

FSI Series

Hybrid Solar Inverter



The FSI Series is a professional low-frequency toroidal transformer inverter charger for backup, off-grid, and energy storage systems. It features pure sine wave output (1.5–6KW rated, 4.5–18KW surge power), ≤4ms UPS transfer, built-in AVR stabilizer, and ≥85% transfer efficiency. It includes an adjustable AC charger (up to 35A) compatible with Gel/SLA/AGM/lithium batteries, integrated MPPT solar controller, and supports 12/24/48V battery systems.

FEATURES

- Rated power 1.5KW-6KW.
- Pure sine wave AC output.
- Clear display for real-time system monitoring.
- Multi-layer Protection for Comprehensive Safety.
- High efficiency, low loss, long-term reliability.
- Compatible with LiFePO4 batteries.

PRODUCT CONNECTION DIAGRAM



Model	FSI-152	FSI-202	FSI-302	FSI-402	FSI-502	FSI-602
Rated Power	1.5KW	2KW	3KW	4KW	5KW	6KW
Surge Power	4.5KW	6KW	9KW	12KW	15KW	18KW
AC Input & Output						
Voltage	220VAC					
Selectable Voltage Range	165-275VAC (220VAC)					
Frequency Range	50Hz/60Hz automatic recognition					
AC Voltage Regulation (BATT. Mode)	(DC Batt.mode)220vac±3%					
Transfer Time	≤4ms					
Wave Form	Pure Sine Wave					
Transformer Type	Toroidal					
Transfer Efficiency	≥85%					
Battery						
Battery Voltage	12V/24V/48V		24V/48V			
Type	Gel/SLA/AGM/ Lithum battery					
DC Charge Voltage	13.6-14.2VDC(12V)/27.2-28.4VDC(24V)/54.4-56.8VDC(48V)					
Overcharge Protection	Battery voltage ≥16VDC (12V) ≥32VDC (24V) ≥64VDC (48V), stop charging after 60s alarm					
Solar Charge & Ac Charger						
Maximum PV Array Working Circuit Voltage	150VDC					
Maximum PV Array Power	700W(12V)/1400W(24V)		1400W(24V)/2800W(48V)			
Maximum AC Charge Current	35A (adjustable)					
Maximum Solar Charge Current	30/60A MPPT (OPTIONAL)			60A MPPT		
Maximum Charging Current	90A			90A		
Working mode						
01 Mode	AC mains priority					
02 Mode	Energy saving					
03 Mode	DC battery priority					
04 Mode	Unattended mode					
Physical						
Dimension, D*W*H(MM)	530*355*250			740*355*275		
G.W.(KGS)	18	20	22	33	35	36
Environment						
Humidity	0~95% (NO Condensation)					
Operating Temperature	0~60℃					
Storage Temperature	0~60℃					