

Q.HOME CORE H4

THE MODULAR AND SCALABLE
ENERGY STORAGE SOLUTION



EASY INSTALLATION

Equipment design emphasizing improved simplicity of installation



HIGH EFFICIENCY

Competitive round-trip efficiency all-around system



DYNAMIC OPTIMISER 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 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

A total energy solution from quality Q CELLS

Q CELLS

TECHNICAL SPECIFICATIONS

GENERAL PRODUCT INFORMATION		Q.HOME CORE H4
Dimensions Inverter Module / Battery Module (W x H x D)	[mm]	460 x 700 x 221, 238 (From Wall)
Weight Inverter Module / Battery Module	[kg]	37.5 / 61.1
Operating Temperature Range	[°C]	Q.VOLT: -20 to 60, Q.SAVE: -10 to 45
Relative Humidity	[%]	4 to 100 (Condensing)
Protection Degree / Class		IP65
Mounting		Wall-Mounted or Floor-Mounted Options
Max. Operating Height	[m]	2,000
Cooling Method		Natural air cooling
Product Warranty / Performance Warranty		15 / 15 years
Noise Emissions		≤40 dB (A) @ 1m
Over Voltage Category		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 Usable Power	[kWp]	8.0 (4.0 per MPPT)
Max. Input Voltage	[Vdc]	600
Start Input Voltage / MPP Voltage Range	[V]	120 / 90 to 550
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		MC4
GRID DATA (AC)		
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 Phases / Connection Phases		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
BACKUP POWER OUTPUT (ALTERNATING CURRENT)		
Connection Phases		Single
Rated Apparent Power / Rated Power (only Battery)	[kVA/kW]	3.3 to 4.5 / 3.3 to 4.5 @ 1 Battery Pack, 5 / 5 (4.6 for DE) @ 2 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
EFFICIENCY		
MPPT Efficiency	[%]	99.9
Max. Efficiency (PV to Grid)	[%]	97
Max. Efficiency (PV to Battery)	[%]	97.8
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]	6.51 / 13.03 / 19.55
Max. Charge Power / Max. Discharge Power	[kW]	2.8 to 3.8 / 3.3 to 4.5 @ 1 Battery Pack, 5 / 5 (4.6 for DE) @ 2 Battery Pack
Converter Technology		Non-isolated
Rated Battery Voltage / Battery Voltage Range	[Vdc]	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
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

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.

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.q-cells.com