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



ATS-free Seamless Control

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



High efficiency

Competitive round-trip efficiency all-around system



Extended Warranty

Fully wrapped 15-year product and performance warranty



Scalable battery

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



Enhanced reliability

Excellent system reliability with Samsung SDI battery cells

The ideal solution for:



Residential PV system

Specifications subject to technical changes. © Qcells Q.HOME_CORE_H5_2023-09_Rev05_AU

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 _{DC}]	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 265
Nominal Grid Frequency/Range	[Hz]	50, 60/-5Hz to +5Hz
Feed-in Phase/Connection Phase	[i 14]	Single/Single
Nominal Current/Max. Current/Max. Over-Current Protection	[A]	21.7/25/30
Power Factor Range	[P]	0.8 lagging to 0.8 leading
Total Harmonic Distortion	[%]	0.6 lagging to 0.6 leading ≤ 5
BACKUP POWER OUTPUT (ALTERNATING CURRENT)		
Connection Phase		Single
	[[4]] [4]	
Rated Apparent Power/Rated Power (only Battery) Rated Apparent Power/Rated Power (with PV)	[kVA/kW] [kVA/kW]	3.3 to 4.5/3.3 to 4.5 @ 1 Battery Pack, 5/5 @ 2, 3 Battery Pack 5.0/5.0 (max)
		230
Rated Voltage	[V]	
Rated Frequency Switch Over Time to Backup Power	[Hz]	50, 60
Switch Over Time to Backup Power Overload support		less than 0.1 seconds 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)
,	[kWh]	6.51/13.03/19.55

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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 _{DC}]	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
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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,

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, IEC 60730-1 ANNEX.H

