

E3 SERIES SMALL INDUSTRIAL & COMMERCIAL INVERTER

SS-H40.8K3H-E3 ~ SS-H63.5K3H-E3

40.8kW~63.5kW / BAT150~800V / IP66
220/380Vac, 230/400Vac



Reliable performance

- Both the battery side and the load side have super strong load capacity, smooth voltage and current waveforms, and can drive inductive loads such as air conditioning, supporting unlimited load
- Independent intelligent load/generator interface, compatible with existing PV system access, can operate without batteries (PV+grid combined power supply).
- Even without a battery, it can be bypassed for output, and important loads will not be powered off; Dynamically adapt to high-power demands.

Super Protection

- AICOT islanding protection, IP66 protection, PV reverse connection alarm, external CT reverse connection alarm and open circuit detection, three-phase independent anti backflow, three-phase phase sequence detection, and zero ground detection.

Economic benefits

- 4 MPPT channel, PV input can exceed twice times the rated power, supporting simultaneous full power charging and load, maximizing economic benefits.

Friendly Design

- High definition touch screen supports multiple languages; Charge discharge three-level transformation technology; Customized AC output voltage standard; Battery closing soft start and battery activation function.
- Supports grid connected, off grid, and grid connected switching modes, Frequency adaptive, Supports three-phase three-wire systems (without a neutral line).

Parameters

MODEL	SS-H40.8K3H-E3	SS-H51K3H-E3	SS-H63.5K3H-E3
PV Input			
Max PV Input Power	81.6kW	102kW	127kW
Max PV Input Voltage		1000Vdc	
PV Input Starting Voltage		180Vdc	
MPPT Input Voltage		150~850Vdc	
MPPT Full Load Voltage Range	420~850Vdc	420~850Vdc	450~850Vdc
PV Max Input Current		40A+40A+40A+40A	
PV Short-circuit Current		60A+60A+60A+60A	
Number of MPPT / Strings Per MPPT		4/2+2+2+2	
AC Output			
Rated Output Volt/Freq Range	220/380Vac, 230/400Vac, 50/60Hz(±5), Intelligent adaptive/Settable		
Grid Voltage Range	Local grid standard mode / Custom mode: 220Vac~400Vac (configurable)		
Rated Output Current	61.6/58.9A	76.9/73.6A	95.9/91.7A
Max Grid-connected Current	67.7/64.8A	84.7/81A	95.9/91.7A
Rated Grid-connected Power	40.8kW	51kW	63.5kW
Max Grid-connected Viewing Power	44.9kVA	56.1kVA	63.5kVA
Max Grid-connected Active Power	40.8kW	51kW	63.5kW
DC Component	< 0.5% In (Rated current)		
Grid Type	Three-phase, 3L+N+PE / 3L+PE (Adjustable)		
Output Power Factor(cosφ)	> 0.99 @ Rated power (Adjustable 0.8 leading~0.8 lagging)		
THDi	< 3%		
THDu	< 2%(Linear load)		
Transfer Time	10ms(Typical value)		
Off-grid Overload Capability	100%-110% 3min, 110%-125% 1min, >125% 10S		
Battery Input			
Battery Type	Lead-acid, lithium batteries, gel batteries, etc		
Charging Mode	3-section Type/Equilibrium/Self-adaption BMS		
Battery Voltage	150~800Vdc		
Max Discharge Current	100A		
Max Charging Current	100A		
Battery input port	1		
Efficiency			
Max PV Conversion Efficiency	98%		
European Efficiency	97.6%		
PV Charging Efficiency	98.6%		
Max Battery Charging/discharging Efficiency	97.6%		
General Parameters			
Display	Touch Screen+LED		
Communication Mode	Standard: RS485/CAN/DRM, Optional 4G/WIFI/GPRS/Temperature compensation module		
Protection function	Island Protection, AC Output Overcurrent Protection, AC Short Circuit Protection, DC Reverse Connection Protection, Optional Integrated AFCI (DC arc fault protection)		
Surge Protection	DC Type II / AC Type III		
Noise (dB)	< 65		
Cooling	Intelligent fan		
Operating Ambient Temperature	-40°C ~ 60°C (> 45°C Derating)		
Humidity	0~100%		
Altitude	4000m (>2000m Derating)		
Electricity Consumption At Night	25W		
Protection Degree	IP66		
Installation Method	Wall-mounted		
Dimension. W*D*H(mm)	850*300*535		
Weight (kg)	84		
Warranty	5 years standard/10 years optional		
Certifications			
Certification standard	IEC 62109-2 2011, IEC 62109-1 2010, EN/IEC 50549-10, VDE-4105, EC 60529:1989/AMD:2013, GB/T 4208-2017, EN/IEC 61000-6-3:2021, EN 61000-3-12:2011, EN/IEC 61000-3-12:2019, EN/IEC 61000-6-1:2019, RoHS		

Specifications are subject to change without advance notice.