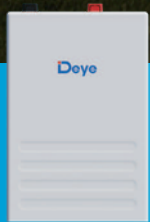
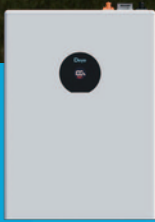


# ESS Solution

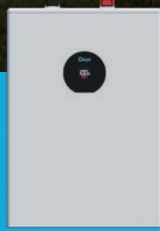
SE-F5 & SE-F5 Plus & SE-F5 Pro & SE-F12 & SE-F12 Max & SE-F16 & SE-F16 Max



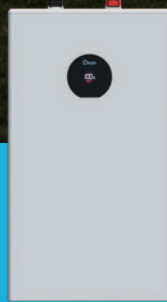
• SE-F5 & F5 Plus



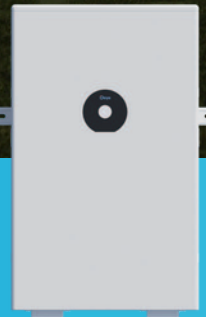
• SE-F5 Pro



• SE-F12



• SE-F16



• SE-F12 Max

💧 IP65





• SE-F16 Max

💧 IP65


SE-F5 & SE-F5 Plus & SE-F5 Pro & SE-F12 & SE-F12 Max & SE-F16 & SE-F16 Max


 **Comprehensive Protection**  
Advanced BMS with active fuse

 **Superior Performance**  
Support Max. 1Ccharge & 1.2C discharge (SE-F5 & F5 Plus), GaN MOSFETs: 50% loss reduction, high-temp resistance

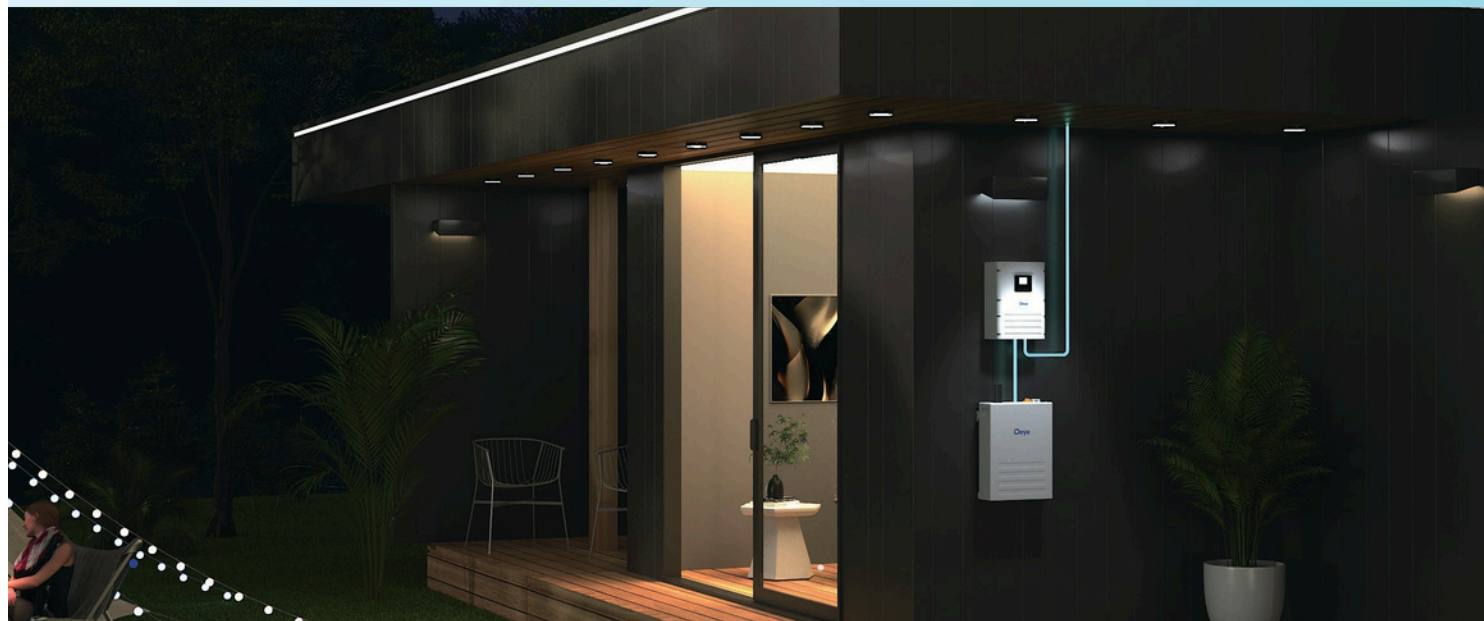
 **Optimized Energy Density**  
Integrated PACK: reduced line loss, enhanced energy density

 **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  $-20^{\circ}\text{C}$  to  $55^{\circ}\text{C}$ , natural cooling

# ESS Solution



## Model

Main Parameters	SE-F5	SE-F5 Plus	SE-F5 Pro
Battery Chemistry	LiFePO <sub>4</sub>		
Capacity	100 Ah		
Scalability [1]	Max. 32 pcs in parallel		
Nominal Voltage	51.2 V		
Operating Voltage	44.8 V ~ 57.6 V		
Nominal Energy	5.12 kWh		
Charge Current [2]	Recommend	50 A	
	Max. Continuous	100 A	
	Peak	120 A (10 sec)	150 A (120 sec)
Discharge Current [2]	Recommend	50 A	
	Max. Continuous	120 A	100 A
	Peak	150 A (10 sec)	150 A (120 sec)
Other Parameter			
Recommend Depth of Discharge	80% DoD	90% DoD	90% DoD
Dimension (W × H × D) (Without hanging board)mm	370 × 548 × 140 mm		404 × 547 × 141 mm
Weight Approximate	41 kg		44 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	Charge: 0~55°C / Discharge: -20~55°C	Charge: -10~55°C / Discharge: -20~55°C	Charge: 0~55°C / Discharge: -20~55°C
Relative Humidity	0°C~35°C		
Altitude	95% (non-condensing)		
Cycle Life	≤3000m		
Installation	≥6000(25°C±2°C, 70%EOL)		
Communication	Wall-Mounted, Floor-Mounted, Stack-Mounted		
Warranty Period [3]	CAN2.0, RS485, Bluetooth+APP		CAN2.0, RS485, Optional module, (WiFi+Bluetooth+APP)
Energy Throughput [3]	5 years	10 years	
Certification	8 MWh	16 MWh	
	UN38.3, MSDS, CE, CB		UN38.3, MSDS, CE, CB, VDE2510-50, CEC

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

[2] Operating current is affected by temperature and SOC.

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

# ESS Solution



## Model

Main Parameters		SE-F12	SE-F12 Max	SE-F16	SE-F16 Max
Battery Chemistry		LiFePO <sub>4</sub>			
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]	Recommend	115 A		157 A	
	Max. Continuous	230 A		160 A	
	Peak	280 A ( 10 sec )			
Discharge Current [2]	Recommend	115 A		157 A	
	Max. Continuous	230 A			
	Peak	280 A ( 10 sec )			
Other Parameter		90% DoD			
Recommend Depth of Discharge		90% DoD			
Dimension ( W × H × D ) (Without hanging board)mm		400 × 559 × 233	464 × 767 × 244.5	400 × 708 × 233	464 × 914 × 244.5
Weight Approximate		84 kg	93 kg	109 kg	118 kg
LED Indicator		LED (SOC, working, protecting) & Buzzer	LCD(SOC, Alarm)	LED ( SOC, working, protecting ) & Buzzer	LCD(SOC, Alarm), LED (Working)
IP Rating of Enclosure		IP21	IP65	IP21	IP65
Operating Temperature		Charge: 0~55°C (-20~55°C, 12 Max/16 Max with Optional heating) 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]		CAN2.0, RS485, Bluetooth+APP	CAN2.0, RS485, Bluetooth+APP	CAN2.0, RS485, Bluetooth+APP	CAN2.0, RS485, Bluetooth+APP
Energy Throughput [3]		10 years	10 years	10 years	10 years
Certification		37 MWh	37 MWh	50 MWh	50 MWh
		UN38.3, CE, CB	UN38.3, CE, CB	UN38.3, CE, CB	UN38.3, CE, CB, UL1973, UL9540A, UL9540-DC, FCC

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

[2] Operating current is affected by temperature and SOC.

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

## Product comparison

Model	Nominal Energy		Charge / Discharge Rate	Do D	Warranty	Size
SE-F5	5.12kWh, 51.2V,		1C/1.2C 1C/1.2C 1C/1C	80%	5years	370 x 548 x 140 mm
SE-F5 Plus	100Ah 5.12kWh,		1C/1C 1C/1C 0.5C/0.7C	90%	10years	370 x 548 x 140 mm
SE-F5 Pro	51.2V, 100Ah		0.5C/0.7C	90%	10years	404 x 547 x 141 mm
SE-F12	5.12kWh, 51.2V,			90%	10years	400 x 583 x 233 mm
SE-F12 Max	100Ah 11.8kWh,			90%	10years	464 x 767 x 244.5 mm
SE-F16	51.2V, 230Ah			90%	10years	400 x 708 x 233 mm
SE-F16 Max	11.8kWh, 51.2V,			90%	10years	464 x 914 x 244.5 mm
	230Ah 16kWh, 51.2V,					
	314Ah 16kWh, 51.2V,					

## Mounting example

### Stacked

Supports 6 layers in parallel ( 4 layers for SE-F16/F12 Max/F16 Max ), allows multiple clusters in parallel



SE-F5 & SE-F5 Plus



SE-F5 Pro



SE-F12



SE-F16

### Wall mounted

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



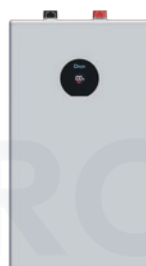
SE-F5 & SE-F5 Plus



SE-F5 Pro



SE-F12



SE-F16



SE-F12 Max



SE-F16 Max

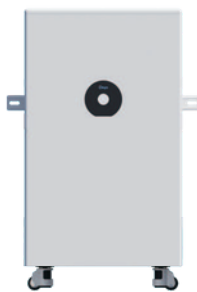
Optional wheels available for SE-F12 & SE-F12 Max & SE-F16 & SE-F16 Max



SE-F12



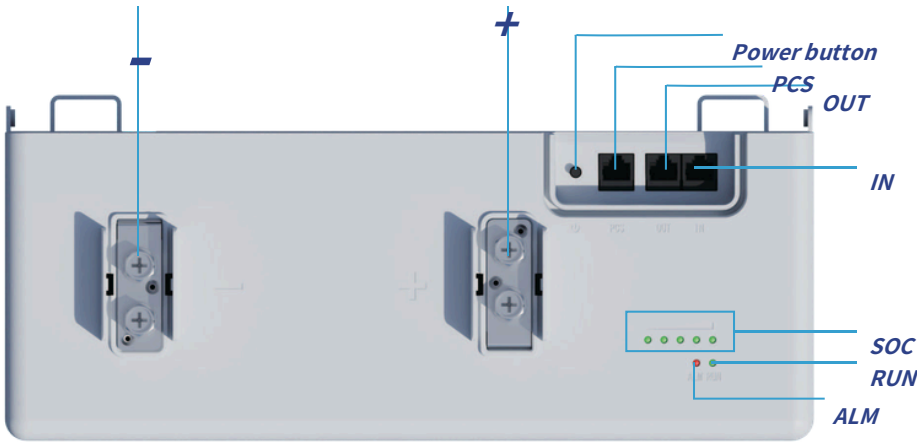
SE-F16



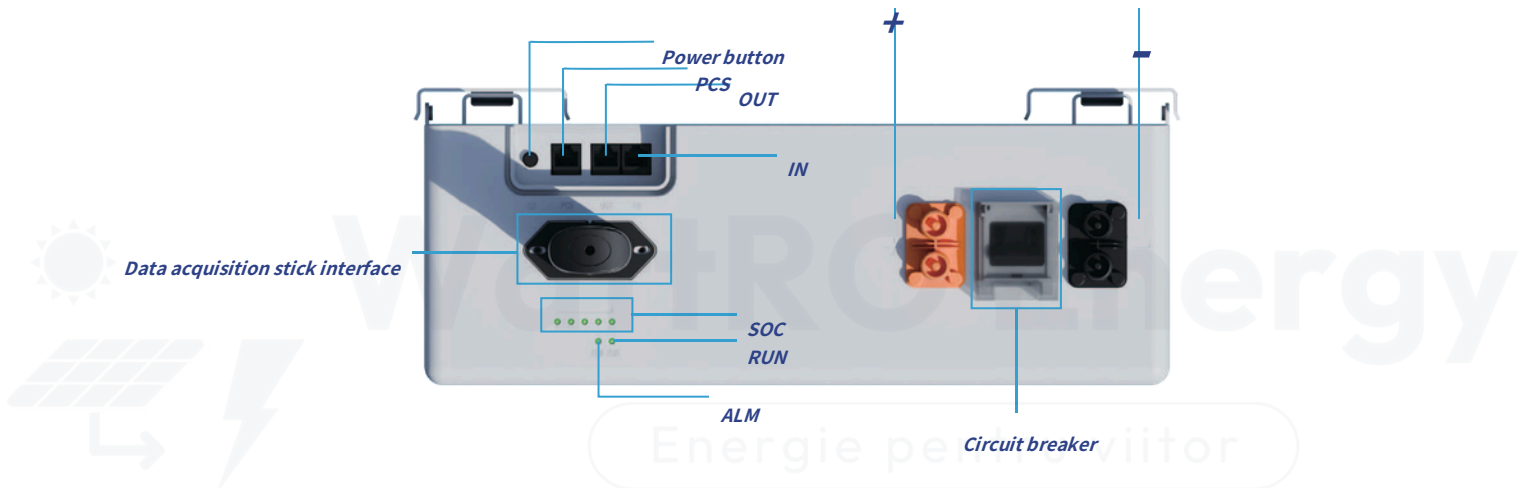
SE-F12 Max



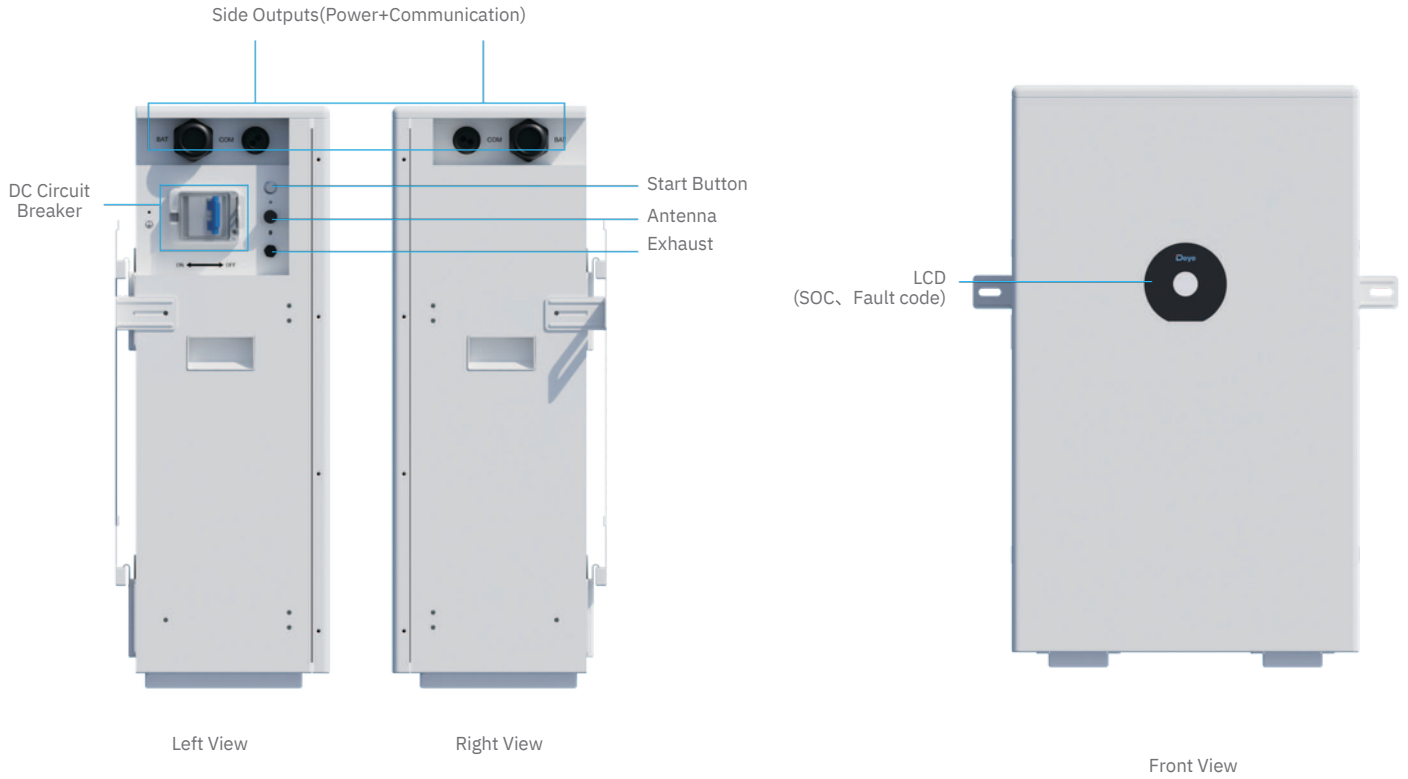
SE-F16 Max



- ⊙ -: 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:500kpbs),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.



- ⊙ -: Battery negative terminal connection position(Quickly plug and unplug).
- ⊙ +: Battery positive terminal connection position(Quickly plug and unplug).
- ⊙ 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:500kpbs),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.
- ⊙ Circuit breaker: Used to manually control the connection between the battery rack and external devices.
- ⊙ Data acquisition stick interface: The location to connect with your Data Logger that is used for data acquisition via WIFI or Bluetooth.



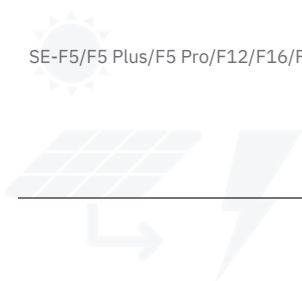
# WattRO Energy

Energie pentru viitor

# SE-F Series Model Selection and Appearance Reference



Model	Config Version	Reference
SE-F5/F5 Plus/F5 Pro/F12/F16	L	
SE-F5/F5 Plus/F5 Pro/F12/F16	E	
SE-F5/F5 Plus/F5 Pro/F12/F16/F12 Max/F16 Max	C	

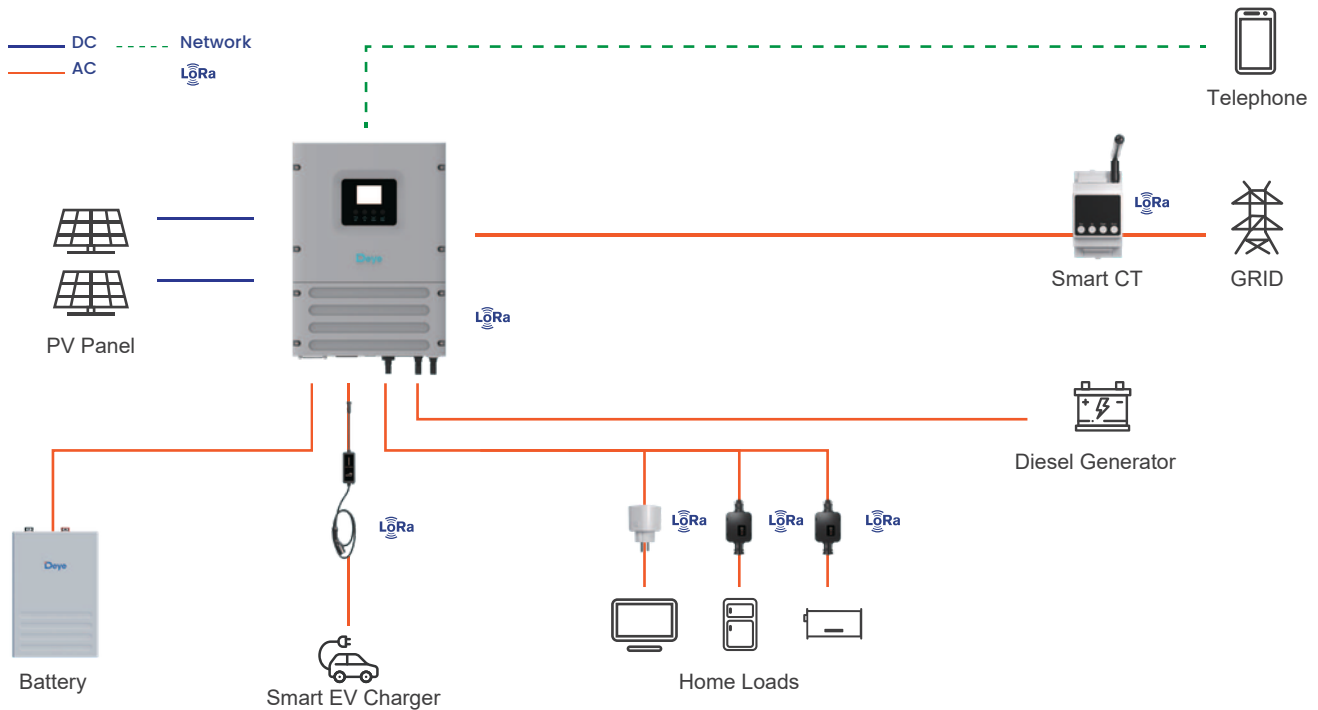


WattRO Energy

Energie pentru viitor

# 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.
- Solar-Powered EV Charging**  
 Supports 100% solar charging with dynamic power adjustment for enhanced efficiency and sustainability.
- Intelligent Load Control**  
 Automatically manages loads based on time schedules and battery SOC, optimizing energy distribution.
- 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.



**Smart EV Charger**

LoRa control, flexible charging

**Smart Switch**

Outdoor, supports single/three-phase loads

**Wireless CT**

Power monitoring, dual communication

**Smart Plug**

Plug-and-play, smart upgrade

**Smart Transmitter (TX)**

IoT hub, LoRa pairing

# Deye APP

Bluetooth APP Monitoring

Low Power (Bluetooth LE)

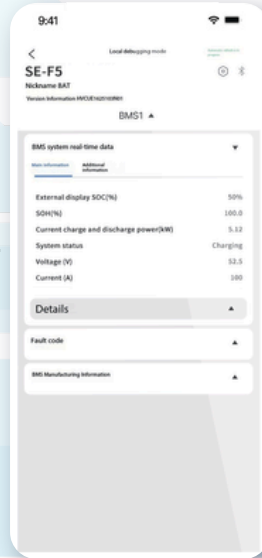
Automated upgrade

Local monitoring mode for battery

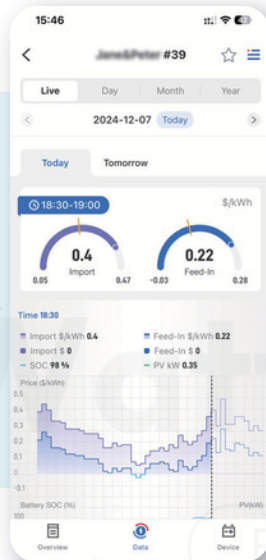
Quick Pairing

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



# BENEFICII DEDICATE INSTALATORI & REVÂNZĂTORI B2B

**Prețuri preferențiale pentru parteneri B2B**



**Stoc disponibil în România**



**Termene de plată flexibile**



**Livrare rapidă, oriunde în țară**



**Parteneri  
B2B**



**WattRO Energy**

Energie pentru viitor

**FII PARTE DIN REȚEAUA WATTRO ENERGY**

# BENEFICII DEDICATE INSTALATORI & REVÂNZĂTORI B2B



## Prețuri preferențiale pentru parteneri B2B

Parteneriatele de succes se construiesc pe termen lung.

De aceea, oferim prețuri dedicate și competitive pentru instalatori și revânzători.

Asta înseamnă mai multă marjă pentru tine și  
posibilitatea de a rămâne competitiv pe piață.

Noi nu vindem doar echipamente, ci sprijinim direct  
creșterea afacerii tale.

Parteneri  
**B2B**

**Noi nu vindem doar  
echipamente, ci sprijinim direct  
creșterea afacerii tale.**

# BENEFICII DEDICATE INSTALATORI & REVÂNZĂTORI B2B



**Stoc disponibil în România**

Timpul tău este prețios.

De aceea, avem stoc permanent în depozitul nostru din București, astfel încât să livrăm imediat.

Fără grija lipsei de produse, fără întârzieri inutile.

Parteneri  
**B2B**

**Fără grija lipsei de produse,  
fără întârzieri inutile.**

# BENEFICII DEDICATE INSTALATORI & REVÂNZĂTORI B2B



## Termene de plată flexibile

Știm cât de important este fluxul de numerar pentru afacerea ta.

Cu WattRo Energy beneficiazi de termene de plată extinse, de până la 90 de zile.

Parteneri  
**B2B**

**Îți oferim libertatea financiară să  
te concentrezi pe dezvoltare, nu  
pe blocaje de cash-flow.**

# BENEFICII DEDICATE INSTALATORI & REVÂNZĂTORI B2B



## Livrare rapidă, oriunde în țară

Într-o piață în care fiecare zi contează, livrăm comenzile tale în 24 – 48 de ore, oriunde în România.

Ne asigurăm că echipamentele ajung la timp, astfel încât proiectele tale să nu întârzie nici măcar o zi.

Parteneri  
**B2B**

**Rapid, sigur și de încredere –  
exact așa cum ar trebui să fie un  
parteneriat.**