

Q.HOME+ ESS HYB-G2

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THE MODULAR AND SCALABLE  
ENERGY STORAGE SOLUTION



**HYBRID  
INVERTER**



**BATTERY  
CHARGER**



**SAMSUNG  
LITHIUM-ION  
BATTERY**



**10 YEARS PRODUCT  
WARRANTY**



## SCALABLE SOLUTION FOR OPTIMISED CONSUMPTION

Scalable storage capacity from 4 kWh up to 12 kWh to suit the specific energy consumption.



## SMART DESIGN

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



## REMOTE MAINTENANCE

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



## SAFETY

Premium quality Samsung lithium-ion battery.



## DURABILITY AND HIGH CYCLE STRENGTH

High durability with an all-wrapped, 10-year product warranty. Very short recharge time and a high discharge depth.



## CYCLE STRENGTH

High charging cycle strength, deep discharge and short charging times.



## BACKUP POWER FUNCTION

Thanks to the integrated backup power function, even in the event of power failure 3 kW continuous operation at the second output (switchover time max. one minute).

## THE IDEAL SOLUTION FOR:



Rooftop arrays on  
residential buildings

## TECHNICAL SPECIFICATIONS

GENERAL PRODUCT INFORMATION		Q.HOME <sup>+</sup> ESS HYB-G2
Manufacturer		Hanwha Q CELLS & Advanced Materials Corp.
Dimensions Inverter Module / Battery Module (W × H × D)	[mm]	467 × 721 × 212
Weight Inverter Module / Battery Module	[kg]	31.3/52.3
Operating Temperature	[°C]	0~40
Relative Humidity	[%]	95 (non-condensing)
Protection Degree / Class		IP65
Mounting		Wall-Mounted or Floor-Mounted (with Bracket) Options
Max. operating height without power loss	[m]	2000
Cooling method		Natural cooling
Product Warranty / Performance Warranty		10/10 years
Noise emissions		≤40 dB (A) @ 1m
AC Over voltage category		III
Front Panel Display		5" TFT Touch LCD
Communications		LAN, RS485, CAN
Remote Monitoring		Web, mobile
Software Update		Internet update
Energy Management System		Integrated
PV DATA (DC)		
Max. Input Power	[kWp]	6.6 (3.3 per MPPT)
Max. Input Voltage [V <sub>DC</sub> ]	[V]	550
Start input voltage / MPPT Operating Range / Rated Input Voltage	[V]	150/125~500/400
Number of independent MPPTs		2
Number of DC input pairs per MPPT		1
Max. Input Current per MPPT / Max. Short Circuit Current per MPPT	[A]	15/20
DC Connection Type		PV quick fit connector
GRID DATA (AC)		
Max. Apparent Power / Rated output power	[kVA/kW]	5.0/5.0
Nominal Voltage / Range	[V]	230/184~264
Nominal Grid Frequency / Range	[Hz]	50/47.5~51.5
Feed-in Phases / Connection Phases		Single/Single
Nominal Current / Max. Current / Max. Over-Current Protection	[A]	21.7/25/30
Power Factor Range		0.8 lagging to 0.8 leading
Total Harmonic Distorsion	[%]	≤5
BACKUP POWER OUTPUT (ALTERNATING CURRENT)		
Connection phases		Single
Rated apparent power / rated power	[kVA/kW]	3/3 (4.6kW max. 10 minutes)
Rated voltage	[V]	230
Rated frequency	[Hz]	50
Switchover time to backup power		approx. 1 minute
Support by PV during backup power operation		YES
EFFICIENCY (PV TO GRID)		
Max. Efficiency	[%]	95.28
BATTERY UNIT (DC)		
Manufacturer		Hanwha Q CELLS & Advanced Materials Corp. (battery from Samsung SDI)
Battery Technology		Lithium Ion
Battery Capacity	[kWh]	4/8/12 (4kWh per Battery module)
Battery Usable Capacity	[kWh]	3.6/7.2/10.8
Max. charging capacity / max. discharge capacity	[kW]	2 (one battery module), 3 (≥two battery modules) / 3
Converter Technology		Non-isolated
Rated Battery Voltage / Battery Voltage Range	[Vdc]	203.84/176.40~225.12
Maximum Charging / Discharging Current	[A]	17 (9.8 with one battery module) / 17
Depth of Discharge (DoD)	[%]	90 (5~95)
COUNTRY AVAILABILITY / CERTIFICATES AND APPROVALS		
Inverter Model Name		Q.VOLT HYB-G2 4.6kW.1.1
Battery Model Name		Q.SAVE-G2 4kWh B1.1.1
Certificates and approvals		VDE-AR-N 4105:2018, CE, IEC62109-1, IEC62109-2, IEC 62619, IEC 62477-1, EN 61000-6-2, EN 61000-6-3, AS4777.2:2016, AS62040, IEC62116, IEC 60068.2-52

**NOTE:** Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

**Made in Korea**

**ZECO**  
**ENERGY**  
ZERO COST ZERO CARBON

Engineered in Germany

**Q CELLS**