12-20K

SOLARATOR SERIES

Operates Seamlessly with Generator: Experience Uninterrupted Power, Even in Areas with Grid Instability

S6-EH3P(12-20)K-H

Three Phase | High Voltage

Smart Energy Management

- AI intelligently manages charging and discharging based on TOU (Time-of-Use) tariffs
- Seamless integration with VPP and EMS platforms for enhanced energy optimization
- Built-in control for SG-ready heat pumps

High Performance

- Supports three-phase unbalanced output, allowing up to 40% of rated inverter power per phase
- 160% PV input capacity to maximize solar energy utilization
- Switching time < 10ms

Flexible & Scalable

- Compatible with mainstream lithium batteries
- Easily expand system capacity using parallel connections and AC coupling

Simple & Fast Configuration

- 7-inch large screen uses U.S.-made ZEITLER industrial-grade components
- Bluetooth app support for quick and easy setup

PHILIPPINES

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DATASHEET

Models	12K	15K	20K
Input DC (PV side)			
Recommended max. PV array size	24 kW	30 kW	40 kW
Max. usable PV input power	19.2 kW	24 kW	32 kW
Max. input voltage		1000 V	
Rated voltage		600 V	
Start-up voltage		160 V	
MPPT voltage range		200 - 850 V	
Max. input current		4 × 20 A	
Max. short circuit current		4 × 30 A	
MPPT number / Max. input strings number		4 / 4	
Battery			
Battery type		Li-ion	
Battery voltage range		120 - 800 V	
Max. charge / discharge power	12 kW	15 kW	20 kW
Max. charge / discharge current		50 A	
Communication		CAN / RS485	
Output AC (Grid side)			
Rated output power	12 kW	15 kW	20 kW
Max. apparent output power	12 kVA	15 kVA	20 kVA
Rated grid voltage		3/N/PE, 220 V / 380 V, 230 V / 400 V	
Rated grid frequency		50 Hz / 60 Hz	
Rated grid output current	18.2 A / 17.3 A	22.8 A / 21.7 A	30.4 A / 28.9 A
Max. output current	18.2 A / 17.3 A	22.8 A / 21.7 A	30.4 A / 28.9 A
Power factor		> 0.99 (0.8 leading - 0.8 lagging)	
THDi		< 3%	
Input AC (Grid side)			
Input voltage range		304 - 437 V / 320 - 460 V	
Max. input current	27.3 A / 26.0 A	34.2 A / 32.5 A	45.6 A / 43.3 A
Rated grid frequency		50 Hz / 60 Hz	
Frequency range		45 - 55 Hz / 55 - 65 Hz	
Input Generator			
Max. input power	12 kW	15 kW	20 kW
Max. input current	18.2 A / 17.3 A	22.8 A / 21.7 A	30.4 A / 28.9 A
Rated input frequency		50 Hz / 60 Hz	
Output AC (Back-up)			
Rated output power	12 kW	15 kW	20 kW
Max. apparent output power		1.6 time of rated power, 10 s	
Back-up switch time		< 10 ms	
Rated output voltage		3/N/PE, 220 V / 380 V, 230 V / 400 V	
Rated frequency		50 Hz / 60 Hz	
Rated output current	18.2 A / 17.3 A	22.8 A / 21.7 A	30.4 A / 28.9 A
THDv (@linear load)		< 3%	
Efficiency			
Max. efficiency		97.7%	
EU efficiency		97.5%	
BAT charged by PV max. efficiency		98.5%	
BAT charged / discharged to AC max. efficiency		97.2%	
Protection			
Anti-islanding protection		Yes	
Output over current protection		Yes	
Short circuit protection		Yes	
Integrated AFCI 2.0		Optional	
Integrated DC switch		Yes	
DC reverse-polarity protection		Yes	
PV over voltage protection		Yes	
Battery reverse protection		Yes	
General Data			
Max. allowable phase imbalance (grid & back-up)		100%	
Max. power per phase (grid & back-up)		40% rated power	
Dimensions (W × H × D)		563 × 546 × 250 mm	
Weight		35.2 kg	
Topology		Transformerless	
Self-consumption (night)		< 25 W	
Operating ambient temperature range		-25 ~ + 60°C	
Relative humidity		0 - 100%	
Ingress protection		IP66	
Noise emission (typical)		< 65 dB(A)	
Cooling concept		Intelligent fan-cooling	
Max. operation altitude		4000 m	
Grid connection standard		EN 50549-1/-10, VDE4105, CEI 0-21, CEI 0-16, NC-RFG TypeB, NRS 097-2-1, LTU-1, G99, PEA	
Safety / EMC standard		IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4	
Features			
PV connection		MC4 connector	
Battery connection		OT terminal	
AC connection		OT terminal	
Display		7.0" LCD display & Bluetooth + APP	
Communication		CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN	