgt)	Voltage Range (OC)	50-1000V/100-1500V/100-2000V
Current precision	±(0.1% FS+5dgt)	Current Range (SC)	1-irate*
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
Temperature compensation coefficient of constant voltage & current	±0.03%/K	IV Curve Update	≤100ms
Protection	OVP/OCP/OTP/Emergency stop etc.	Single Curve Points	≤4096

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

IV Functions	
Output Modes	IV simulation/Constant voltage/Current limiting/Power limiting
	Parameter setting for IV curve: VOC/ISC/FF/Pm (editable)
	IV curve data base: ≥100
Software Simulation	Dynamic/Static state simulation
	IV curve simulation under shadowed conditions
	IV curve simulation based on environmental factors: Temperature/Light intensity
	EN50530 dynamic IV curve test program

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

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

Software Interfaces

