

Q.HOME CORE H5

Energy Storage Solution



H5 : DC-coupled (Hybrid)

MODEL Q.VOLT H5S | Q.SAVE B6.8S | Q.OMMAND (Platform)



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 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 H5
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
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. 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		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	[V _{oc}]	600
Start Input Voltage	[V]	120 to 550
MPP Voltage Range (Operation Range)	[V]	90 to 550 (Derating from 520 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]	5.0/5.0
Nominal Voltage/Range	[V]	230/180 to 260
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
Power Factor Range		0.8 lagging to 0.8 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, 5/5 @ 2, 3 Battery Pack
Rated Apparent Power/Rated Power (with PV)	[kVA/kW]	5.0/5.0 (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 5.0 - 5.5 kVA, 20 sec for 5.5 - 6.0 kVA, 10 sec for 6.0 - 6.5 kVA @ 2, 3 Battery Pack and Off-grid
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]	3.8/4.5 @ 1 Battery Pack, 5.0/5.0 @ 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 H5S
Battery Model Name		Q.SAVE B6.8S
Certificates and Approvals		AS/NZS 4777.2:2020, 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 60730-1ANNEX.H