



12kW Hybrid

FUSION™ Three Phase Inverter

The Fusion inverter is a brand new three phase hybrid inverter with low battery voltage 48V, ensuring a safe and reliable system.

3 Phase Hybrid

Inverter Features

The Fusion inverter has amazing features that make it the perfect inverter for any setting.



Best Value

There's nothing that comes close for the size, quality, capacity, cost and performance!



True Hybrid

With the ability to blend Solar, Battery and Grid together this is a true Hybrid inverter.



User Friendly

LCD touch screen and buttons, easy operation. Compatible with Lithium-ion batteries and lead acid batteries.



Parallel

Max 16 units can be paralleled for higher system power.



Large Cover

This monster can handle 15600 WATTS of PV power.



Safe

A low battery voltage 48V which ensures a safe system.

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SPECIFICATIONS

Model	FUSION-12-HYB
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BATTERY INPUT DATA

Battery Type	Lead-acid or Li-Ion
Battery Voltage Range (V)	40~60V
Max. Charging Current (A)	240A
Max. Discharging Current (A)	240A
Charging Curve	3 Stages/Equilization
External Temperature Sensor	Yes
Charging Strategy for Lithium Battery	Self-adaption to BMS

PV STRING INPUT DATA

Max. DC Input Power (W)	15600W
Rated PV Input Voltage (V)	550 (160~800)
Start-up Voltage (V)	160V
MPPT Voltage Range (V)	200-650
Full Load DC Voltage Range (V)	350-650
PV Input Current (A)	26 + 13
Max. PV ISC (A)	34 + 17
Number of MPPT / Strings per MPPT	2/2 + 1

AC OUTPUT DATA

Rated AC Output and UPS Power (W)	
Max. AC Output Power (W)	12000W
AC Output Rated Current (A)	13200W
Max. AC Current (A)	18.2A
Max. Continuous AC Passthrough (A)	27.3A
Peak Power (off grid)	45A
Power Factor	2 time of rated power, 10s
Output Frequency and Voltage	0.8 leading to 0.8 lagging
Grid Type	50/60Hz; 3L/N/PE 220/380, 230/400Vac
DC injection current (mA)	Three Phase THD<3% (Linear load<1.5%)

EFFICIENCY

Max Efficiency	97.60%
Euro Efficiency	97.00%
MPPT Efficiency	99.90%

PROTECTION

PV Input Lightning Protection	Integrated
Anti-islanding Protection	Integrated
PV String Input Reverse Polarity Protection	Integrated
Insulation Resistor Detection	Integrated
Residual Current Monitoring Unit	Integrated
Output Over Current Protection	Integrated
Protection	Integrated
Output Shorted Protection	Integrated
Output Over Voltage Protection	Integrated
Surge protection	DC Type II / AC Type II

CERTIFICATIONS AND STANDARDS

Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2

GENERAL DATA

Operating Temperature Range (°C)	-45~60°C, >45°C Derating
Cooling	Smart cooling
Noise (dB)	<45 dB
Communication with BMS	RS485; CAN
Weight (kg)	33.6
Size (mm)	422W x 699.3H x 279D
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 Years

SolarAdvice 

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