

PRODUCT MODEL

Three-phase Hybrid Inverter

Product Features:

Safe & Reliable

- With island protection, PV reverse polarity protection, battery reverse polarity protection, insulation monitoring, residual current monitoring, AC over current protection, AC over power protection, short circuit protection.

Friendly & Flexible

- Less noise due to no external cooling fans;
- Support diesel generator access;
- Support full power discharge, automatic management of battery charge and discharge.

Economical & Practical

- It is more economical to support multiple operating modes;
- Can be as a UPS for the important loads when power off.

PV string input

Model	QS6KH3	QS8KH3	QS10KH3	QS12KH3	QS15KH3
Max.PV input power (kW)	9	12	15	18	22.5
Max. PV voltage (V)			1,000		
MPPT voltage range (V)			180~850		
Full power MPPT voltage range (V)	250~850	330~850	430~850	510~850	620~850
Min. input voltage/start-up voltage (V)			125/180		
Max. input current per MPPT (A)	13/13	13/13	13/13	13/13	13/13
Max. short-circuit current (A)	16/16	16/16	16/16	16/16	25/25
No. of MPPT trackers			2		
No. of strings per MPPT trackers			1/1		
Rated PV input voltage (V)			700		

AC Output

Model	QS6KH3	QS8KH3	QS10KH3	QS12KH3	QS15KH3
Nominal output power to grid (kVA)	6	8	10	12	15
Max. apparent power to grid (kVA)	6.6	8.8	11	13.2	16.5
Max. apparent power from grid (kVA)	13.2	17.6	22	26.4	33
Max. apparent current from grid (A)	19.1	25.5	31.8	38.2	47.6
Nominal output current to grid (A)	8.7	11.5	14.4	17.3	21.7
Max.output current to grid (A)	9.5	12.7	15.9	19.1	23.8
Nominal grid voltage (V)	380/400, 3W+N+PE				
Nominal grid frequency (Hz)	50/60				
THDi	<3%				

Battery

Model	QS6KH3	QS8KH3	QS10KH3	QS12KH3	QS15KH3
Max.charging /discharging Power (kW)	6.6	8.8	11	13.2	16.5
Battery voltage range (V)	125~600				
Battery optimal operating voltage range (V)	150~550				
Max.charging /discharging current (A)	50				
Rated.charging /discharging current (A)	40				
Battery type	Lithium /Lead acid				
Communication interface	CAN				

EPS output

Model	QS6KH3	QS8KH3	QS10KH3	QS12KH3	QS15KH3
Nominal output power (kVA)	8	8	10	12	15
Max. apparent power (kVA)	8.8	8.8	11	13.2	16.5
Nominal output current (A)	8.7	11.5	14.4	17.3	21.7
Max.output current (A)	9.5	12.7	15.9	19.1	23.8
Nominal output voltage (V)	400 ,3W+N+PE				
Nominal output frequency (Hz)	50/60				
THDu	<2%				
Max.efficiency	97.9%	97.9%	98.2%	98.2%	97.6%
Europe efficiency	97.2%	97.2%	97.5%	97.5%	97.8%
MPPT efficiency	99.9%				
Max.battery charge/discharge efficiency	97.5%	97.5%	97.5%	97.6%	97.8%

General Data

Model	QS6KH3	QS8KH3	QS10KH3	QS12KH3	QS15KH3
Ingress protection	IP65				
Operating temperature range (°C)	-25~60				
Relative humidity	0~100%				
Operating altitude (m)	4,000 (>2,000 Derating)				
Dimensions W*H*D (mm)	596*566*220				
Net weight (kg)	30	31	31	33	34
Self-consumption at night (W)	<20				
Cooling	Natural				
Noise emission (dB)	≤35				

EMC IEC/EN 61000-6-1:2019, IEC/EN 61000-6-2:2019, IEC/EN 61000-6-3:2021, IEN/EN 61000-6-4:2019, IEC/EN 61000-3-2:2019/A1:2021, EN 61000-3-3:2013/A2:2021, IEC/EN 61000-3-11:2019, EN 61000-3-12:2011

On-grid Europe: EN 50549-1:2019/AC:2019, Poland:EN50549-1:2019/Rfg:2016/NC Rfg:2018/PTPIREE:2021, Germany: VDE-AR-N 4105:2018 /DIN VDE V 0124-100(VDE V 0124-100):2020, South Africa: NRS 097-2-1:2017 Edition 2.1, UK:G98/G99/1-6:2022, Spain:UNE217001:2020 /UNE217002:2020/NTS V2.1:2021-07, IEC61727:2004/IEC62116:2014/IEC61683:1999, Hungary:EN50549-1:2019/RFG:2016/Hungary, Italy CEI 0-21

Safety standard IEC/EN62109-1:2010, IEC/EN62109-2:2011

Display and communication

Model	QS6KH3	QS8KH3	QS10KH3	QS12KH3	QS15KH3
HMI	LCD; APP				
BMS	CAN				
EMS/Meter	RS485/RS485				
Supported communication interface	WIFI / GPRS				