



GreensunSolar

# SMALL-SCALE C&I ESS SOLUTION

Model:GCB-E240



## **Total Protection**

- Combustible gas, smoke and temperature detection
- Active exhaust system
- Fire alarm

## **Integrated Technology**

- EMS, hybrid inverter and BMS integration technology
- Power supply redundancy design
- Support for black start function, off-grid operation

## **Safety Protection**

- Lithium iron phosphate ( LFP ) batteries, battery packs and systems all use aerosol fire suppression solutions

## **Flexible Expansion**

- Supports up to 10 sets in parallel

## Technical Data

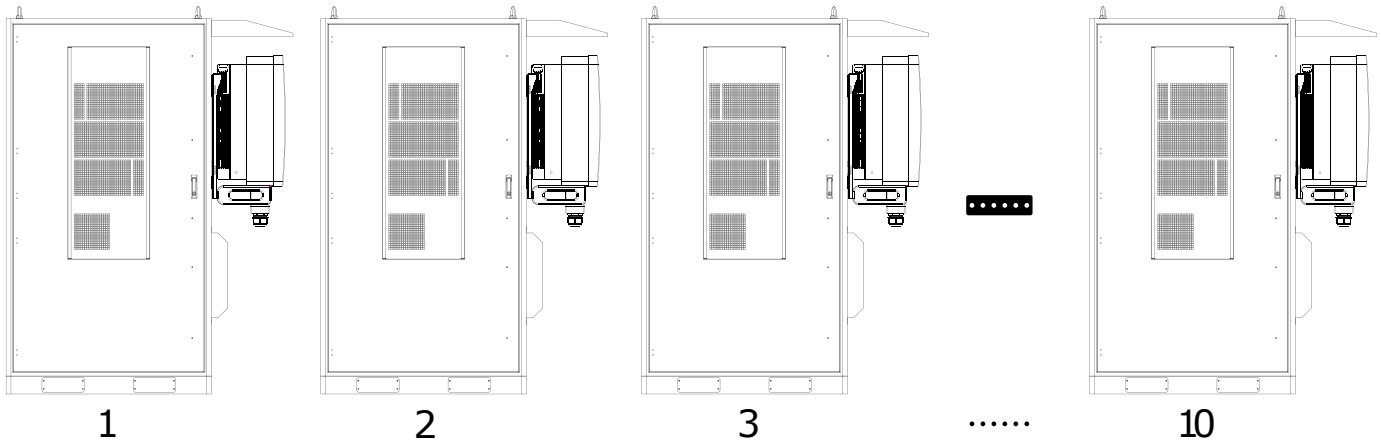
| Model                          |                | GCB-E240                                                           |
|--------------------------------|----------------|--------------------------------------------------------------------|
| Main Parameter                 |                |                                                                    |
| Cell Chemistry                 |                | LiFePO4                                                            |
| Module Energy (kWh)            |                | 16.076                                                             |
| Module Nominal Voltage (V)     |                | 51.2                                                               |
| Module Capacity (Ah)           |                | 314                                                                |
| Battery Module Qty In Series   |                | 15                                                                 |
| System Nominal Voltage ( V )   |                | 768                                                                |
| System Operating Voltage ( V ) |                | 672V~852V                                                          |
| System Energy (kWh)            |                | 241.15                                                             |
| System Usable Energy (kWh) 90% |                | 217.03                                                             |
| Charge/Discharge               | Nominal        | 157A                                                               |
| Current(A)                     | Peak Discharge | 157A                                                               |
| Other Parameter                |                |                                                                    |
| Thermal Management             |                | Battery model: Smart fan cooling; Cabinet: Air conditioner cooling |
| LCD Display                    |                | SOC/ Voltage/Tem/Time/Fault Code                                   |
| Working Temperature (°C)       |                | Charge:0~55/Discharge :-20-55                                      |
| Status Indicator               |                | Wake Up/Power light                                                |
| Communication Port             |                | CAN/RS485                                                          |
| Humidity                       |                | 5%~85%RH                                                           |
| Altitude                       |                | ≤2000m                                                             |
| IP Rating of Enclosure         |                | IP55                                                               |
| Dimension (W*D*H, mm)          |                | 1150*1350*2420mm                                                   |
| Weight Approximate (kg)        |                | 2400kg                                                             |
| Installation Location          |                | Floor-Mounted                                                      |
| Storage Temperature (°C)       |                | 0~35°C                                                             |
| Recommend Depth of Discharge   |                | 90%                                                                |
| Cycle Life                     |                | 25±2°C, 0.5C/0.5C, DOD80%≥6000                                     |
| Warranty                       |                | 10 years                                                           |
| Certification                  |                | CE/UN38.3/MSDS                                                     |

## System Information

| Model                                   | GCB-E240-80KW                                                                                                                                                                                                                                                                                | GCB-E240-100KW | GCB-E240-125KW |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|
| <b>System Specification</b>             |                                                                                                                                                                                                                                                                                              |                |                |
| Nominal Output Power / UPS Power        | 80kw                                                                                                                                                                                                                                                                                         | 100kw          | 125kw          |
| AC Output Frequency and Voltage         | 50Hz/60Hz; 220V/380V,230V/400V                                                                                                                                                                                                                                                               |                |                |
| Grid Type                               | 3L/N/PE                                                                                                                                                                                                                                                                                      |                |                |
| Number of Parallel ( Off-grid )         | 10                                                                                                                                                                                                                                                                                           |                |                |
| AC Output Rated Current ( A )           | 121.6A/115.5A                                                                                                                                                                                                                                                                                | 152A/114.3A    | 189.9A/180.4A  |
| Battery Operating Voltage ( V )         | 672V~852V                                                                                                                                                                                                                                                                                    |                |                |
| Energy Configuration ( kWh )            | 241.15                                                                                                                                                                                                                                                                                       |                |                |
| System Usable Energy ( kwh )            | 217.03                                                                                                                                                                                                                                                                                       |                |                |
| Battery Chemistry                       | LiFePO4                                                                                                                                                                                                                                                                                      |                |                |
| IP Rating of Enclosure                  | IP55                                                                                                                                                                                                                                                                                         |                |                |
| Installation Method                     | Floor-Mounted                                                                                                                                                                                                                                                                                |                |                |
| Storage Temperature ( °C )              | 0~35°C                                                                                                                                                                                                                                                                                       |                |                |
| Operating Temperature ( °C )            | -20~55°C                                                                                                                                                                                                                                                                                     |                |                |
| Warranty                                | 10 years                                                                                                                                                                                                                                                                                     |                |                |
| Certification                           | CE,UN3536                                                                                                                                                                                                                                                                                    |                |                |
| <b>Inverter Technical Specification</b> |                                                                                                                                                                                                                                                                                              |                |                |
| Max. PV Input Power                     | 160kw                                                                                                                                                                                                                                                                                        | 200kw          | 250kw          |
| Max. PV Input Current ( A )             | 10 X 42A                                                                                                                                                                                                                                                                                     |                |                |
| Rated PV Input Voltage ( Vdc )          | 1000                                                                                                                                                                                                                                                                                         |                |                |
| Start Up DC Voltage ( Vdc )             | 180                                                                                                                                                                                                                                                                                          |                |                |
| MPPT Voltage Range ( Vdc )              | 150-950V                                                                                                                                                                                                                                                                                     |                |                |
| Max. PV Short-circuit Current ( A )     | 10 X 60A                                                                                                                                                                                                                                                                                     |                |                |
| Number of MPPT                          | 10/20                                                                                                                                                                                                                                                                                        |                |                |
| Power Factor                            | >0.99 (0.8 leading - 0.8 lagging)                                                                                                                                                                                                                                                            |                |                |
| THD                                     | <3%                                                                                                                                                                                                                                                                                          |                |                |
| DC Injection current ( mA )             | <0.5% In                                                                                                                                                                                                                                                                                     |                |                |
| Display                                 | 7.0" LCD display & Bluetooth+APP                                                                                                                                                                                                                                                             |                |                |
| Operating Temperature Range ( °C )      | -25~60°C                                                                                                                                                                                                                                                                                     |                |                |
| Relative Humidity                       | 0-100%                                                                                                                                                                                                                                                                                       |                |                |
| Dimension ( W×D×H,mm )                  | 1174×400×814mm                                                                                                                                                                                                                                                                               |                |                |
| Inverter Communication                  | CAN, RS485-115200, Ethernet, Optional: Wi-Fi, Cellular, LAN                                                                                                                                                                                                                                  |                |                |
| Grid Regulation                         | G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1&2/EN 50549-10, VDE 0126/UTE C 15/VFR:2019, NTS 631/RD 1699/RD 244/UNE 206006/UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683,EN 50530, MEA, PEA,PORTARIA N° 140, DE 21 DE MARÇO DE 2022; |                |                |
| Max. Efficiency                         | 97.6%                                                                                                                                                                                                                                                                                        |                |                |
| MPPT Efficiency                         | 97.2%                                                                                                                                                                                                                                                                                        |                |                |

## Product Expansion

80kW/100kW/125KW Inverter selectable



## All-in-one Energy & Device Management Platform

It displays detailed data of the current device, allowing you to view the charging and discharging power and charging and discharging time data of the battery and inverter separately and supports time filtering

