

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 6.8kWh, 13.7kWh and 20.5kWh 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	
PV DATA (DC)			
Max. Input power (Max. Input per MPPT)	[kWp]	8.0 (4.0 per MPPT)	N/A
Max. Input Voltage	[V _{oc}]	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
GRID DATA (AC)			
Max. Apparent Power/Rated Output Power	[kVA/kW]	5 (4.6 for DE, 3.68 for G98)/5 (4.6 for DE, 3.68 for G98)	
Nominal Voltage/Range	[V]	230/184 to 264 (230/184 to 262 for G98)	
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, 16/20/30 for G98)	
Power Factor Range		0.95 lagging to 0.95 leading	
Total Harmonic Distortion	[%]	≤ 5	
BACKUP POWER OUTPUT (ALTERNATING CURRENT)			
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 (3.3 to 3.68/3.3 to 3.68 @ 1 Battery Pack for G98) 5 (4.6 for DE, 3.68 for G98)/5 (4.6 for DE, 3.68 for G98) @ 2, 3 Battery Pack	
Rated Apparent Power/Rated Power (with PV)	[kVA/kW]	5 (4.6 for DE, 3.68 for G98)/5 (4.6 for DE, 3.68 for G98) (max)	
Rated Voltage	[V]	230	
Rated Frequency	[Hz]	50, 60	
Switch Over Time to Backup Power		less than 0.1 seconds	
Overload support		30 sec for 3.68 - 4.05 kVA, 20 sec for 4.05 - 4.41 kVA, 10 sec for 4.41 - 4.78 kVA @ 2, 3 Battery Pack and Off-grid	
EFFICIENCY			
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	
BATTERY UNIT (DC)			
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]	3.8/4.5 (3.8/4.5 for DE, 3.8/3.68 for G98) @ 1 Battery Pack 5.0/5.0 (5.0/4.6 for DE, 5.0/3.68 for G98) @ 2, 3 Battery Pack	
Converter Technology		Non-isolated	
Rated Battery Voltage/Battery Voltage Range	[V _{oc}]	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	
CERTIFICATES AND APPROVALS			
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, EN50549-1, EN 61000-6-2, EN 61000-6-3, IEC 60068-2-52, IEC 60730-1 ANNEX.H, G98, G99, G100, VDE V 0126-1-1/08.13, XP C15-712-3:2019, VFR 2019, SEI REF 04 Version 7	

* 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.

Hanwha Q CELLS GmbH Sonnenallee 17-21, 06766 Bitterfeld-Wolfen, Germany | TEL +49 (0)3494 66 99-23444 | FAX +49 (0)3494 66 99-23000 | EMAIL sales@q-cells.com | WEB www.qcells.com

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