

YOUR GREEN ENERGY MANUFACTURER



# Residential Series (for US)

Energy Storage Solution



# KOWINT ENERGY

Kowint Energy (Shenzhen) Co., Ltd.

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# KOWINT

## YOUR GREEN ENERGY MANUFACTURER

Established in 2014, KOWINT ENERGY is a high-tech enterprise focusing on the R&D, design, production, and sales of lithium battery energy storage systems, BMS, EMS, and lithium battery modules.

We have continuous independent innovation capabilities, excellent lithium battery module development & design abilities, and advanced manufacturing technology. Our products have passed UL, CE, ROHS, TUV, PSE, and other related certifications. Our factory has passed ISO9001 and ISO14000 system certifications.

Our products are designed to meet the needs of a wide range of applications, from residential and commercial buildings to industrial facilities and utility-scale projects. Whether you're looking to reduce your energy bills, increase your energy independence, or support your sustainability goals, KOWINT has the right solution for you.

**10<sup>+</sup>**

Years Experience  
in the energy storage

**4**

Countries with  
warehouse deployment

**3GWh/year**

Global  
Production Capacity

## MAIN BUSINESS



Residential Solution



C&I Solution



UPS Solution



# CONTENTS

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To produce world-class energy storage products.  
To serve the consumers in the global market.



## 01 LV Battery Storage System

R5000	_____	01
R5000i	_____	03
R5000o	_____	05
W16K	_____	07
S40K	_____	09

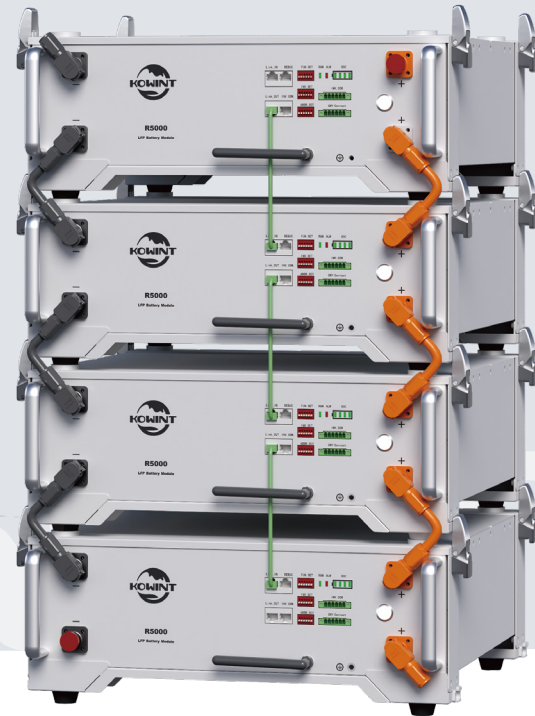
## 02 Kowint Cloud

Kowint Cloud	_____	11
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# Rack-Mount ESS R5000

5.12 — 158.72kWh



## HIGH PERFORMANCE

- >6000 Life Cycles.
- Max. 31 units in parallel.



## USER FRIENDLY SETUP

- RS485 and CAN compatible.
- Cloud platform / APP remote monitor.



## SAFE AND RELIABLE

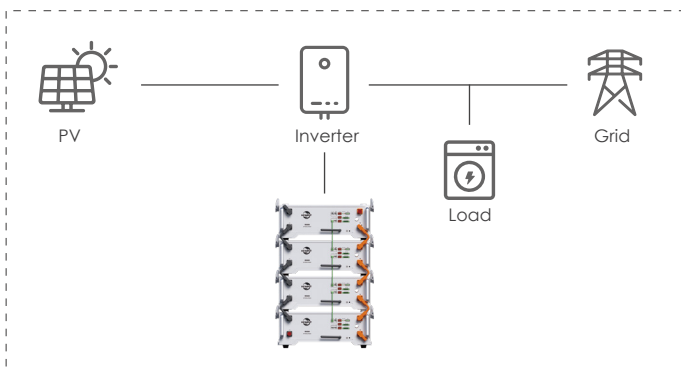
- Intelligent BMS protecting battery cells.
- Advanced safety mechanisms ensure reliable operation.



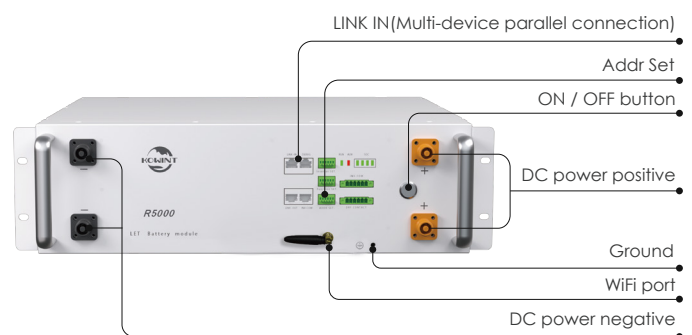
## EASY INSTALLATION

- Rack mount design.
- Lightweight and convenient , single person installation.

## System Layout



## System Demonstration



## ● Product Specifications

### Battery Parameters

Nominal Energy(kWh)	5.12
Max. Continuous Charging / Discharging(A)	95
Nominal Capacity(Ah)	100
Nominal Voltage(V)	51.2
Recommend Charging Voltage(V)	56.8
Max. Charging Voltage(V)	58.4
Discharge Cut-off Voltage(V)	43.2
Cell Model	3.2V 100Ah
Combination Mode	1P16S
Initial Internal Resistanc (mΩ)	<50
Standard Charging Current(A)	50
Standard Discharging Current(A)	50

### System Characteristics

BESS Certifications	UKCA, UL1973, CE, UN 38.3, IEC62619
Emission	FCC Part 15 Class B
Surge Protection	DC Type II
Warranty	10 Years

### General Parameters

Dimensio - W*D*H(mm/in)	440*420*132/17.3*16.5*5.2
Net Weight (kg/lb)	~45/~99.2
Enclosure	IP20
Operating Temperature(°C)	Discharging -20 ~ 50, Charging 0 ~ 50
Relative Humidity Range(RH)	Up to 95 %, non-condensing
Cooling	Natural Cooling
Communication	CAN, RS485, WiFi

## Cabinet ESS

# R5000i

15.36 — 61.44kWh



### HIGH PERFORMANCE

- Capacity options from 15.36kWh to 61.44kWh for diverse indoor applications



### SAFE AND RELIABLE

- IP20 design, available for indoor.



### SMART MANAGEMENT

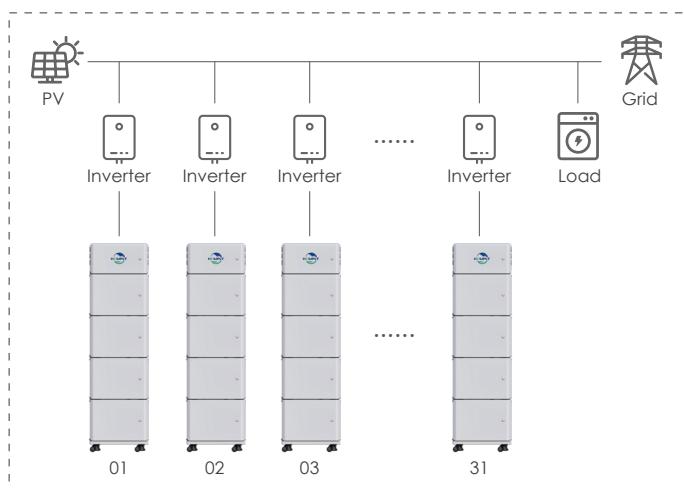
- Intelligent BMS protecting battery cells.
- Cloud platform / APP remote monitor.



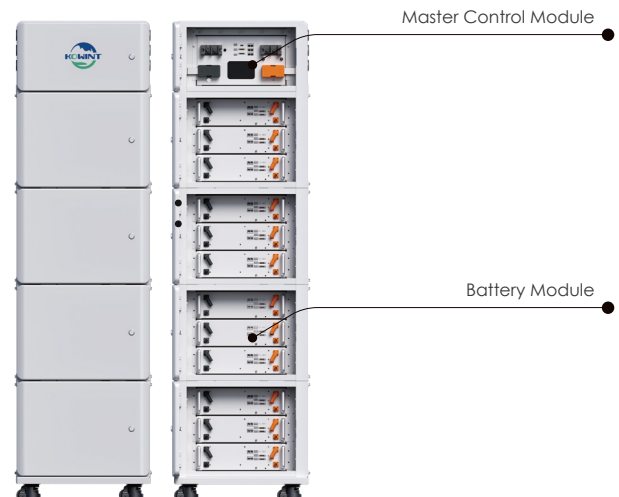
### FLEXIBLE APPLICATION

- Compact indoor cabinet design with modular battery configuration.

## System Layout



## System Demonstration



## ● Product Specifications

Battery Energy Storage	R5000i-15	R5000i-30	R5000i-45	R5000i-60
Module Number	1	2	3	4
Battery Module Numbe	3	6	9	12
Nominal Energy (kWh)	15.36	30.72	46.08	61.44
Max. Charging/Discharging (A)	300	300	300	300
Nominal Capacity (Ah)	300	300	400	500
Peak for 10s (A)	330	330	350	350
Recommend Charging Voltage (V)	56.8			
Max. Charging Voltage (V)	58.4			
Discharge Cut-off (V)	43.2(Cells)			
Nominal Voltage (V)	51.2(Cells)			
Output Power voltage (V)	54(Steady Voltage)			
General Parameters				
Weight (kg/lb)	~165/363.76	~300/661.39	~435/958	~570/1,256.63
Dimensions - W*D(mm/in)	663*635/26.1*25.0	663*635*1436	663*635*1917	663*635*2398
Dimensions - H(mm/in)	955/37.6	1436/56.53	1917/75.51	2398/94.41
IP Rating	IP20			
Cycle Life	8000 times @25°C, 0.5C, 80%DOD, 80%EOL			
Designed Calendar Life	10 years			
Safety Function	Over-charge, Over-discharge, Over-current, Low/High-temperature, Low-voltage, Short-circuit Protections			
Operation Temperature	Discharge -20°C~50°C, Charge 0°C~50°C			
Parallel Capacity	Max. 8			
Communication	RS485, Wi-Fi, CAN			



## All-IN-ONE Cabinet ESS

# R5000o

30.72 / 61.44kWh



### HIGH PERFORMANCE

- Single unit delivers 30.72kWh / 61.44kWh, expandable up to 491.52kWh with 8 units in parallel



### SAFE AND RELIABLE

- IP54 design, available for outdoor.



### SMART MANAGEMENT

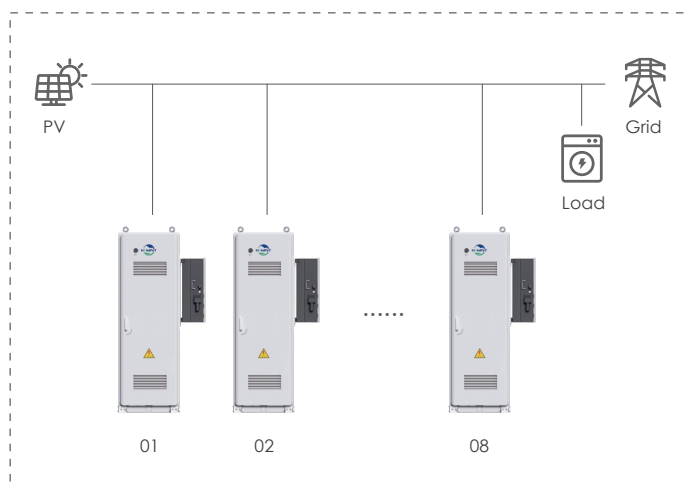
- Intelligent BMS protecting battery cells.
- Cloud platform / APP remote monitor.



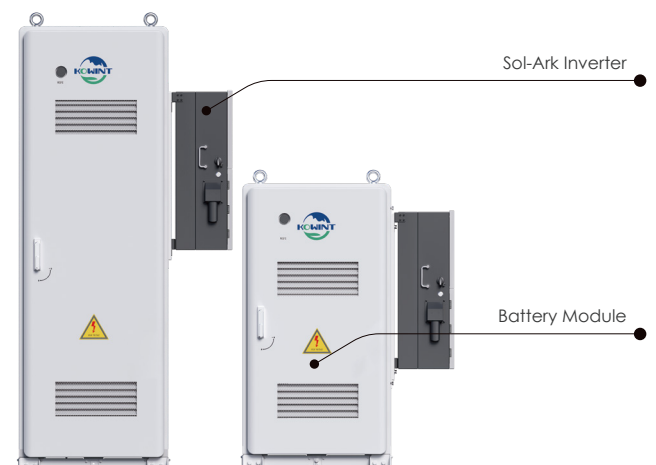
### FLEXIBLE APPLICATION

- All-in-one inverter & battery design for diverse outdoor applications.

### ● System Layout



### ● System Demonstration





## ● Product Specifications

Battery Energy Storage	R5000o-30	R5000o-60
Product Module QTY	6	12
Nominal Energy (kWh)	30.72	61.44
Max. Charging/Discharging (A)	300	300
Nominal Capacity (Ah)	300	500
Peak for 10s (A)	330	350
Recommend Charging Voltage (V)	56.8	
Max. Charging Voltage (V)	58.4	
Discharge Cut-off (V)	43.2(Cells)	
Nominal Voltage (V)	51.2(Cells)	
Output Power voltage (V)	54(Steady Voltage)	
General Parameters		
Weight (kg/lb)	400/881.85	700/1543.23
Dimensions - W*D*H (mm/in)	760*832*1466/29.9*32.8*57.7	760*832*2266/29.9*32.8*89.2
IP Rating	IP54	
Cycle Life	8000 times @25°C, 0.5C, 80%DOD, 80%EOL	
Designed Calendar Life	10 years	
Safety Function	Over-charge, Over-discharge, Over-current Low/High-temperature, Low-voltage, Short-circuit Protections	
Operation Temperature	Discharge -20°C~50°C, Charge 0°C~50°C	
Parallel Capacity	Max. 8	
Communication	RS485, Wi-Fi, CAN	

## Wall-Mount ESS

# W16K

16kWh



### HIGH PERFORMANCE

- >8000 Life Cycles.
- 314Ah Cell Capacity.



### SAFE AND RELIABLE

- IP65 protection degree.



### USER FRIENDLY SETUP

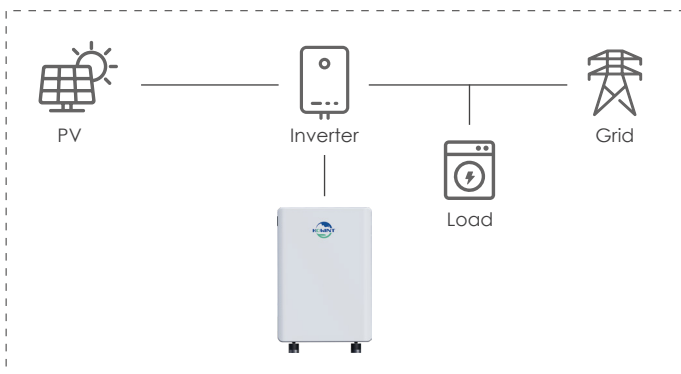
- Display Screen allows for real-time monitoring.
- Could platform / APP remote monitor.



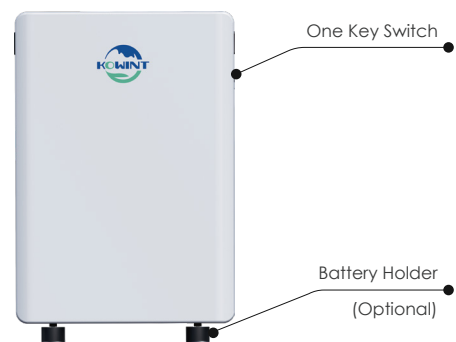
### EASY INSTALLATION

- Wall-mount design saves installation space.
- Lightweight and convenient ,Easy to install.

## System Layout



## System Demonstration



## ● Product Specifications

### System Characteristics

Battery Type	LiFePO4
Rated Energy(kWh)	16
Cell Capacity(Ah)	314
Rated Voltage(V)	51.2
Cell Model	3.2V 314Ah
Combination Mode	16S1P
Discharge Cut-off Voltage(V)	43.2
Recommend Charding(V)	56.8
Max. Charging / Discharging Curent(A)	200
Primary Overcurrent Protection(A)	210A@10S
Secondary Overcurrent Protection(A)	250A@500mS
Communication	RS485 / CAN / RS232
Compatible Inverter Brand	SMA, Growatt, Solax, Solis, DEYE, Sofar, Voltronic, Studer, etc
Cycle life	≥8000 times @ 25°C
Dimension - W*D*H(mm/in)	560*200*800/22.05*7.87*31.50
Net Weight (kg/lb)	~133/~293
Protection Degree	IP65
Cooling	Natural Cooling
Installation	Wall-Mount In
Discharge Temperature(°C)	- 20 ~ 50
Charge Temperature(°C)	0 ~ 50
Storage Conditions	-20 ~ 55°C(0 ~ 35°C Recommended)Up to 95 % RH, non-condensing, Initial So : 50 %
Battery Compliances	IEC 62619, UN 38.3, CEI 0-21, EN-61000

## Modular LV ESS

# S40K

10.24 — 40.96kWh



### HIGH PERFORMANCE

- >6000 Life Cycles.
- Each cluster is up to 40.96 kwh(8 battery modules), maximum 15 clusters in parallel to get 614.4 kWh.



### SMART MANAGEMENT

- Display Screen allows for real-time monitoring.
- Cloud platform / APP remote monitor.



### SAFE AND RELIABLE

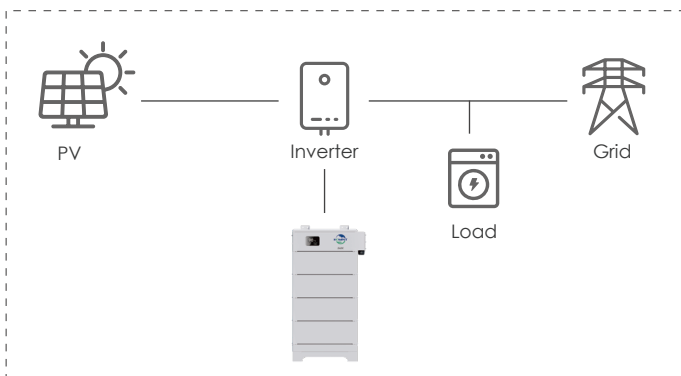
- IP65 design, available for indoor / outdoor.



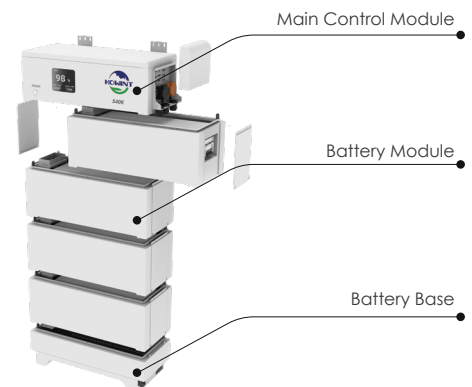
### EASY INSTALLATION

- Modular design for ease of expansion.

## System Layout



## System Demonstration



● Product Specifications

Battery Energy Storage

Product Module QTY	2	3	4	5	6	7	8
Nominal Energy (kWh)	10.24	15.36	20.48	25.6	30.72	35.84	40.96
Output Power (kW)	9.7	14.6	15.4	15.4	15.4	15.4	15.4
Max. Operation Current (A)	190	285	300	300	300	300	300
Peak for 10s (A)	196	297	392	490	500	500	500
Peak for 2s (A)	240	360	480	500	500	500	500
Max. Charging Voltage (Vdc)	58.4						
Discharge Cut-off (Vdc)	43.2						
Nominal Voltage (Vdc)	51.2						
Recommend Charging Voltage (Vdc)	56.8						
Battery Chemistry	LiFePO4						
Dimension - W*D (mm/in)	635*268/25*10.6						
Dimension - H (mm/in)	795/31.3	1023/40.3	1250/49.2	1478/58.2	1706/67.1	1934/76	2162/85
Net Weight (kg/lb)	~141/~311	~194/~428	~247/~545	~300/~661	~353/~778	~406/~895	~459/~1012

General Parameters

Scalability	Max. 15 systems in parallel
Storage Conditions	−4°F ~ 131°F( 32°F ~ 95°F Recommended) Up to 90%RH, non-condensing Initial SoC: 50%
Operating Temperature	Charge: 32°F ~ 122°F Discharge: −4°F ~ 122°F
Cooling	Natural Cooling
Max. Altitude	4000m/13123ft
Cycle Life	8000 Cycles
Communication	RS485, CAN, WiFi

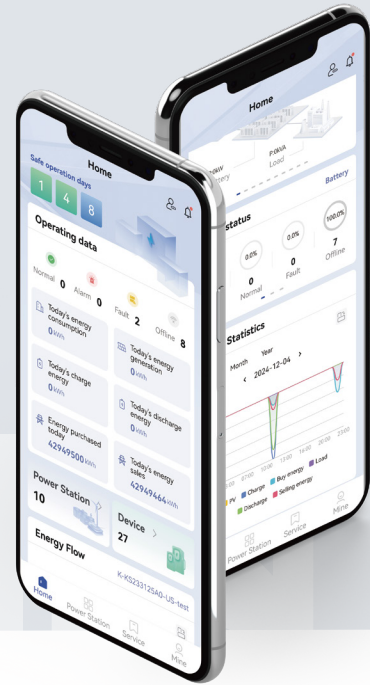
System Characteristic

Battery Compliances	UL1973,UL9540, UL9540A, UKCA, IEC 62619, IEC62040, CEI 0-21, UN 38.3, EN-61000, EN-62311
Installation Method	Stack Mounting
Installation Scene	Indoor or Outdoor
IP Rating	IP65
Warranty [1]	10 Years

[1] Please refer to the warranty letter for details

# KOWINT CLOUD

## Monitoring System



### Instant Clarity With Remote Data Monitoring And Analysis

- Remote data monitoring, automatic curve generation, and big data analysis management make the product operation status clear at a glance.



### Boost Customer Satisfaction With Remote firmware Upgrades

- Remote firmware upgrading and intelligent operation and maintenance report generation effectively improve customer satisfaction.



### Enhanced Security With Distributed Architecture And Data Encryption

- Distributed architecture deployment and data security encryption ensure that cloud data is more secure and reliable.



### Optimized Channel Construction With Six-level Distribution System

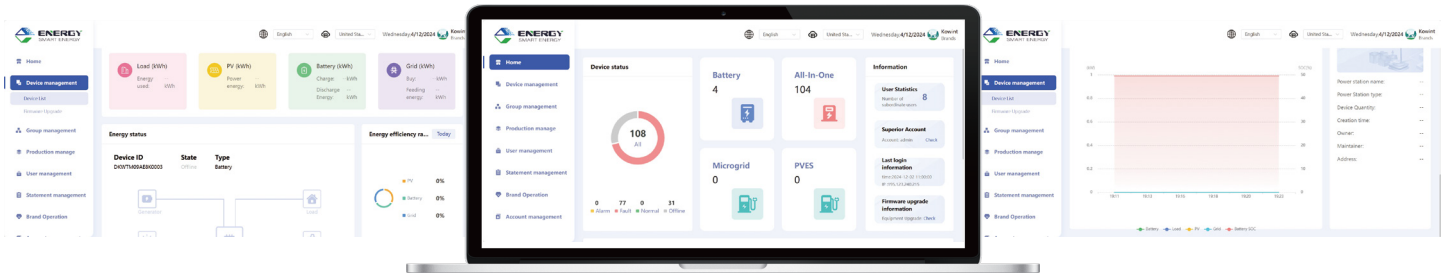
- The six-level distribution system, from the brand owner to end users, is more conducive to robust product channel construction.



### Seamless Connections With Intelligent Mall And Trial Applications

- Intelligent mall application and new product trial application enable users to contact source manufacturers directly, making product promotion faster and more accurate.

## System Layout



Memo No. \_\_\_\_\_

Date     /     /





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