

# Q.HOME CORE H4/A4

## Energy Storage Solution



H4 : DC-coupled (Hybrid)

A4 : AC-coupled

MODEL Q.VOLT H4.6S/A4.6S | Q.SAVE B6.8S | Q.OMMAND



### Easy installation

Equipment design emphasizing improved simplicity of installation



### High efficiency

Competitive round-trip efficiency all-around system



### Dynamic optimizer mode

Algorithm maximises energy yields by incorporating real-time weather information



### Scalable battery

Scalable battery from 6.8 kWh, 13.7 kWh and 20.5 kWh to suit specific energy consumption



### ATS-free Seamless Control

Seamless operation mode conversion for continuous and stable backup without external ATS on both circumstances, grid fault and restoration



### Extended Warranty

Fully wrapped 15-year product and performance warranty



### Enhanced reliability

Excellent system reliability with Samsung SDI battery cells

### The ideal solution for:



Residential PV system

## ■ Technical Specification

GENERAL PRODUCT INFORMATION		Q.HOME CORE H4	Q.HOME CORE A4
Dimensions Inverter Module / Battery Module (W × H × D)	[mm]	460 × 700 × 221, 238 (From Wall)	
Weight Inverter Module / Battery Module	[kg]	37.5 / 61.1	33.9 / 61.1
Operating Temperature Range	[°C]	Q.VOLT: -20 to 60 (de-rating Start temp. 45), Q.SAVE: -10 to 45	
Relative Humidity	[%]	4 to 100 (Condensing)	
Protection Degree / Class		IP65	
Mounting		Wall-Mounted or Floor-Mounted Options	
Max. Operation altitude	[m]	2,000	
Cooling Method		Natural air cooling	
Product Warranty / Performance Warranty*		15/15 years	
Noise Emissions		≤ 40 dB (A) @ 1m	
Over Voltage Category (Internal)		OVC II (DC) / OVC III (AC)	
Communications		LAN, RS485, CAN, Wi-Fi (optional), LTE (optional)	
Remote Monitoring		Web, Mobile & App	
Software Update		Online update	
Energy Management System		Integrated	
Country of Manufacturer		Republic of Korea	
<b>PV DATA (DC)</b>			
Max. Input power (Max. Input per MPPT)	[kWp]	8.0 (4.0 per MPPT)	N/A
Max. Input Voltage	[V <sub>DC</sub> ]	600	N/A
Start Input Voltage / MPP Voltage Range	[V]	120 / 90 to 550	N/A
Number of Independent MPPTs		2	N/A
Number of DC Input Pairs per MPPT		1	N/A
Max. Input Current per MPPT / Max. Short Circuit Current per MPPT	[A]	15 / 20	N/A
DC Connection Type		MC4	N/A
<b>GRID DATA (AC)</b>			
Max. Apparent Power / Rated Output Power	[kVA / kW]	5 (4.6 for DE) / 5 (4.6 for DE)	
Nominal Voltage / Range	[V]	230 / 184 to 264	
Nominal Grid Frequency / Range	[Hz]	50, 60 / -5 Hz to +5 Hz	
Feed-in Phase / Connection Phase		Single / Single	
Nominal Current / Max. Current / Max. Over-Current Protection	[A]	21.7 / 25 / 30 (20 / 25 / 30 for DE)	
Power Factor Range		0.95 lagging to 0.95 leading	
Total Harmonic Distortion	[%]	≤ 5	
<b>BACKUP POWER OUTPUT (ALTERNATING CURRENT)</b>			
Connection Phase		Single	
Rated Apparent Power / Rated Power (only Battery)	[kVA / kW]	3.3 to 4.5 / 3.3 to 4.5 @ 1 Battery Pack 5 (4.6 for DE) / 5 (4.6 for DE) @ 2, 3 Battery Pack	
Rated Apparent Power / Rated Power (with PV)	[kVA / kW]	5 (4.6 for DE) / 5 (4.6 for DE) (max)	
Rated Voltage	[V]	230	
Rated Frequency	[Hz]	50, 60	
Switch Over Time to Backup Power		less than 0.1 seconds	
Support by PV during Backup Power Operation		YES	N/A
<b>EFFICIENCY</b>			
MPPT Efficiency	[%]	99.9	N/A
Max. Efficiency (PV to Grid)	[%]	97	N/A
Max. Efficiency (PV to Battery)	[%]	97.8	N/A
Max. Efficiency (Battery to Grid)	[%]	96.3	96.3
<b>BATTERY UNIT (DC)</b>			
Battery Technology		Lithium-ion NCA (Samsung SDI)	
Battery Energy	[kWh]	6.8 / 13.7 / 20.5 (6.86 kWh / pack)	
Battery Usable Energy	[kWh]	6.5 / 13.0 / 19.5 (6.51 kWh / pack)	
Max. Charge Power / Max. Discharge Power	[kW]	4.6 / 4.6 (DE) 5 / 5 (Others)	
Max. Charge Power / Max. Discharge Power (PV)	[kW]	5 / 4.6 (DE) 5 / 5 (Others)	
Converter Technology		Non-isolated	
Rated Battery Voltage / Battery Voltage Range	[V <sub>DC</sub> ]	202.8 / 168.0 to 228.2	
Maximum Charge / Discharge Current	[A]	16.9 / 20 (for each Q.SAVE unit)	
Depth of Discharge (DoD)	[%]	95	
<b>CERTIFICATES AND APPROVALS</b>			
Inverter Model Name		Q.VOLT H4.6S	Q.VOLT A4.6S
Battery Model Name		Q.SAVE B6.8S	
Certificates and Approvals		VDE-AR-N 4105:2018, CE, IEC 62109-1, IEC 62109-2, IEC 62040-1, IEC 62619, IEC 62477-1, EN 61000-6-2, EN 61000-6-3, IEC 60068-2-52, EN 60730-1 ANNEX.H, G99	

\* For details about warranty, refer to the warranty document.

Qcells pursues minimizing paper output in consideration of the global environment.

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

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