

# THE Q CELLS ALL-IN-ONE ENERGY STORAGE SOLUTION

Q.HOME+ ESS-G1 is our powerful storage system range with integrated inverter for residential solar systems. Q.HOME+ ESS-G1 is available in three different dimensions to suit the needs of the most common sizes of residential solar systems. Our Q.HOME+ ESS-G1 ensures a reliable long-term operation and high output. Q.HOME+ ESS-G1 includes a 10-year product warranty and comes with a built-in web server for the monitoring of the all-in-one storage solution.



# FOR RESIDENTIAL HOUSES OPTIMISED CAPACITY

Available in three different sizes to suit the specific energy production and consumption.



### **SMART DESIGN**

Easy to install and remote control operated all-in-one system with integrated 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 automotive industry proven 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**

Exceptional good cycle strength of up to 6,000 cycles (tested at  $25^{\circ}$ C).





PV INVERTER





BATTERY CHARGER





SAMSUNG LITHIUM-ION BATTERY





10 YEARS PRODUCT WARRANTY



TECHNICAL SPECIFICATIONS					
GENERAL PRODUCT INFORMATION		Q.HOME+ ESS-G1 3.6		Q.HOME+ ESS-G1 5.5	Q.HOME* ESS-G1 8.0
Manufacturer		Hansol Technics		Hansol Technics	Hansol Technics
Dimensions (W x H x D)	[mm]	1000 × 680 × 267		1000 × 680 × 267	1070 × 880 × 260
Weight	[kg]	95		100	155
Operating Temperature	[°C]	-10~40		-10~40	-10~40
Relative Humidity [%]	[%]	max. 95 (non-condensing)		max. 95 (non-condensing)	max. 95 (non-condensing)
Protection Degree/Class		IP21/I		IP21/I	IP21/I
Product Warranty/Performance Warranty		10/10 years		10/10 years	10/10 years
Noise emissions		≤50dB(A) @ 1 m		≤50dB(A) @ 1 m	≤38dB(A) @ 1 m
AC Over voltage category		III		III	III
Front Panel Display		LCD		LCD	LCD
Communications		LAN, RS485		LAN, RS485	LAN, RS485
Remote Monitoring		Web, mobile		Web, mobile	Web, mobile
Software Uptade		Internet update		Internet update	Internet update
Energy Management System		Integrated		Integrated	Integrated
PV DATA (DC)					
Max. Input Power	[kWp]	6.6 (3.3 per MPPT)		6.6 (3.3 per MPPT)	10.0 (5.0 per MPPT)
Max. Input Voltage [V <sub>nc</sub> ]	[V]	550		550	1000
MPPT Operating Range	[V]	125~500		125~500	320~800
Initial Input Voltage	[V]	150		150	188
Number of independent MPP trackers		2		2	2
Number of DC-Inputs for each MPPT		1		1	2
Maximum Input Current per MPPT	[A]	15		15	16
Max. Short Circuit Current per MPPT	[A]	20		20	20
DC Connection Type		MC4		MC4	MC4
GRID DATA (AC)					
Nominal Power	[kW]	4.6		4.6	8.0
Max. Aparent Power	[kVA]	4.6		4.6	8.0
Nominal Voltage/Range	[ <b>V</b> ]	230/-20%~+15%		230/-20%~+15%	400 (230)/-20%~+15%
Nominal Grid Frequency/Range	[Hz]	50/47.5~51.5		50/47.5~51.5	50/47.5~51.5
Feed-in Phases/Connection Phases		1/1		1/1	3/3
Max. Current	[A]	20.0		20.0	11.6
Max. Over-Current Protection	[A]	30.0		30.0	20.0
Power Factor Range		0.95~1~0.95		0.95~1~0.95	0.95~1~0.95
Total Harmonic Distorsion	[%]	≤5		≤5	≤5
EFFICIENCY (PV TO GRID)					
Maximum Efficiency	[%]	95.5		95.5	97.5
European Efficiency	[%]	95.0		95.0	97.0
BATTERY DATA (DC)					
Manufacturer		SAMSUNG SDI		SAMSUNG SDI	SAMSUNG SDI
Battery Technology		Lithium-ion		Lithium-ion	Lithium-ion
Battery Capacity	[kWh]	3.6		5.5	8.0
Battery Usable Capacity	[kWh]	3.24		5.0	7.2
Nominal Power	[kW]	2		2	3
Converter Technology		Isolated		Isolated	Isolated
Nominal Battery Voltage/Range	[Vdc]	60/48~65.9		60/48~65.9	118/96~131
Maximum Current	[A]	46.3		46.3	31.25
Depth of Discharge (DoD)	[%]	90 (5~95)		90 (5~95)	90 (5~95)
Operating Life	DDDOVAL	6000 cycles		6000 cycles	6000 cycles
COUNTRY AVAILABILITY/CERTIFICATES AND A		62-00006/SJ94-00108F	ELCI	R552-00006/\$ IQ4_00167E	 ot available
System Model/Inverter Model for France				R552-00006/SJ94-00167F	ot available
System Model/Inverter Model for Germany		62-00001/SJ94-00108A		R552-00001/SJ94-00167A	LSR802-00002/SJ94-00171A
System Model/Inverter Model for III	ELSR362-00005/SJ94-00108E				ot available
System Model/Inverter Model for UK  Certificates and approvals		62-00002/SJ94-00108B R-N 4105, VDE 0126-1-1,		-AR-N 4105, VDE 0126-1-1,	ot available DE-AR-N 4105, VDE 0126-1-1,
our univates and approvais	CE, IE	C 62109-1, IEC 62109-2, 21, ER-G83/2, ER-G59/3	CE,	EC 62109-1, IEC 62109-2, 0-21	E, IEC 62109-1, IEC 62109-2

**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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