

# ESSC

## Air-cooled ESS container

ESSC series



### KEY STRENGTHS

- Multiple working modes can be flexibly set.
- Supports battery management system and comprehensive thermal management.
- The electrical and battery compartments are separated, effectively preventing thermal runaway propagation.
- Supports real-time online monitoring of system status.
- Supports simultaneous access to load, battery, grid, DG, and PV.
- Integrated design for easy transportation and installation, enabling flexible deployment.

ESSC series



| Model                            | ESSC0500B-1000                                                     |  | ESSC1000B-2000                                 |  |
|----------------------------------|--------------------------------------------------------------------|--|------------------------------------------------|--|
| AC data                          |                                                                    |  |                                                |  |
| Rated power (kW)                 | 500                                                                |  | 1,000                                          |  |
| Rated voltage (V)                |                                                                    |  | 400                                            |  |
| Rated current (A)                | 722                                                                |  | 1,445                                          |  |
| Voltage range (V)                |                                                                    |  | 320-460                                        |  |
| Rated frequency (Hz)             |                                                                    |  | 50 / 60                                        |  |
| Frequency range (Hz)             |                                                                    |  | 45-55 / 55-65                                  |  |
| THDi (on-grid)                   |                                                                    |  | <3%                                            |  |
| THDu (off-grid)                  |                                                                    |  | ≤ 1% linear; ≤ 5% non-linear                   |  |
| Power factor                     |                                                                    |  | 1leading~1lagging(settable)                    |  |
| Overload capacity                |                                                                    |  | 110% long-term                                 |  |
| Grid type                        |                                                                    |  | 3W+N+PE                                        |  |
| Isolation transformer            |                                                                    |  | Yes                                            |  |
| On / off-grid switching          |                                                                    |  | Support                                        |  |
| PV data                          |                                                                    |  |                                                |  |
| Max. PV input voltage (V)        |                                                                    |  | 1,000                                          |  |
| Max. PV power (kW)               | 660 / 742.5 / 825                                                  |  | 1,320 / 1,485 / 1,650                          |  |
| MPPT operating voltage range (V) |                                                                    |  | 250~1,000                                      |  |
| Buck-boost mode                  |                                                                    |  | Self-adaption                                  |  |
| Battery data                     |                                                                    |  |                                                |  |
| Cell type                        |                                                                    |  | 3.2V / 280Ah / LFP                             |  |
| Rated voltage(V)                 |                                                                    |  | 768V / 1P240S                                  |  |
| Rated energy (MWh)               | 1.0752                                                             |  | 2.1504                                         |  |
| Operating voltage range (V)      |                                                                    |  | 672~852V                                       |  |
| Max. charge and discharge rate   |                                                                    |  | 0.5P@25°C                                      |  |
| General data                     |                                                                    |  |                                                |  |
| System specification             | 500kW / 1,075.2kWh (1,000kWh)                                      |  | 1,000kW / 2,150.4kWh (2,000kWh)                |  |
| Dimensions W*D*H (mm)            | 6,058×2,438×2,896                                                  |  | 12,192×2,438×2,896                             |  |
| Weight (kg)                      | 21,000                                                             |  | 38,000                                         |  |
| Operating temperature (°C)       |                                                                    |  | 0 ~ +45                                        |  |
| Relative humidity                |                                                                    |  | 0 ~ 70% (non-condensing)                       |  |
| Ingress protection               |                                                                    |  | IP54                                           |  |
| Noise emission (dB)              |                                                                    |  | <75                                            |  |
| Max. operating altitude (m)      |                                                                    |  | 2,000( > 2,000 power derating)                 |  |
| Cooling                          |                                                                    |  | Temperature-controlled intelligent air cooling |  |
| Fire extinguishing system        |                                                                    |  | FM200 / NOVEC1230(optional)                    |  |
| Display                          | 7" device display +10" EMS display +10" BMS display (configurable) |  |                                                |  |
| EMS communication                |                                                                    |  | RS485, TCP / IP                                |  |

### APPLICATIONS



C&I peak shaving and valley filling



Emergency power supply



Grid side peak regulation and frequency modulation