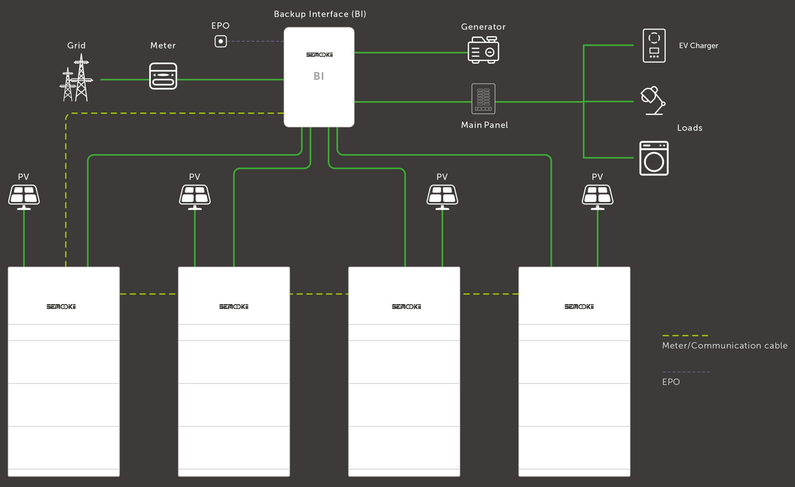
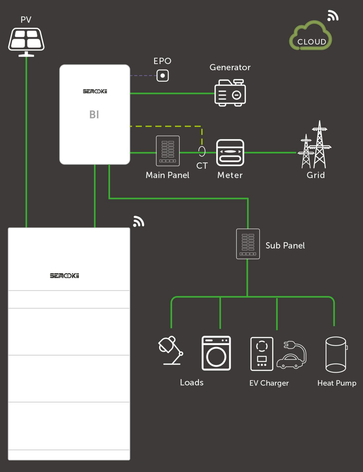
## ENERGY STORAGE SYSTEM (PARALLEL OPERATION)

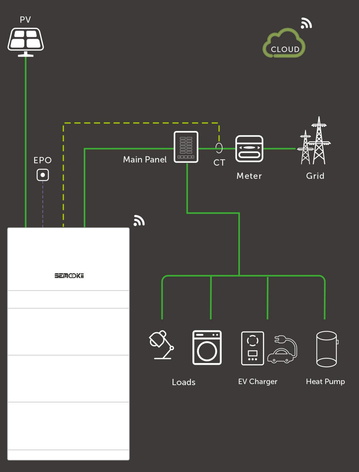
- Friendly with existing PV system
- Up to 4 systems in parallel, 7.6kW *4 =30.4kW, 20kWh*4=80kWh
- Up to 4 battery modules stackable, 20kWh each system
- 160A BI supported



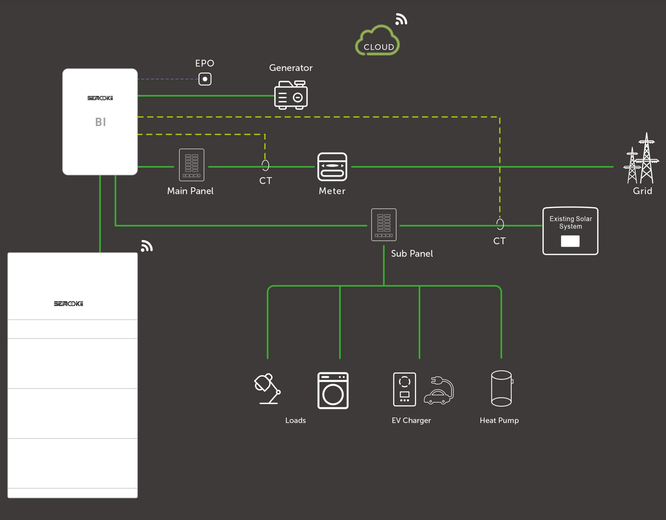

## FLEXIBLE HOME BACKUP SOLUTION




## FLEXIBLE HOME ON-GRID SOLUTION




## FLEXIBLE HOME BACKUP SOLUTION AC COUPLED



# EHOO-ESS

## EHOO-HYBRID

- Up to 200% oversizing allowed
- Up to 3 MPPTs
- Maximum 16A PV input current
- Microgrid supported
- Optional revenue grade metering
- Up to 4 systems in parallel①
- Peak efficiency: 98%
- Integrated arc fault protection and rapid shutdown transmitter

## EHOO-BATTERY-HV-5.0

- Long life & Safe LPF battery
- Up to 4 battery modules stackable, 20kWh each system
- Modular design & Quick installation
- Floor or wall mounted

## EHOO-BI-200

- Maximum 160A AC current
- Flexible home backup
- Up to 4 systems in parallel
- 64A generator supported
- Built-in energy management meter
- Smart load management②
- Heat pump extendable③
- EV charger extendable③

## EHOO-HYBRID

| | EHOO-HYBRID-3.8 | EHOO-HYBRID-5.0 | EHOO-HYBRID-6.0 | EHOO-HYBRID-7.6 |
|---|---|---|---|---|
| **INPUT PV** | | | | |
| Maximum recommended PV power [W] | 7600 | 10000 | 10000 | 15200 |
| Maximum DC voltage [V] | 550 | | | |
| Norminal DC operating voltage [V] | 360 | | | |
| Maximum input current [A] | A: 16 / B: 16 | A: 16 / B: 16 | A: 16 / B: 16 | A: 16 / B: 16 / C: 16 |
| Maximum short circuit current [A] | A: 20 / B: 20 | A: 20 / B: 20 | A: 20 / B: 20 | A: 20 / B: 20 / C: 20 |
| MPPT voltage range [V] | 90-500 | | | |
| Start input voltage [V] | 120 | | | |
| No. of MPP trackers, Strings per MPP tracker | 2, 1 / 1 | 2, 1 / 1 | 2, 1 / 1 | 3, 1 / 1 / 1 |
| DC disconnection switch | YES | | | |
| **INPUT/OUTPUT AC** | | | | |
| Nominal AC power [VA] | 3816 | 5016 | 6000 | 7608 |
| Maximum apparent AC power [VA] | 3816 | 5016 | 6000 | 7608 |
| Nominal AC voltage [V] / Nominal AC frequency [Hz] | 240 / 60 | | | |
| Nominal AC current [A] | 15.9 | 20.9 | 25 | 31.7 |
| Displacement power factor | 0.8 leading to 0.8 lagging | | | |
| Total harmonic distortion (THD, rated power) | < 3% | | | |
| **INPUT/OUTPUT BAT** | | | | |
| Battery type | Li-ion | | | |
| Maximum output power [W] | 3816 | 5016 | 6000 | 7600 |
| Maximum charge / discharge current [A] | 54 | 54 | 54 | 54 |
| Reverse-polarity protection | YES | | | |
| Cycle efficiency charging to discharging (PCS) | 88.5% | 90.5% | 91.5% | 92.5% |
| **ADDITIONAL FEATURES** | | | | |
| AFCI | YES | | | |
| Revenue grade metering, ANSI C12.20 | Optional | | | |
| Rapid shutdown transmitter | Integrated PLC controller to RSD | | | |
| **EFFICIENCY** | | | | |
| CEC weighted efficiency | 97.50% | | | |
| Maximum inverter efficiency | 98.00% | | | |
| **POWER CONSUMPTION** | | | | |
| Internal consumption (night) [W] | < 3 | | | |
| **STANDARD** | | | | |
| Safety | UL1741, UL1741 SA, UL1699B, CSA - C22.2 No. 107.1-01, Canadian AFCI according to T.I.L. M-07 | | | |
| Emissions | FCC Part 15 Class B | | | |
| Grid connection standards | IEEE1547, Rule 21, Rule14 (HI) | | | |
| **INSTALLATION SPECIFICATIONS** | | | | |
| Protection class | NEMA 4X | | | |
| Operating temperature range [°F / °C] | -13 to +140 / -25 to +60 | | | |
| De-rating start temperature [°F / °C] | 113 / 45 or above | | | |
| Storage temperature range [°F / °C] | -13 to +167 / -25 to +75 | | | |
| Relative humidity [%] | 0 to 95 | | | |
| Altitude [ft / m] | 9843 / 3000 MAX | | | |
| Typical noise emission [dBA] | < 30 | | | |
| Over voltage category | IV (electric supply side), II (PV side) | | | |
| **GENERAL** | | | | |
| Dimensions (W x H x D) [in / mm] | 33.1 x 15.7 x 5.7 / 840 x 400 x 145 | | | |
| Weight [lb / Kg] | 75 / 34 | | | |
| Cooling | Natural convection | | | |
| Topology | Transformerless | | | |
| Communication interfaces | RS485, CAN, WIFI (optional) / 4G (optional), Dry Contact | | | |
| Warranty | 10 years | | | |

## EHOO-AC COUPLED

| | EHOO-AC COUPLED-3.8K | EHOO-AC COUPLED-5.0K | EHOO-AC COUPLED-6.0K | EHOO-AC COUPLED-7.6K |
|---|---|---|---|---|
| **INPUT/OUTPUT AC** | | | | |
| Nominal AC power [VA] | 3816 | 5016 | 6000 | 7608 |
| Maximum apparent AC power [VA] | 3816 | 5016 | 6000 | 7608 |
| Nominal AC voltage [V] / Nominal AC frequency [Hz] | 240 / 60 | | | |
| Nominal AC current [A] | 15.9 | 20.9 | 25 | 31.7 |
| Displacement power factor | 0.8 leading to 0.8 lagging | | | |
| Total harmonic distortion (THD, rated power) | < 3% | | | |
| **NPUT/OUTPUT BAT** | | | | |
| Battery type | Li-ion | | | |
| Maximum output power [W] | 3816 | 5016 | 6000 | 7600 |
| Maximum charge / discharge current [A] | 54 | 54 | 54 | 54 |
| Reverse-polarity protection | YES | | | |
| Cycle efficiency charging to discharging (PCS) | 88.5% | 90.5% | 91.5% | 92.5% |
| **ADDITIONAL FEATURES** | | | | |
| Revenue grade metering, ANSI C12.20 | Optional | | | |
| **Efficiency** | | | | |
| Maximum inverter efficiency | 98.00% | | | |
| **POWER CONSUMPTION** | | | | |
| Internal consumption (night) [W] | < 3 | | | |
| **STANDARD** | | | | |
| Safety | UL1741, UL1741 SA, CSA - C22.2 No. 107.1-01 | | | |
| Emissions | FCC Part 15 Class B | | | |
| Grid connection standards | IEEE1547, Rule 21, Rule14 (HI) | | | |
| **INSTALLATION SPECIFICATIONS** | | | | |
| Protection class | NEMA 4X | | | |
| Operating temperature range [°F / °C] | -13 to +140 / -25 to +60 | | | |
| De-rating start temperature [°F / °C] | 113 / 45 or above | | | |
| Storage temperature range [°F / °C] | -13 to +167 / -25 to +75 | | | |
| Relative humidity [%] | 0 to 95 | | | |
| Altitude [ft / m] | 9843 / 3000 MAX | | | |
| Typical noise emission [dBA] | < 30 | | | |
| Over voltage category | IV (electric supply side) | | | |
| **GENERAL** | | | | |
| Dimensions (WxHxD) [in / mm] | 33.1 x 15.7 x 5.7 / 840 x 400 x 145 | | | |
| Weight [lb / Kg] | 75 / 34 | | | |
| Cooling | Natural convection | | | |
| Topology | Transformerless | | | |
| Communication interfaces | RS485, CAN, WIFI (optional) / 4G (optional), Dry Contact | | | |
| Warranty | 10 years | | | |

## EHOO-BATTERY-HV-5.0

| | EHOO-BATTERY H 10.0 | EHOO-BATTERY H 15.0 | EHOO-BATTERY H 20.0 |
|---|---|---|---|
| **MODEL** | | | |
| Battery type | 100Ah Lithium (LFP) | | |
| Component | BMS MODULE + 2*MF-51100U | BMS MODULE + 3*MF-51100U | BMS MODULE + 4*MF-51100U |
| **NOMINAL CHARACTER** | | | |
| Voltage [V] | 102.4 | 153.6 | 204.8 |
| Operating voltage range [V] | 90 - 116 | 135 - 174 | 180 - 232 |
| Total energy [kWh] | 10 | 15 | 20 |
| Usable energy [kWh]④ | 9 | 13.5 | 18 |
| Battery roundtrip efficiency [%]⑤ | 95% | | |
| Maximum power [kW] | 5.5 | 8.3 | 11.1 |
| Maximum charge / discharge current [A] | 54 | | |
| Cycle life (90% DOD) | 6000 cycles | | |
| Warranty | 10 years (Details refer to semooki Power warranty statement.) | | |
| **INSTALLATION SPECIFICATIONS** | | | |
| Charge / Discharge temperature range [°F / °C] | Charge: 32 to 127.4 / 0 to 53, Discharge: 14 to 127.4 / -10 to 53 | | |
| Storage temperature range [°F / °C] | 3 months: 4 to 122 / -20 to 50, 1 year: 32 to 104 / 0 to 40 | | |
| Relative humidity [%] | 0 to 100 | | |
| Altitude [ft / m] | 9843 / 3000 MAX | | |
| Protection class | NEMA 4X | | |
| **STANDARD** | | | |
| Certification | UN38.3, UL1973, UL9540, UL9540A | | |
| Hazardous materials classification | Class 9 | | |
| **GENERAL** | | | |
| Cooling | Natural convection | | |
| Dimensions (W x H x D) [in / mm] - BMS MODULE | 33.5 x 5.2 x 5.8 / 850 x 133 x 148 | | |
| Dimensions (W x H x D) [in / mm] - MF-51100U (BAT) | 33.5 x 23.6 x 5.8 / 850 x 600 x 148 | 33.5 x 35.4 x 5.8 / 850 x 900 x 148 | 33.5 x 47.2 x 5.8 / 850 x 1200 x 148 |
| Dimensions (W x H x D) [in / mm] - Base | 33.5 x 2.2 x 5.8 / 850 x 55 x 148 | | |
| Weight [lb / kg] | BMS MODULE: 22 / 10<br>+ 2*MF51100U: 238 / 108 | BMS MODULE: 22 / 10<br>+ 3*MF-51100U: 357 / 162 | BMS MODULE: 22 / 10<br>+ 4* MF-51100U: 476 / 216 |

## EHOO-BI-200

| | |
|---|---|
| **GRID INPUT** | |
| Nominal AC input voltage [V] / Nominal AC frequency [Hz] | 120 / 240, 60 |
| Maximum AC input current [A] | 160 |
| **OUTPUT TO MAIN PANEL IN GRID TIED OPERATION** | |
| Nominal AC output voltage [V] | 120 / 240 |
| Maximum AC input current [A] | 160 |
| **OUTPUT TO MAIN PANEL IN BACKUP OPERATION** | |
| Nominal AC output voltage [V] | 120 / 240 |
| Imbalance compensation in backup operation [VA] | 5000 |
| Split phase imbalance output current [A] | 41.7 |
| Maximum AC output current [A] | 126.8 |
| **INPUT FROM INVERTER** | |
| Maximum number of inverter inputs | 4 |
| Maximum AC power [W] | 7600 |
| Maximum continuous input current @240V [A] | 31.7 |
| Maximum inverter input AC circuit breaker [A] | 40 (optional) |
| Upgradability | Up to 4 x 40A circuit breaker |
| **GENERATOR** | |
| Maximum AC power [W] | 15000 |
| Maximum continuous input current [A] | 63 |
| Auto generator start | Yes |
| **GENERAL** | |
| Dimensions (HxWxD) [in / mm] | 27.8 x 17.7 x 5.9 / 706 x 450 x 151 |
| Weight [lb / kg] | 69.4 / 31.5 |
| Energy meter accuracy | 1% |
| Communication interfaces | RS485, CAN, Dry Contact |
| Cooling | Fan |
| Warranty | 10 years |
| **STANDARD** | |
| Safety | UL1741, CSA 22.2 NO.107 |
| Emissions | FCC part 15 Class B |
| **INSTALLATION SPECIFICATIONS** | |
| Altitude [ft / m] | 9843 / 3000 MAX |
| Operating temperature range [°F / °C] | -13 to +140 / -25 to +60 |
| Protection class | NEMA 3R |
| Typical noise emission [dBA] | < 50 |

① To be released in Q4 2022. ② To be released in Q2 2023. ③ To be released in Q3 2023.
④ Test Conditions: 90% DOD, 0.2C charge & discharge at + 25 °C. ⑤ Maximum Charge/Discharge power may be variant with different inverter models.

**V1.1 Information may be subject to change without notice.650.00024.00*