



8kW SP-HYBRID



Product Features

Dual MPPT
Support Smart Load and Main Load

High PV Input Power
Up to 16kW PV Input Power
Max. MPPT Charging Current up to 160A

High Efficiency
Pure Sine Wave Inverter
MPP Tracking Efficiency $\geq 99\%$
Max. Battery Mode Conversion Efficiency 95%

Powerful Performance
1min@102%-110% Load
15s@110%-130% Load
10s@130%-150% Load
5s@ $\geq 150\%$ Load

Solid Quality & Service
IP54 Protection Design for Anti-dust & Waterproof
3-Year Replacement

Model	IPV-8K48T
Efficiency	
MPPT Efficiency	99.90%
Max. Battery Mode Conversion Efficiency	95%
PV Input	
Max. PV Input Power (W)	16000
Max. PV Input Voltage (V)	535
Start-up Voltage (V)	85
MPPT Voltage Range (V)	75-500
Max. Input Current (A)	30+20
Number of MPPT	2
Number of Strings per MPPT	2+1
AC Input	
Nominal Input Voltage (Vac)	230
Input Voltage Range (Vac)	90-280
Max. AC Input Current (A)	52 (Bypass Mode)
Nominal Operating Frequency (Hz)	50/60
AC Output	
Nominal AC Output Power (W)	8000
Max. Output Apparent Power (VA)	8000
Nominal AC Output Voltage (Vac)	220/230/240 (L+N+PE)
Max. Output Current (A)	50
Total Current Harmonic Distortion	<3%
Nominal AC Frequency (Hz)	50
Switch Time (ms)	<10 (UPS) <20 (Appliances)
Surge Power (VA)	16000 @ 5s
Overload Capability	102%-110% Load @ 1min 110%-130% Load @ 15s 130%-150% Load @ 10s $\geq 150\%$ Load @ 5s
Battery	
Battery Type	Lead-acid/Lithium-ion/User Defined
Rated Voltage (V)	48
Battery Voltage Range (V)	40-60
Max. Solar Charging Current (A)	160
Max. Mains/Generator Charging Current (A)	140
Max. Discharging Current (A)	180
General	
Dimensions (L*W*H, mm)	410*145.7*600
Net Weight (kg)	19
Operating Temperature Range (°C)	-10 ~ +60 (>45°C Power Derating)
Max. Operating Altitude (m)	3000 (>2000m Power Derating)
Communication	WiFi/RS485/CAN/RS232/Dry Contact
Diesel Generator Support	Yes
Smart Load Support	Yes
Parallel Capability	Single Phase: 12 Three Phase: 12
Cooling Method	Intelligent Fan Cooling
Noise (dB)	<50
Authentication Level	IEC62109-1, IEC62109-2, IEC61683
Protection	
Ingress Protection	IP54
Overvoltage Protection	Yes
Overload Protection	Yes
Short Circuit Protection	Yes
Over Temperature Protection	Yes
Surge Protection	DC: TYPE III; AC: TYPE III

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