# ESS Solution

SE-F12 & SE-F16

- SE-F12-C
- SE-F16-C

## SE-F12 & SE-F16

### Comprehensive Protection
Advanced BMS with active fuse

### Superior Performance
Support Max. 1C charge & 1C discharge （SE-F12）, GaN MOSFETs: 50% loss reduction, high-temp resistance

### Optimized Energy Density
Integrated PACK: reduced line loss, enhanced energy density

### Flexible Expansion
Max. 32 units in parallel

### Easy Maintenance
Auto-networking, Local monitoring mode for battery, remote monitoring mode for ESS

### Reliable Durability
Operates reliably in -20℃ to 55℃, natural cooling

# ESS Solution

## Model

| Main Parameters | | SE-F12 | SE-F16 |
|---|---|---|---|
| Battery Chemistry | | $LiFePO_4$ | |
| Capacity | | 230 Ah | 314 Ah |
| Scalability [1] | | Max. 32 pcs in parallel | |
| Nominal Voltage | | 51.2 V | |
| Operating Voltage | | 44.8 V ~ 57.6 V | |
| Nominal Energy | | 11.8 kWh | 16 kWh |
| Charge Current [2] | Max. Continuous | 230 A | 160 A |
| | Peak | 280 A ( 10 sec ) | |
| Discharge Current [2] | Max. Continuous | 230 A | |
| | Peak | 280 A ( 10 sec ) | |
| **Other Parameter** | | | |
| Recommend Depth of Discharge | | 90% DoD | |
| Dimension ( W × H × D ) (Without hanging board)mm | | 400 × 559 × 233 | 400 × 708 × 233 |
| Weight Approximate | | 84 kg | 109 kg |
| LED Indicator | | LED ( SOC, working, protecting ) & Buzzer | |
| IP Rating of Enclosure | | IP21 | |
| Operating Temperature | | Charge: 0～55°C / Discharge: -20～55°C | |
| Storage Temperature | | 0°C~35°C | |
| Relative Humidity | | 95% (non-condensing) | |
| Altitude | | ≤3000m | |
| Cycle Life | | ≥6000(25°C±2°C ,70%EOL) | |
| Installation | | Wall-Mounted, Floor-Mounted, Stack-Mounted | |
| Communication | | CAN2.0, RS485, Bluetooth+APP | |
| Warranty Period [3] | | 5 years / 10 years (extended warranty) | |
| Energy Throughput [3] | | 18 MWh | 25 MWh |
| Certification | | UN38.3, MSDS, CE, CB | |

[1] Max. 64 pcs can parallel with CAN-Box.

[2] Operating current is affected by temperature and SOC. This max. continuous current is only supported in lithium battery mode; for lead-acid mode, please refer to the manual for the max. continuous current.

[3] Conditions apply, refer to Deye Warranty Letter.

# Mounting example

## Stacked

Supports 6 layers in series ( 4 layers for SE-F16 ), allows multiple clusters in parallel

SE-F12-C

SE-F16-C

## Wall mounted

All support wall mounted installation, and support for multiple packs in parallel

SE-F12-C

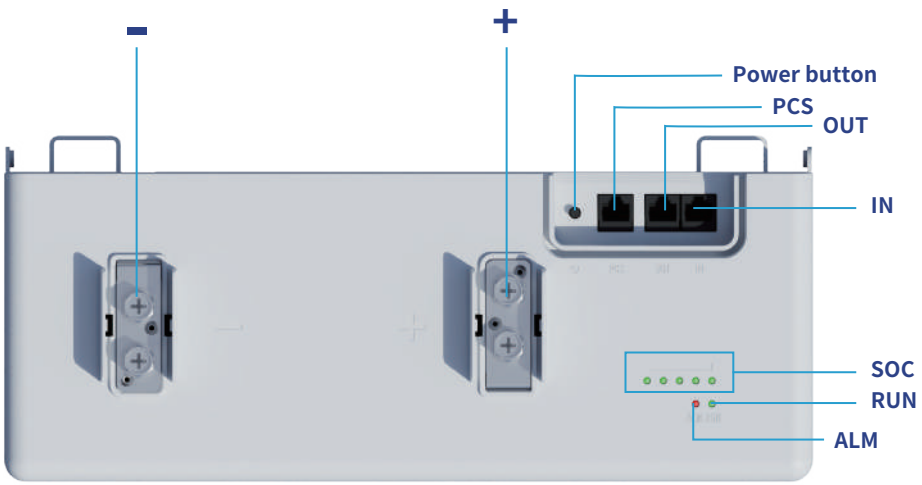
SE-F16-C

## Optional wheels available for SE-F12 & SE-F16

SE-F12-C

SE-F16-C

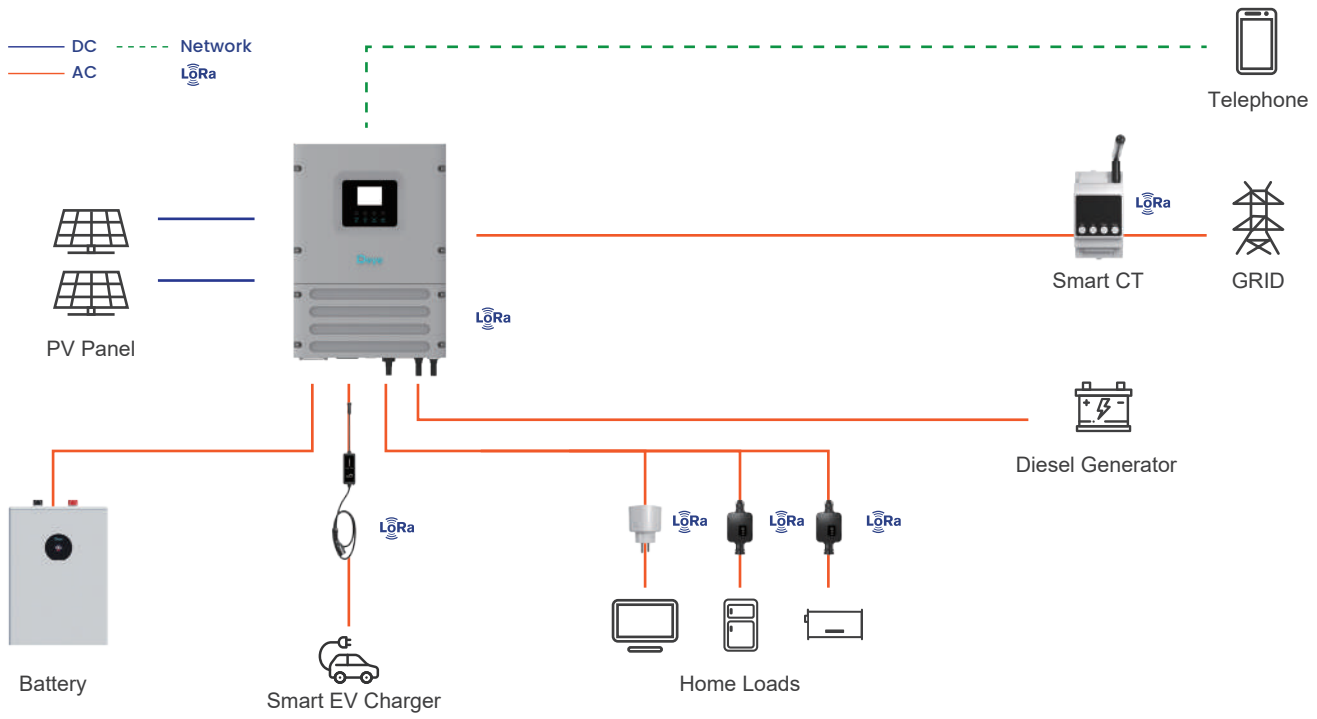
## Model




◎ -: Battery negative terminal connection position.
◎ +: Battery positive terminal connection position.
◎ SOC: These 5 LEDs are used to display the pack SOC and charge or discharge state.
◎ RUN light: green LED lighting to show the battery running status.
◎ ALM light: red LED lighting to show the battery has been alarmed .
◎ Power button: Power on or off the control battery.
◎ PCS: Inverter communication terminal:(RJ45port) follow the CAN protocol (baud rate:500kbps),and RS485(baud rate:9600bps),used to output battery information to the inverter.
◎ OUT: parallel Communication Terminal:(RJ45port) Connect "IN"Terminal of Next battery,for Communication between multiple parallel batteries.
◎ IN: parallel Communication Terminal: (RJ45 port) Connect "OUT" Terminal of Previous battery,for Communication between multiple parallel batteries.

# Deye Smart Energy Management System(Optional)

The Deye Smart Energy Management System enables seamless control with smart CT, smart plug, smart switch and solar EV charging, ensuring efficiency and full compatibility with Deye inverters.



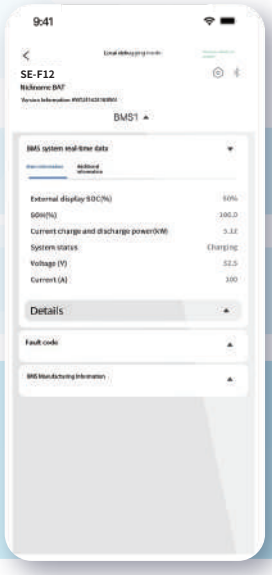

## Key Features

- **Wireless Zero Export Control**
  Enables seamless zero export without the need for complex wiring, simplifying installation.
- **Intelligent Load Control**
  Automatically manages loads based on time schedules and battery SOC, optimizing energy distribution.
- **Solar-Powered EV Charging**
  Supports 100% solar charging with dynamic power adjustment for enhanced efficiency and sustainability.
- **Full Compatibility**
  All Deye hybrid inverters can be upgraded to support this system, ensuring seamless integration with existing setups.
- **Precise Off-Grid Load Management**
  Ensures that only non-essential loads are disconnected during off-grid operation, maintaining power supply for critical applications.

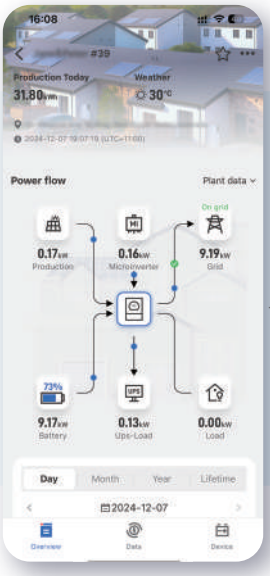
# Deye APP

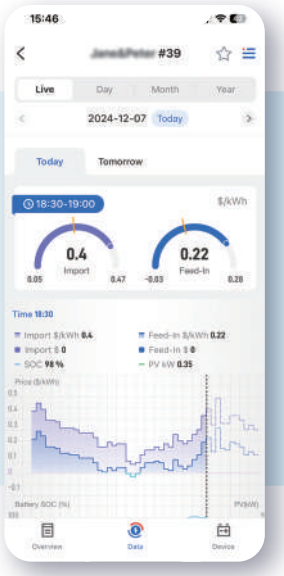
## Local monitoring mode for battery

- Bluetooth APP Monitoring
- Low Power (Bluetooth LE)
- Automated upgrade
- Quick Pairing
- No Internet Needed
- Portable Control


## Remote monitoring mode for ESS(Inverter&Battery)




- Real-time Equipment Monitoring
- Intelligent Charging/Discharging Strategies
- AI Data Analytics
- Customized Maintenance

## Smarten Up Your Home Energy

Download Deye APP to join us!

Embrace a seamless, effortless energy experience that's both ecofriendly and budget-friendly with our intelligent assistant

Deye

POWERING YOUR LIFE

www.deyeess.com / www.deyeinverter.com

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