



# BESS Residential Solution



# Top Li-ion Battery manufacturer in China

- More than 200 experienced engineers team
- R&D investment exceeds 6% of sales revenue
- 12GWh annual fully automatic lithium battery production capacity
- The R&D management team has more than 20 years of experience in the clean energy industry







### Safety

LFP(Lithium ion Phosphate) the highest safety



### Up to 8 Series or Parallel

Flexible to increase voltage capacity without any other equipments or settings



### Cycle Life

≥6000 cycles



### WiFi & APP

Integrated WiFi Modem  
OTA online upgrade convenient after-sales service



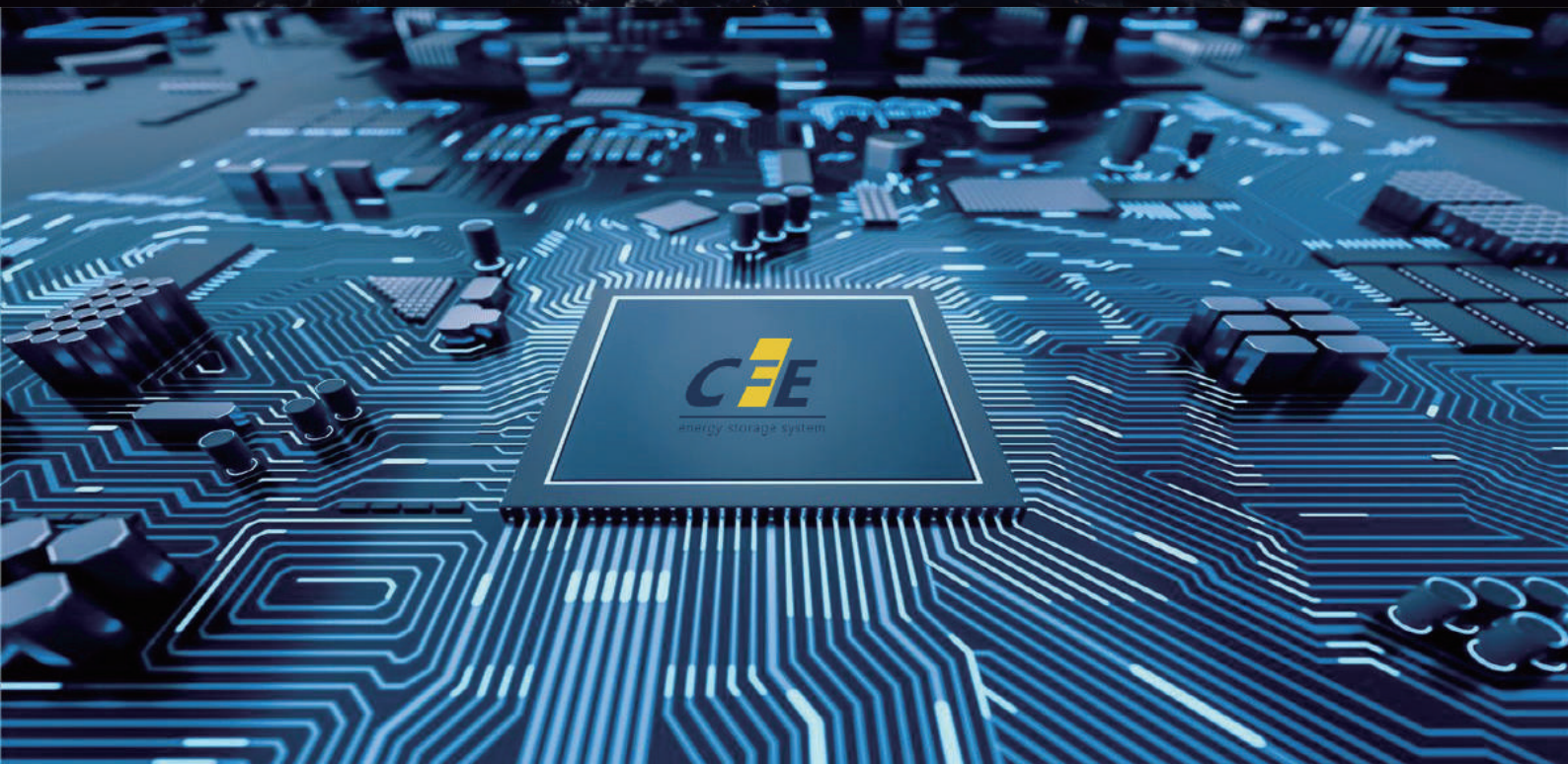
### Installation

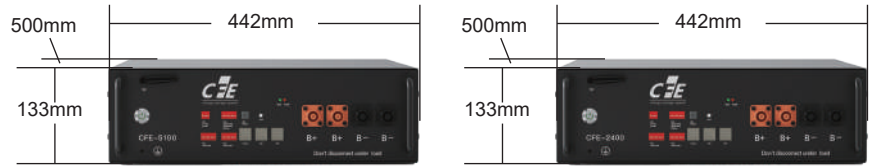
Simple buckle fixing  
minimize the installation time and cost



### High-precision SOC

Accurate sampling of voltage and current SOC mathematic more accurate and never jump





| Basic Parameters            | CFE 5100      | CFE2400       |
|-----------------------------|---------------|---------------|
| Nominal Voltage(V)          | 51.2          | 51.2          |
| Nominal Capacity (Wh)       | 5120          | 2457          |
| Usable Capacity(Wh)         | 4608          | 2211          |
| Dimension(mm)               | 442*500*133   | 442*500*133   |
| Weight(Kg)                  | 42            | 27            |
| Voltage(V)                  | 48 ~ 56       | 48 ~ 56       |
| Charge/Discharge Current(A) | 60(Recommend) | 30(Recommend) |
|                             | 60(Max)       | 48(Max)       |
|                             | 100(Peak@15s) | 60(Peak@15s)  |



|                                    |                                       |
|------------------------------------|---------------------------------------|
| Commucation Port                   | CAN / RS485                           |
| Single string quantity(pcs)        | 8                                     |
| Working Temperature/°C (Charge)    | 0~45                                  |
| Working Temperature/°C (Discharge) | -10~55                                |
| Shelf Temperature/°C               | -20~60                                |
| Humidity                           | 5~85%                                 |
| Altitude(m)                        | <2000                                 |
| IP Rating                          | IP20                                  |
| Warranty                           | 10 years                              |
| Cycle life [1]                     | 6000                                  |
| Authentication Level               | CE & TUV(IEC 62619, IEC 62040) UN38.3 |
| Cooling Type                       | Ambient Cooling                       |
| Installation                       | Cabinet or Wall Mounting              |

[1] Test conditions: 0.2C Charging/Discharging, @25°C, 80% DOD





| Basic Parameters                     | Powercube(Parallel)      |           |           | Powercube(Series) |           |           |
|--------------------------------------|--------------------------|-----------|-----------|-------------------|-----------|-----------|
|                                      | 2 Modules                | 3 Modules | 4 Modules | 2 Modules         | 3 Modules | 4 Modules |
| Battery Module                       | 2 Modules                | 3 Modules | 4 Modules | 2 Modules         | 3 Modules | 4 Modules |
| CFE-2400 Battery Capacity [Ah]       | 96                       | 144       | 192       | 48                | 48        | 48        |
| CFE-5100 Battery Capacity [Ah]       | 200                      | 300       | 400       | 100               | 100       | 100       |
| CFE-2400 Nomial Battery Energy [kWh] | 4.914                    | 7.317     | 9.828     | 4.914             | 7.317     | 9.828     |
| CFE-5100 Nomial Battery Energy [kWh] | 10.24                    | 15.36     | 20.48     | 10.24             | 15.36     | 20.48     |
| Working Voltage [V]                  | 48~56                    | 48~56     | 48~56     | 96~112            | 114~168   | 192~224   |
| Nominal Voltage [V]                  | 51.2                     | 51.2      | 51.2      | 102.4             | 153.6     | 204.8     |
| Operating Temp. Range [°C]           | -20 ~ 50                 |           |           |                   |           |           |
| IP Rating                            | IP55                     |           |           |                   |           |           |
| Color                                | White / Silver           |           |           |                   |           |           |
| Installation                         | Cabinet or Wall Mounting |           |           |                   |           |           |

[1] Test conditions: 0.2C Charging/Discharging, @25°C, 80% Dod

| Battery Specifications            | CREEK2-5-A                   | CREEK2-10-A  | CREEK5-10-A  | CREEK5-15-A  | CREEK5-20-A  |
|-----------------------------------|------------------------------|--------------|--------------|--------------|--------------|
| Capacity [KWh]                    | 4.91                         | 9.83         | 10.24        | 15.36        | 20.48        |
| Battery voltage range [V]         | 48 ~ 56                      | 48 ~ 56      | 48 ~ 56      | 48 ~ 56      | 48 ~ 56      |
| Recommended battery voltage [V]   | 51.2                         | 51.2         | 51.2         | 51.2         | 51.2         |
| Cut Off Voltage [V]               | 48                           | 48           | 48           | 48           | 48           |
| Max. charging Voltage [V]         | 56                           | 56           | 56           | 56           | 56           |
| Max. Protective Voltage [V]       | 58                           | 58           | 58           | 58           | 58           |
| Dimension (W/D/H[mm])             | 580*350*1280                 | 580*350*1800 | 580*350*1280 | 580*350*1800 | 580*350*1800 |
| System Weight[kg]                 | 110                          | 167          | 149          | 197          | 245          |
| Max. charge/discharge current [A] | 60/60                        | 120/120      | 120/120      | 120/120      | 120/120      |
| Peak charge/discharge current [A] | 60/60                        | 120/120      | 120/120      | 120/120      | 120/120      |
| Communication interfaces          | CAN/RS485/WIFI/LAN/DRM       |              |              |              |              |
| Reverse connect protection        | Yes                          | Yes          | Yes          | Yes          | Yes          |
| Warranty                          | 10 Year Performance Warranty |              |              |              |              |



5-20KWh flexible portfolio  
 Fast installation  
 High energy density  
 All in one  
 Scalability  
 WIFI & APP

## Efficiency

MPPT efficiency 99.90%  
 Euro efficiency 97%  
 Max. efficiency 97.60%  
 Max. Battery charge efficiency 95%  
 Max. Battery discharge efficiency 95%

| PCS Specifications                      | CREEK2-5-A                  | CREEK2-10-A | CREEK5-10-A | CREEK5-15-A | CREEK5-20-A |
|---|-----------------------------|-------------|-------------|-------------|-------------|
| <b>DC input</b>                         |                             |             |             |             |             |
| Max. recommended DC power [W]           | 4600                        | 6000        | 6000        | 6000        | 7000        |
| Max. DC voltage[V]                      | 500                         | 500         | 500         | 500         | 500         |
| Norminal DC operating voltage[V]        | 360                         | 360         | 360         | 360         | 360         |
| MPPT voltage range [V]                  | 125 ~ 500                   | 125 ~ 500   | 170 ~ 500   | 170 ~ 500   | 220 ~ 500   |
| MPPT voltage range@full load [V]        | 150 ~ 500                   | 150 ~ 500   | 150 ~ 500   | 150 ~ 500   | 150 ~ 500   |
| Max. input current [A]                  | 14/14                       | 14/14       | 14/14       | 14/14       | 14/14       |
| Max. short circuit current [A]          | 17.5/17.5                   | 17.5/17.5   | 17.5/17.5   | 17.5/17.5   | 17.5/17.5   |
| Start input voltage [V]                 | 125                         | 125         | 125         | 125         | 125         |
| No. of MPP trackers                     | 2                           | 2           | 2           | 2           | 2           |
| Strings per MPP tracker                 | 1                           | 1           | 1           | 1           | 1           |
| Max. inverter backfeed current to array | 0                           | 0           | 0           | 0           | 0           |
| DC disconnection switch                 | /                           | /           | /           | /           | /           |
| <b>AC output</b>                        |                             |             |             |             |             |
| Norminal AC power [VA]                  | 3600                        | 4000        | 4000        | 5000        | 5000        |
| Max. apparent AC power [VA]             | 3600                        | 4000        | 4000        | 5000        | 5000        |
| Rated grid voltage(range) [V]           | 230 (176 to 270)            |             |             |             |             |
| Rated grid frequency [Hz]               | 50/60                       | 50/60       | 50/60       | 50/60       | 50/60       |
| Norminal AC current [A]                 | 16                          | 16          | 16          | 16          | 16          |
| Max.AC current [A]                      | 16                          | 16          | 16          | 16          | 16          |
| Displacement power factor               | 0.99 leading...0.99 lagging |             |             |             |             |
| Total harmonic distortion (THDI)        | < 2%                        | < 2%        | < 2%        | < 2%        | < 2%        |
| Load control                            | optional                    | optional    | optional    | optional    | optional    |
| <b>AC input</b>                         |                             |             |             |             |             |
| Norminal AC power [VA]                  | 3600                        | 4000        | 4000        | 5000        | 5000        |
| Rated grid voltage(range) [V]           | 230 (176 to 270)            |             |             |             |             |
| Rated grid frequency [Hz]               | 50/60                       | 50/60       | 50/60       | 50/60       | 50/60       |
| Norminal AC current [A]                 | 16                          | 17.4        | 17.4        | 21.7        | 21.7        |
| Max.AC current [A]                      | 16                          | 17.4        | 17.4        | 21.7        | 21.7        |
| Displacement power factor               | 0.99 leading...0.99 lagging |             |             |             |             |
| AC inrush current                       | 35                          | 35          | 35          | 35          | 35          |
| <b>EPS output</b>                       |                             |             |             |             |             |
| EPS rated power [VA]                    | 3600                        | 4000        | 4000        | 5000        | 5000        |
| Max. EPS power [VA]                     | 3600                        | 4000        | 4000        | 5000        | 5000        |
| EPS rated voltage, Frequency            | 230VAC, 50/60Hz             |             |             |             |             |
| EPS rated current [A]                   | 16                          | 17.4        | 17.4        | 21.7        | 21.7        |
| Max. EPS current [A]                    | 16                          | 17.4        | 17.4        | 21.7        | 21.7        |
| Switch time [s]                         | <500ms                      | <500ms      | <500ms      | <500ms      | <500ms      |
| Total harmonic distortion (THDv)        | <2%                         | <2%         | <2%         | <2%         | <2%         |
| Parallel operation                      | Yes                         | Yes         | Yes         | Yes         | Yes         |
| Compatible with the generator           | Yes(signal provided only)   |             |             |             |             |