

Single-phase Hybrid Inverter

SUNFLUX 3KW TO 6KW

SFHX SERIES-Hybrid 3KW
TO 6KW - 1PHASE

SF3KHX | SF3.6KHX | SF4KHX | SF4.6KHX
SF5KHX | SF6KHX



Smart Management

- Integrated AI energy management with generator & Smart loads
- Cloud monitoring and operations & maintenance
- Global MPP scan for optimal energy harvest



Assured Reliability

- Battery terminal temperature detection
- IP66 ingress protection
- Type II SPD on AC&DC side



High Performance

- 200% oversizing and 200% PV input power
- Max. 36A PV input per MPPT
- Low start-up voltage for higher energy harvest
- Up to 200% EPS output for 10s
- Single unit UPS-level switchover time < 4 ms



Flexible Adaptability

- Compatible with multiple third-party batteries
- Micro-grid and generator function for versatile operations
- Max. 10 pcs parallel for on-grid and off-grid

BATTERY INPUT DATA

Battery Type	Lithium or Lead acid battery					
Rated Battery Voltage	48V					
Maximum Charging Voltage	<60V (Configurable)					
Maximum Charge/Discharge Current	75A	90A	100A	110A	120A	120A

PV INPUT DATA

Maximum DC Input power	6KW	7.2KW	8KW	9.2KW	10KW	12KW
Maximum DC Input Voltage	500V					
MPPT Operating Voltage range	150 ~ 450 V					
Starting Voltage	125V					
Maximum Input Current	18	18/18	18/18	18/18	18/18	18/18
MPPT number	1	2	2	2	2	2

AC OUTPUT PARAMETERS (ON-GRID)

Maximum output apparent power	3300W	3960W	4400W	5000W	5500W	6000W
Rated output voltage	220V/230V					
Rated output frequency	50Hz/60Hz					
Max output Current	15A	18A	20A	22A	25A	27A
Output Power factor	~ 1 (0.8 lagging to 0.8 leading)					

AC OUTPUT PARAMETERS (OFF-GRID)

Rated output apparent power	3000W	3600W	4000W	4600W	5000W	6000W
Maximum output apparent power	>200%,15sec					
Rated output voltage	230V					
Rated output frequency	50Hz/60Hz					
Max output Current	14A	16A	18A	21A	23A	27A

EFFICIENCY

Max efficiency	97.60%
Max efficiency	94.50%
Europe efficiency	97%

PROTECTION

PV input reverse polarity protection	YES
PV insulation resistance detection	YES
Residual current detection	YES
Output over current protection	YES
Output short circuit protection	YES
Output over voltage protection	YES

BASIC DATA

Operation temperature	-25 ~ 60°C (> 45°C derating)
Storage temperature	-25 ~ 60°C
Relative humidity	0-95%
Working altitude	<2000
Cooling	Natural cooling
Noise	<55db
Weight	20Kg
Dimensions (W*H*D)	198*427*554mm
Protection class	IP66
Topology	HF Isolation (Battery side)

STANDARD

Safety standard/EMC standard	IEC62109, IEC61000, IS16169 & IS16221(BIS)
Grid connected standard	IEC61727, EN50549, VDE-4105
Other standard	IEC61683, IEC62116, EN50530, IEC60068
Warranty	5 years*