

F400 C&I Energy Storage System (ESS)



Introduction

F400 C&I ESS product is made by Shanghai Electric for industrial and commercial application scenarios, aiming to provide a solution with high-safety, high-reliability, and easy scalability. The product adopts a highly integrated system design and it can flexibly match various C&I scenarios. The product can help relieve grid pressure through the practice of peak-shaving or energy shifting under different electricity consumption patterns, and it is suitable for applications in micro-grid scenarios. The product is also equipped with Smart OPS which can help achieve real-time monitoring and remote control.

Features



Standardized Design

- Modularized design, easy maintenance
- All-in-one, plug and use
- Compact design, space-saving
- Remote technical support available



Seamless switching & redundant power supply

- Dual auxiliary power supply, more redundancy
- Seamless transition between AC & DC aux-power



Eco-friendly and safe & highly adaptable

- On-grid & off-grid operation with on-grid & offgrid switching functions
- Multi-level fire protection system of high safety, with environmental friendly fire-extinguishing medium



Comprehensive Protection

- Network communication Modbus-TCP protocol
- 3-level BMS for overall protection
- Real-time data collection with high accuracy



Superior Performance & Longevity

- High cell consistency, low internal resistance
- Superior thermal-management design



Intelligent O&M

- Smart OPS clouding-service platform
- Remote problem detecting, failure analysis reports*
- Intelligent statistical analysis, providing key information data report
- Remote O&M and software upgrading* (* if allowed by local law & regulations)

Application Scenarios





















Zero-carbon Solar-storage- CBD of industrial parks charging stations

CBD centers Data centers

5G stations

House-hold

Micro-grid

Mining area

Power backup

City railways

System Parameter

| Model Type | F400 |
|---------------------------|----------------------------|
| Cell Grouping | 1P52S×8 |
| Discharge Rate | 0.5P |
| Recommended PCS Power | 100kW-200kW |
| Rated Energy kWh | 418 |
| Available Energy kWh | 376 |
| DC Voltage Range V | 1164.8-1497.6 |
| Maximum system RTE | 93% |
| Protective Class | IP55 |
| Anti-corrosion Class | C3-M ^① |
| Communication Port | RJ45, Modbus-TCP protocal |
| Working Temperature | -30~50°C ² |
| Cooling Mechanism | Liquid Cooling |
| Fire Extinguishing Medium | Aerosol |
| Humidity Range | 5%~95% |
| Operating Altitude | ≤2000m |
| Cycle Life | ≥8000, 0.5C@25°C 70%EOL |
| Dimension W×D×H | 1400(mm)×1300(mm)×2450(mm) |
| Weight T | 3.7 |
| Certifications | IEC62619、UN38.3、IEC61000 |

Note: The product picture is for reference ONLY.

Note ①: The standard anti-corrosion class is C3-M, while a higher class can be customizable.

Note ②: Usage over 45°C working temperature will be derating.

