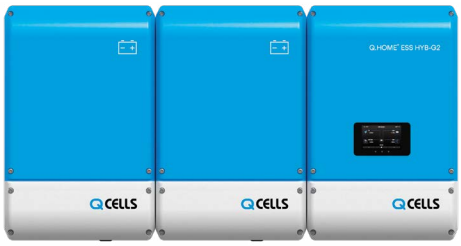

# Q.HOME+ ESS HYB-G2

## THE MODULAR AND SCALABLE ENERGY STORAGE SOLUTION




HYBRID INVERTER

+

BATTERY CHARGER

+

SAMSUNG LITHIUM-ION BATTERY

+

10-YEAR PRODUCT WARRANTY

### SCALABLE SOLUTION FOR OPTIMISED CONSUMPTION
Scalable storage capacity from 4 kWh up to 18.9 kWh to suit the specific energy consumption.

### SMART DESIGN
Modular design for easy and fast installation, remote control operated hybrid system with PV inverter, lithium-ion battery and battery charger.

### REMOTE MAINTENANCE
Easy maintenance of the device due to early error detection function, web and mobile monitoring and a reliable service network.

### SAFETY
Premium quality Samsung lithium-ion battery.

### DURABILITY AND HIGH CYCLE STRENGTH
High durability with a 10-year product warranty and a performance to be maintained at least 80 % of the initial battery capacity after 10 years. Very short recharge time and a high discharge depth.

### CYCLE STRENGTH
High charging cycle strength, deep discharge and short charging times.

### BACKUP POWER FUNCTION
Thanks to the integrated backup power function, even in the event of power failure 3 kW continuous operation at the second output (switchover time max. 30 seconds).

### THE IDEAL SOLUTION FOR:
Rooftop arrays on residential buildings

Engineered in Germany

## TECHNICAL SPECIFICATIONS

| GENERAL PRODUCT INFORMATION | | Q.HOME+ ESS HYB-G2 | |
|---|---|---|---|
| Manufacturer | | Hanwha Solutions Corporation | |
| Dimensions inverter module / Battery module (W × H × D) | [mm] | 468 × 722 × 213 | |
| Weight inverter module / Battery module | [kg] | 31.3 / 52.3 | |
| Operating temperature | [°C] | 0 ~ 40 | |
| Relative humidity | [%] | 4-100 | |
| Protection degree / Class | | IP65 | |
| Mounting | | Wall mounted | |
| Max. operating height without power loss | [m] | 2000 | |
| Cooling method | | Natural cooling | |
| Product warranty / Performance warranty | | 10 / 10 years | |
| Noise emissions | | ≤ 40 dB (A) @ 1 m | |
| AC over voltage category | | III | |
| Front panel display | | 5" TFT Touch LCD | |
| Communications | | LAN, RS485, CAN | |
| Remote monitoring | | Web, mobile | |
| Software update | | Internet update | |
| Energy management system | | Integrated | |
| **PV DATA (DC)** | | | |
| Max. input power | [kWp] | 6.6 (3.3 per MPPT) | |
| Max. input voltage [$V_{DC}$] | [V] | 550 | |
| Start input voltage / MPPT operating range / Rated input voltage | [V] | 150 / 125~500 / 400 | |
| 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 | | Weidmüller | |
| **GRID DATA (AC)** | | | |
| Max. apparent power / Rated output power | [kVA / kW] | 4.6 / 4.6 | |
| Nominal voltage / Range | [V] | 230 / 184 ~ 264 | |
| Nominal grid frequency / Range | [Hz] | 50 / 47.5 ~ 51.5 | |
| Feed-in phases / Connection phases | | 1 / 1 | |
| Nominal current / Max. current / Max. over-current protection | [A] | 20 / 25 / 32 | |
| Power factor range | | 0.8 ~ 1 ~ 0.8 | |
| Total harmonic distortion | [%] | ≤ 5 | |
| **BACKUP POWER OUTPUT (ALTERNATING CURRENT)** | | | |
| Connection phases | | 1 | |
| Rated apparent power / rated power | [kVA / kW] | 3 / 3 (4.6 kW max. 10 minutes) | |
| Rated voltage | [V] | 230 | |
| Rated frequency | [Hz] | 50 | |
| Switch over time to backup power | | less than 30 seconds | |
| Support by PV during backup power operation | | YES | |
| **EFFICIENCY (PV TO GRID)** | | | |
| Max. efficiency / European efficiency | [%] | 96.2 / 95.5 | |
| **BATTERY UNIT (DC)** | | | |
| Battery name | | Q.SAVE-G2 4 kWh | Q.SAVE-G2 6.3 kWh |
| Manufacturer | | Hanwha Solutions Corporation (battery from Samsung SDI) | |
| Battery technology | | Lithium-ion | |
| Battery capacity | [kWh] | 4 / 8 / 12 (4 kWh / module) | 6.3 / 12.6 / 18.9 (6.3 kWh / module) |
| Battery usable capacity | [kWh] | 3.60 / 7.20 / 10.80 | 5.67 / 11.34 / 17.01 |
| Max. charging capacity / max. discharge capacity | [kW] | 2 (one battery module), 3 (≥ two battery modules) / 3 | 3 / 3 |
| Converter technology | | Non-isolated | |
| Rated battery voltage / Battery voltage range | [Vdc] | 203.84 / 176.40 ~ 225.12 | 202.7 / 173.6 ~ 228.2 |
| Maximum charging / Discharging current | [A] | 17 (9.8 with one battery module) / 17 | 17 (15.6 with one battery module) / 17 |
| Depth of discharge (DoD) | [%] | 90 | |
| **COUNTRY AVAILABILITY / CERTIFICATES AND APPROVALS** | | | |
| Inverter model name | | Q.VOLT HYB-G2 4.6 kW 1.1 | |
| Battery model name | | Q.SAVE-G2 4 kWh B1.1.1, Q.SAVE-G2 6.3 kWh B1.1.1 | |
| Certificates and approvals | | VDE-AR-N 4105:2018, CE, IEC62109-1, IEC62109-2, IEC 62619, IEC 62477-1, EN 61000-6-2, EN 61000-6-3 | |

**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.

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