Q.HOME+ ESS HYB-G1

Energy Storage Solution

Hybrid Inverter 6.0 / 7.0 / 9.0 / 8.6 kWh
Up to 95.67 % Conversion Efficiency

MODEL Q.HOME+ ESS HYB-G1

HYBRID INVERTER + BATTERY CHARGER + LITHIUM-ION BATTERY + 10 YEAR PRODUCT WARRANTY

Scalable solution for optimized consumption

Scalable storage capacity from 4.5 kWh up to 18.9 kWh to suit all consumption cases.

Smart design

Modular design for easy and fast installation, remote control operated hybrid system with PV inverter, lithium-ion battery, and battery charger.

Remote monitoring

Easy maintenance due to its early error detection function, web and mobile monitoring, and a reliable service network.

Safety and reliability

Premium quality lithium-ion.

Durability

High durability with 10 year product warranty and 90 % depth of discharge (DoD).

100 % Backup power function

Thanks to the integrated backup power function, even in the event of power failure 100 % of the rated inverter output will support critical loads.

The ideal solution for:

Rooftop arrays on residential buildings

Technical Specification

GENERAL PRODUCT INFORMATION		Q.HOME+ ESS HYB-G1			
		6.0 kW	7.0 kW	7.6 kW	8.6 kW
Dimensions inverter / storage (L × W × D)	[in]	36 × 22 × 10.9 (913 × 560 × 276 mm) / 18.3 × 7.6 × 23.1 in (464 × 193 × 588 mm)			
Weight inverter / storage (4.5 kWh) / storage (6.3 kWh)	[lbs]	130 (58.9 kg) / 124.8 (56.6 kg) / 148.4 (67.5 kg)			
Operating temperature inverter / storage	[°F]	32 ~ 113 (0 ~ 45 °C) / 32 ~ 113 (0 ~ 45 °C)			
Relative humidity	[%]	0 - 100			
Enclosure rating		Type 4X			
Mounting		Wall mounted			
Max. operating height without power loss	[m]	2000			
Cooling method		Natural			
Noise emissions	[dB]	≤35			
AC over voltage category		I / IV			
Front panel display		LCD			
Communications		RS485 / LAN / CAN 2.0 / WiFi / 4G (optional)			
Remote monitoring		Web, mobile			
Software update		Local USB / Remote Web			
Energy management system		Integrated			
PV DATA (DC)					
Max. input power	[kW]	7.2	8.4	9.12	10.32
Max. input voltage [V_{DC}]	[V]	600			
Start input voltage / MPPT operating range / Rated input voltage	[V]	150 / 105~500 / 360			
Shutdown voltage	[V]	80			
Number of independent MPPTs		2	3	3	4
Maximum DC power per MPPT	[kW]	3.6			
Max. input current per MPPT / Max. short circuit current per MPPT	[A]	10 / 12.5			
GRID DATA (AC)					
Max. output power / Rated output power	[kVA]	6.6 / 6	7.7 / 7	8.36 / 7.6	9.46 / 8.6
Nominal voltage / Range	[V]	120 / 240 split phase (105.5 / 211 ~ 132 / 264)			
Nominal grid frequency / Range	[Hz]	60 / 59.3 ~ 60.5			
Nominal current	[A]	25	29	32	36
Maximum AC output current protection	[A]	28	32	35	41
Power factor		>99 (adj. ±0.8)			
Total harmonic distorsion	[%]	≤3			
BACKUP POWER OUTPUT (AC)					
Max. output power / Rated output power	[kW]	6.6 / 6	7.7 / 7	8.3 / 7.5	8.3 / 7.5
Max. output current / Rated output current	[A]	28 / 25	32 / 29	35 / 32	35 / 32
Rated voltage	[V]	120 / 240 split phase			
Rated frequency	[Hz]	60			
Switchover time to backup power		<200 ms			
Support by PV during backup power operation		YES			
EFFICIENCY					
Max. efficiency (PV-AC) / CEC efficiency	[%]	96.7 / 95.67			
Max. efficiency (PV-Battery) / (Battery-AC)	[%]	98.24 / 96.46			
BATTERY DATA (DC)					
Battery technology		Lithium-ion (NMC)			
Battery usable capacity per module	[kWh]	4.5 / 6.3			
Scalability		Up to three battery modules			
Max. battery usable capacity	[kWh]	13.5 / 18.9			
Rated power / Max. power (with three battery modules)	[kW]	7.5 / 8.3			
Rated battery voltage / Battery voltage range (per module)	[V_{DC}]	100.8 / 85 ~ 118			
Battery management system voltage range	[V_{DC}]	84 - 432			
Rated discharging current	[A]	25			
Depth of discharge (DoD)	[%]	90			
COUNTRY AVAILABILITY / CERTIFICATES AND WARRANTY					
Inverter certificates		84 - 432			
Battery certificates		25			
Product warranty / Performance warranty		90			

Note: Installation instructions must be followed. Contact our technical service for further information on approved installation of this product.

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