

# 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 <sub>oc</sub> ] | 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 /<br>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 <sub>oc</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   |
| 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 |