

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 4kWh up to 20kWh 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 10 years product warranty and a performance to be maintained at least 80% of the initial battery capacity after 10 years. Very short recharge time and a high discharge depth.



## CYCLE STRENGTH

Reliable with up to 6000 charging cycles (tested at 25°C), deep discharge and short charging times.



## BACKUP POWER FUNCTION

Thanks to the integrated backup power function, even in the event of power failure 3kW 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® ESS HYB-G2
Manufacturer		Hansol Technics
Dimensions Inverter Module / Battery Module (W x H x D)	[mm]	468 x 722 x 213
Weight Inverter Module / Battery Module	[kg]	31,3/52,3
Operating Temperature	[°C]	-10~40
Relative Humidity	[%]	4-100
Protection Degree / Class		IP65
Mounting		Wall Mounted
Max. operating height without power loss	[m]	2000
Cooling method		Natürliche Kühlung
Product Warranty / Performance Warranty		10/10 years
Noise emissions		≤40dB (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		Weidmüller
GRID DATA (AC)		
Max. Aparent Power / Rated output power	[kVA/kW]	4,6/4,6
Nominal Voltage / Range	[V]	230/184~264
Nominal Grid Frequency / Range	[Hz]	50/47,5~51,5
Feed-in Phases / Connection Phases		1/1
Nominal Current / Max. Current / Max. Over-Current Protection	[A]	20/25/32
Power Factor Range		0,8~1~0,8
Total Harmonic Distorsion		≤5
BACKUP POWER OUTPUT (ALTERNATING CURRENT)		
Connection phases		1
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 / European Efficiency	[%]	96,2/95,5
BATTERIEDATEN (DC)		
Manufacturer		Hansol Technics (battery from Samsung SDI)
Battery Technology		Lithium-Ionen
Battery Capacity	[kWh]	4/8/12/16/20 (4kWh per Battery module)
Battery Usable Capacity	[kWh]	3,6/7,2/10,8/14,4/18
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)
Operating Life		6000 cycles
COUNTRY AVAILABILITY / CERTIFICATES AND APPROVALS		
Inverter Model Name		HSHP-4601
Battery Model Name		HSBE-4001
Certificates and approvals		VDE-AR-N 4105, VDE 0126-1-1, CE, IEC 62109-1, IEC 62109-2, CEI 0-21, ER-G83/2, ER-G59/3, VDE 0126-1-1/A1 VFR 2014, IEC 62619, IEC 62477-1, EN 61000-6-2, EN 61000-6-3

**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.

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