



# 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	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	
Phase	3φ3W + PE
Voltage	380V±15%
Frequency	50Hz±5Hz
PF*	≥0.99
iTHD*	≤3%

Safety & Ambient Conditions	
Insulation Resistance	≥20MΩ (500Vdc)
Protection Level*	IP21 (indoor)
Cooling	Fan cooling
Ambient temperature	-10~40°C
Relative Humidity*	0-90%RH (Non-condensing at 25°C)
Altitude	≤2000m

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

Output Characteristics	
Voltage Precision	±(0.1% FS+5dgt)
Current precision	±(0.1% FS+5dgt)
Response Time	≤10ms
Voltage Ripple (rms)	≤0.5% FS
Load Regulation	0.1% FS
Temperature compensation coefficient of constant voltage & current	±0.03%/K
Protection	OVP/OCP/OTP/Emergency stop etc.

IV Curve	
Voltage Range (OC)	50-1000V/100-1500V/100-2000V
Current Range (SC)	1-Irate*
Fill Factor Range	0.5-0.92
Types of Solar Panels	Monocrystalline/Multicrystalline/Thin-film
IV Curve	Editable
IV Curve Update	≤100ms
Single Curve Points	≤4096

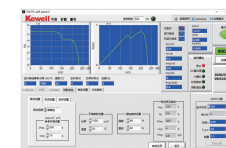
NOTE: \*Irate varies against the current range of power supply.

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 Dynamic/Static state simulation
Software 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

Shadow Conditions



Dynamic MPPT Testing

