KOWINT ENERGY §

YOUR GREEN ENERGY MANUFACTURER



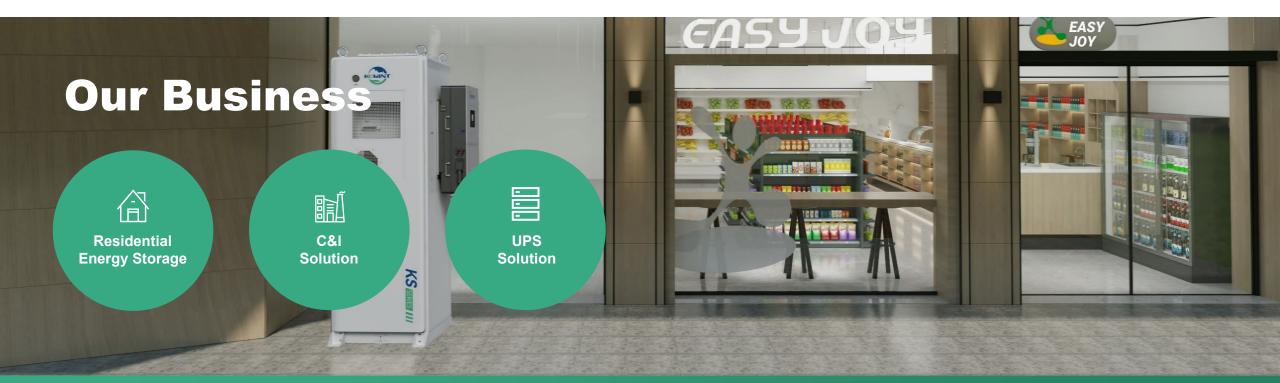
Established in 2014

KOWINT ENERGY is a high-tech enterprise specializing in the R&D, design, production, and sales of lithium battery energy storage systems, BMS, EMS,

and lithium battery modules. We are committed to continuous innovation, with strong capabilities in lithium battery module development and advanced manufacturing technology.

Leading the Future of Green Energy

A partner in the journey toward a sustainable, energy independent future. By investing in green technologies and renewable energy solutions, we are helping create a cleaner, greener world for future generations.





Our Strengths





Innovative R&D

Our team develops advanced BMS and EMS technologies, delivering safe and efficient power solutions with continuous breakthroughs in energy storage innovation.



Global Reach & Fast Delivery

Our MES-driven facility has a 3GWh annual production capacity, supported by four global warehouses for faster delivery and reliable local stock.

24/7 After-Sales Support

Dedicated around-the-clock support ensures prompt assistance and maximizes the reliability of your energy systems.





Manufacturing Ability

Our manufacturing factory in Huizhou, Shenzhen, integrates the latest Manufacturing Execution System (MES), streamlining our processes and providing real-time production oversight.







International Standard IATF 16949, ISO 9001, ISO1 4001







Quality Assurance & Certifications

Certifications

- TUV, Third-party authority certification
- EU: IEC 62619/62620, CE, UKCA
- US: UL1973, UL9540, CEC

Product Qualification

• Our products meet rigorous international standards, ensuring reliability, safety, and quality for global markets.

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Date of Loan (Replace to 2 17/05/2023

Beloaf Ireas (Berlawyo) 14/123/2023

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Product Liability Insurance

• Our products are covered by comprehensive liability insurance, ensuring financial protection against defects and failures.





Development Roadmap

2017

Released UPS

Provide reliable power supply for telecom operators.

2019

Launched LV

offerings for high-

Residential ESS

Expanding energy storage

performance applications.



2014

Launched BMS & DPS

Enhancing power supply efficiency and reliability through advanced energy storage solutions.



2021

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Released HV Residential ESS

Catering to higher energy demands and enhanced reliability.

2022

Launched Micro-grid System

Developed our first microgrid system and established an industrial park with a \$40,000 investment.

2023

Further Developed C&I Storage System

Launched of C&I energy storage products.



2024 Expanded Micro-grid Product Line

Launched 60kWh and 233kWh liquid-cooling Battery.



2025

Developing Utility Scale Solution

Launch 10-ft liquid-cooling distributed container system.

Achieve 5 GWh production capacity and establish service systems in the EU and USA.



Netherlands Warehouse

FOX Warehouse 3 Laan van Mathenesse7BNL-2665 MZ Bleiswijk

US Warehouse

200 Interchange Blvd Newark DE 19711, US

US Warehouse

14410 Best Ave, Santa Fe Springs, -CA 90670, US

Germany Warehouse

Schauenburger straße 9 Halle3 Pinneberg, schleswig Holstein

Shenzhen Huizhou Headquarter& R&D Center

Factory



Manufacturing Execution System









Strategic Horizons Advancement Plans



MX

S40KSupply Chain

Joint Manufacturing & T-MEC Duty-Free Access Local Production & NA Export



US

S40K / W16K / R5000 - Residential ESS KS60A / KS233 - C&I Energy Systems

Warehousing (CA, DE), after-sales teams, recruiting channel partners

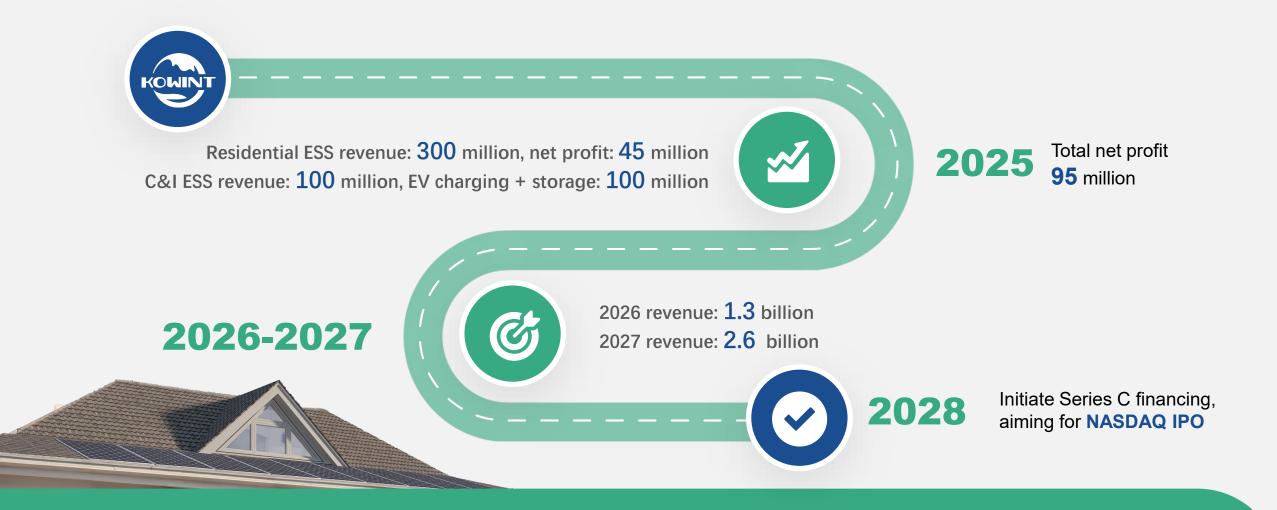
EU

Full Residential & C&I ESS Lineup Warehousing & VPP Rollout (DE/NL)

BR

Market Entry Point: Residential ESS + UPS

Agent Setup & Training



Future Development Blueprint

Strategic Focus

- Global Expansion: USA, Europe, Latin America
- Promote Localized Manufacturing (U.S.-Mexico) to Reduce Costs and Avoid Tariffs
- Deepen Technological Innovation: Cloud-based BMS/EMS Control Systems
- Expand Microgrid, VPP (Virtual Power Plant), and Integrated Storage & Charging Solutions



Customer Roles & Service Positioning

Kowint Energy is not only a product manufacturer but a comprehensive energy storage system solution provider, delivering tailored support and collaboration across diverse client segments to meet their unique operational and strategic needs.



After-sales Servic System



Global Service Network

- ✓ Battery warranty: 10–12 years
- ✓ Inverter: 5 years
- ✓ Optional extended warranty available at an additional annual cost of 2.2%



Kowint Cloud Platform

- ✓ Real-time monitoring, diagnostics, and remote OTA firmware updates
- ✓ Supports role-based access and user management for distributors and installers



Standard Warranty Policy

- ✓ Hotline support, technical video guidance, and on-site replacement solutions
- ✓ Collaborates with local installers to enhance response efficiency

Local warehouses & service centers

US

CA \ DE

EU

CA \ DE

Battery Storage System

ROWINT

S40K

Nominal Energy : 5.12kWh Rated Voltage : 51.2V Max. Operating Current :300A IP Rating : 55 10.24-30.72kWh



R5000

Nominal Energy : 5.12kWh Nominal Voltage : 51.2V Max. Operating Current : 95A IP Rating : 20 5.12–158.72kWh

W16K

Nominal Energy : 16.0kWh Rated Voltage : 51.2 V Max. Operating Current : 200A IP Rating : 65

KOUNT

Battery Storage System

R5000i-60

Nominal Energy : 61.44kWh Nominal Voltage : 51.2V Max. Charging/Discharging : 300A IP Rating : 20 Nominal Capacity : 500(Ah)

ROLAINT

R5000o-30

Nominal Energy : 30.72kWh Rated Voltage: 51.2V Max. Charging/Discharging : 300A IP Rating : 54 Nominal Capacity : 300Ah

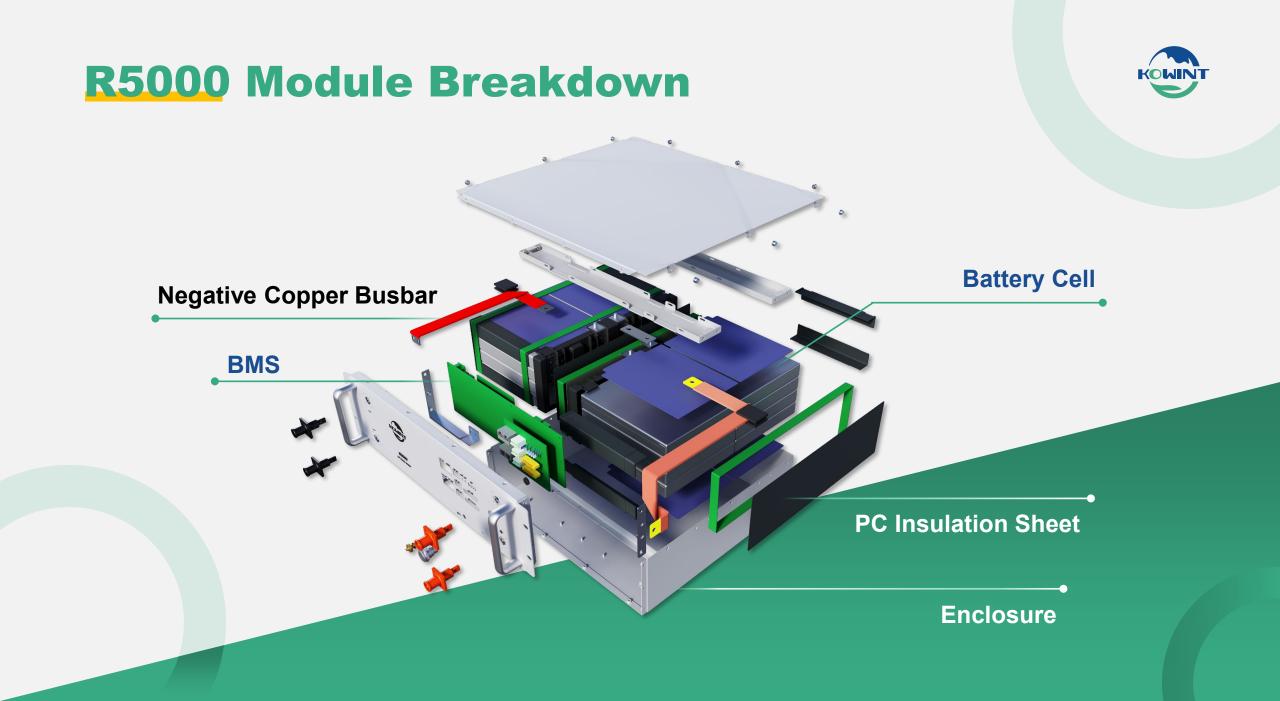
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R5000o-60

Nominal Energy : 61.44kWh Nominal Voltage : 51.2V Max. Charging/Discharging : 300A IP Rating : 54 Nominal Capacity : 500Ah

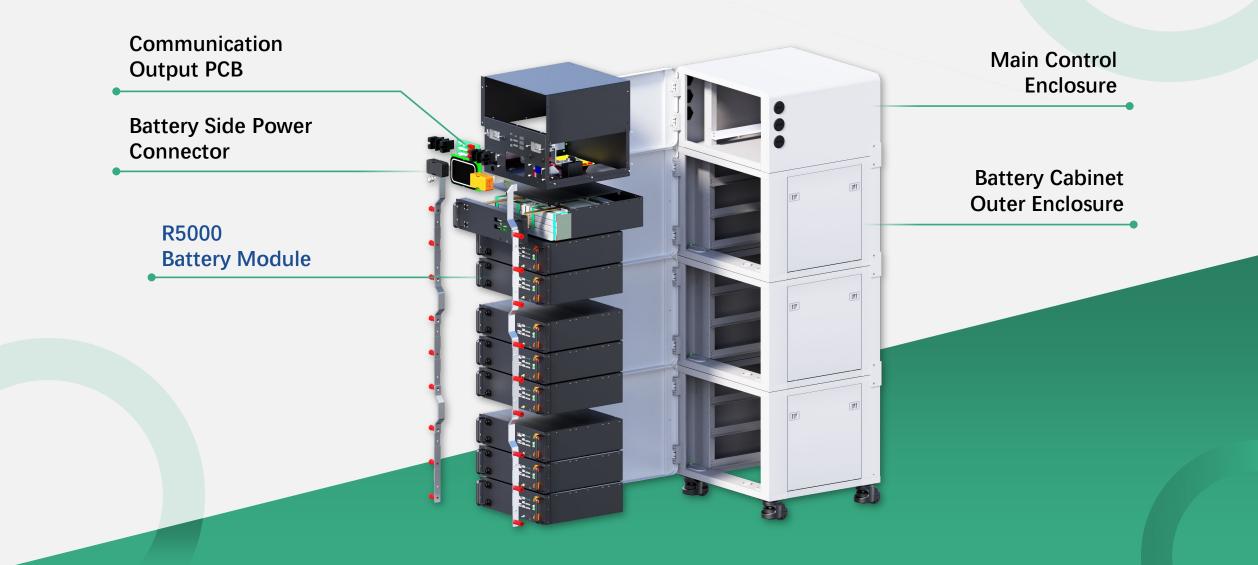
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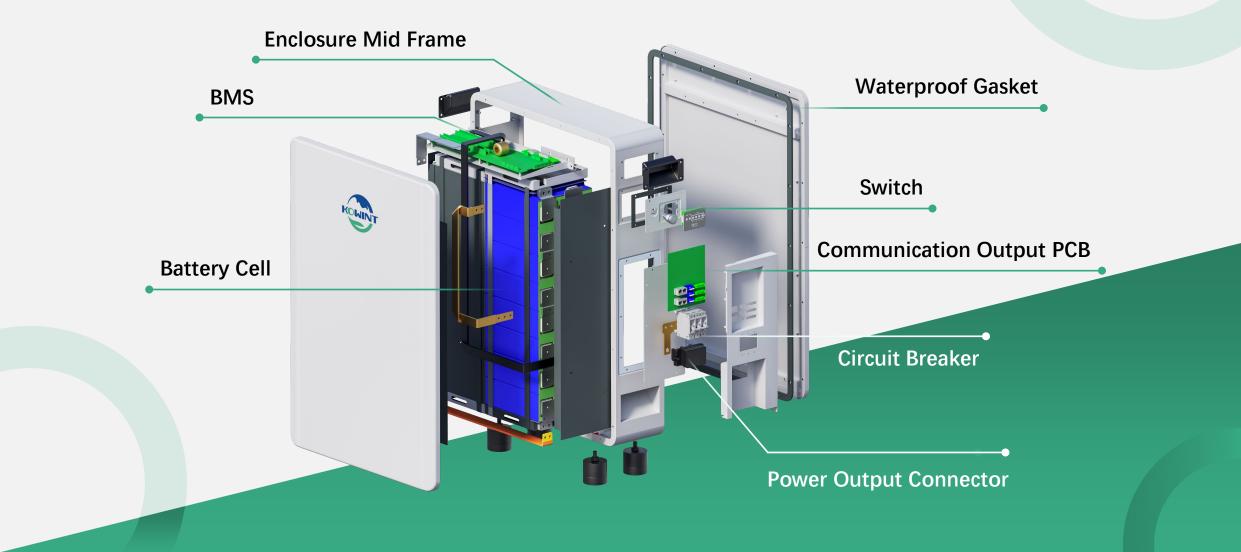
R5000i-60 Module Breakdown





W16K Module Breakdown

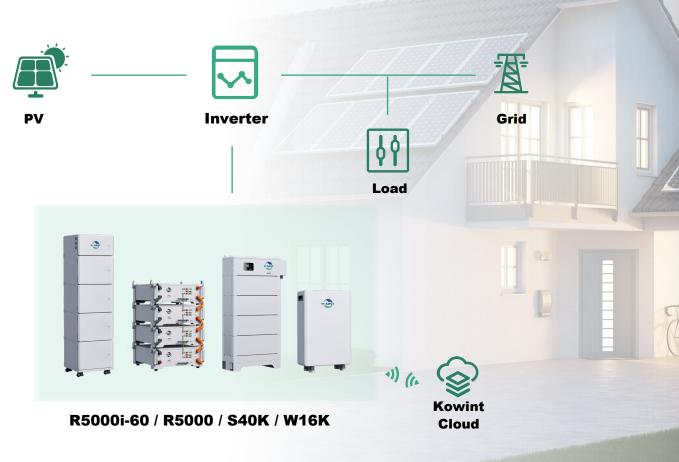








Residential Solution



Residential One Stop Solution

High Performance

- >6000 Life Cycles(S40K /R5000)
- >8000 Life Cycles(R5000i-60)
- Maximum 15 clusters in parallel to get
- 460.8kWh(S40K)
- Maximum 31 units in parallel to get 460.8kWh(R5000)
- Delivers 61.44kWh of usable energy (R5000i-60)

Enhanced Safety

- IP55 design (S40K)
- IP20 design (R5000/R5000i-60)

User-Friendly Setup

Could platform





Residential Solution





R5000o-30 / R5000o-60

Kowint Cloud

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Residential One Stop Solution

High Performance

- >8000 Life Cycles
- Offers 30.72kWh capacity(R5000o-30)
- Offers 61.44kWh capacity (R5000o-60)

Enhanced Safety

• IP54 design

Grid

Load

- Ideal for off-grid and outdoor setups
- Short-circuit Protections

User-Friendly Setup

- Could platform
- All-in-one design with integrated inverter and battery









KS-60A (US/EU)

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233kWh

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Rated Output Voltage	IP Rating
30kW 60kW(US)/30kW 50kW(EU)	55
Capacity	Voltage Range
60kWh	307/614.4V
Rated Output Power	
307/614.4V	
Rated Output Voltage	IP Rating
480V(US)/400V(EU)	54
Capacity	Nominal Voltage

832V

KS-233 (US/EU)



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KOWINT ENERGY

C&I Solution

60kWh Air-Cooling Battery

High Performance

- Black start/Off-grid operations
- Efficient BMS Technology

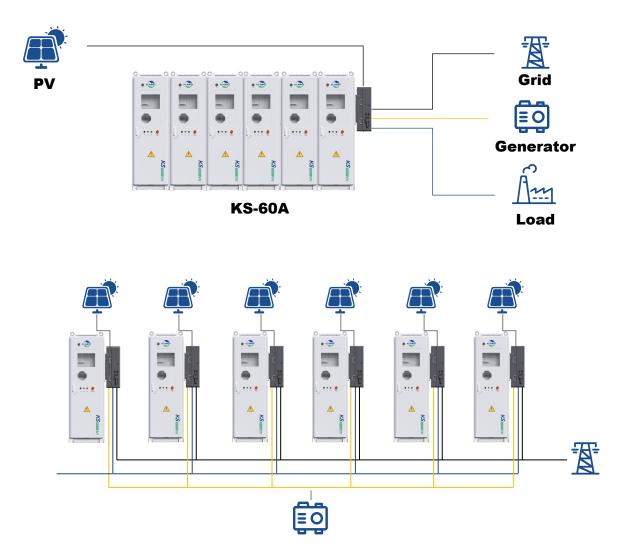
Safe and Reliable

- IP55 design
- Full power temperature control

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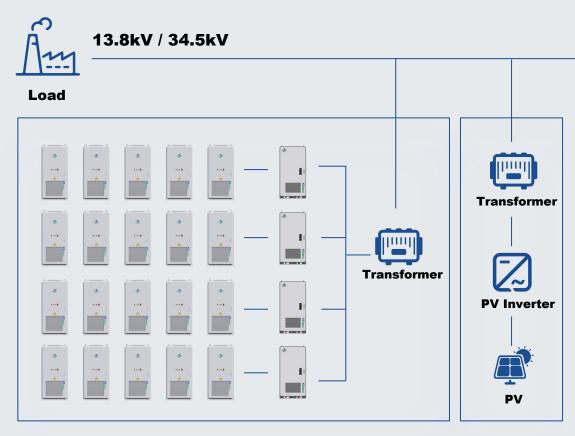
User-Friendly Setup

• Remote monitoring



KOWINT ENERGY

C&I Solution



4* Array (For 13.8kV) / 12* Array (For 34.5kV)



233kWh Liquid-Cooling Battery

High Performance

- High-efficiency liquid cooling
- Efficient BMS Technology

Safe and Reliable

- Fire prevention, top venting design
- Al management

User-Friendly Setup

Modular design



KOWINT ENERGY





 Grid-connected and Off-grid Switching Time

 ≤3min
 Rated Power

 IP Rating
 Rated Power

 IP54
 307/614.4∨

 Pcs Switch
 250A



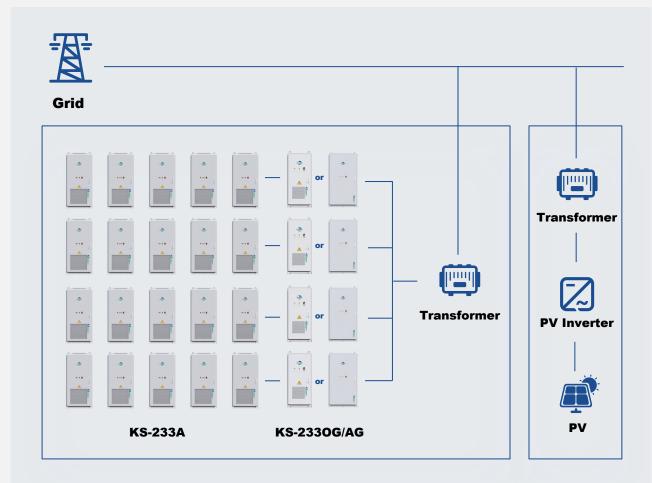
MPPT Efficiency	Output Voltage Rang
95.50%	50~1000Vdc
Total Output Power	Number of MPPT

KS-600MPC



C&I Solution





On Grid Switching Combiner

High Performance

- Smart control for charge/discharge
- Supports multi-loop battery & DC bus
- HMI with modbus tcp/iec 61850.
- Grid-tied cabinet without pcs

On/Off Grid Switching Combiner

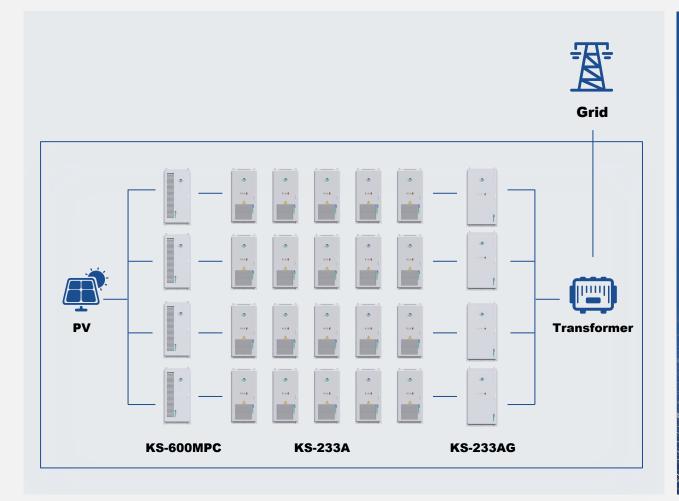
High Performance

- Smart control for charge/discharge
- Supports multi-loop battery & DC bus
- HMI with modbus tcp/iec 61850.
- Grid-tied cabinet without pcs



C&I Solution





MPPT Combiner System

Advanced MPPT Tracking

- Multi-channel tracking for maximum power point
- Improves PV efficiency in all conditions.

Dynamic Power Control

- Seamless PCS & EMS integration.
- Optimizes energy flow and output.

Complete DC Protection

- Polarity, voltage, current & surge protection.
- Ensures safe and stable operation.



Kowint Cloud (

Kowint Cloud is an advanced device management and monitoring platform tailored for agents, installers, and end-users, providing real-time performance tracking, remote diagnostics, firmware updates, and efficient management of large-scale energy storage and power systems.



🛆 ENERGY Wednesday,4/12/2024 🔛 🖁 Load (kWh Grid (kWh) Device managem energy: A Group management Energy status Energy efficiency ra... Today Production manage Device ID User management 0% 🗎 Statement managemen Ð Battery 0% 0% Brand Operation



8 0 Home Energy Flow 2 1 Home **Kowint App** afe operation days 00 Operating data Batten Device status 0% 0% 0 Alarm 0 Normal Offline Fault Load electricity Photovoltaic power # generation D consumption **O**kWh 0 kWh **Interface Details** Energy Statistics Battery discharge Battery charging Denery capacity J capacity 0 kWh O kWh Month Day × 2024-12-03 > Electricity purchased Selling electricity from the power grid Selling electricity from the power grid 0 kWh 0 kWh 8 0 Power Statio Home How can I help you! 0 0 0 cumentation Center 10 Power Station Operating dat Device Repair record Product Installation 0 Language Promotional Video Installation Video Network configurati Local monitoring Battery d capacity 0 kmb Case Studies Terms of Servi Energy Flow 100% Selling electricity from the power g Privacy Policy About Us 1.0.10-kdev Device > Power Station >> 0 Energy Statistic Day Month Ye Home Energy Flo Power Station < 2024-12-03 Service ... Service Mine **Power Station** ⇒ Home ⇒ (\rightarrow) Service Mine ⇒



KOWINT ENERGY

ProControl Prime

Cabinet Level Local EMS

Advanced integrated display and control system forC&I energy storage solutions.



Advanced Graphics and Al



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Interfaces



Robust and Durable Design



High-Performance Data Processing



Flexible Cloud Connectivity

Comprehensive Communication





ROMENT			HOME	BMS	PCS	LCU	FSU	Alarm	System
	CutPeaksFillValleys1	CutPeaksFillValleys2	CutPeaks						
Data									
Setting	Period Of Time	Char	ge Or Dis	charge P	ower			Dead	ISOC
CutPeaksFillValleys	00:00-01:00				(kW) 🌼				(%) 🌼
Alarm	01:00-02:00				(kW) 🌼				(%) 🔅
	02:00-03:00				(kW) 🔅				(%) 🌼
	03:00-04:00				(kW) 🔅				(%) 🌣
	04:00-05:00				(kW) 😂				(%) 🌼
	05:00-06:00				(kW) 🔅				(%) 🌼
	06:00-07:00				(kW) 🔅				(%) 🔅
	07:00-08:00				(kW) 😂				(%) 🔅

FONT			HOME	BMS	PCS	LCU	FSU	Alarm	Systen
Data	Running Status Day Charged			Day Dischar		I Total Charged Total Discha			
Setting	Standby	2.5	(kWh)	2.5	(kWh)	1,144.0	(kWh)	1,120.0	(kWh)
CutPeaksFillValleys	System Active Power (k	W)		0.0		licebarge Ac		wa	0.0
Alarm			AC SILLE D	AC Side Discharge Active Power (kW)					
	System Apparent Power (kVA) System Reactive Power (kVar) Power Factor System Output U Current (A) System Output V Current (A) System Output W Current (A) System Output W Current (A)				AC Side In	AC Side Inductive Reactive Power (kVar)			
					Max. Capacitive Reactive Power Capacity (kVar)				125.0
					Max. Inductive Reactive Power Capacity (kVar)				125.0
				0.4	Frequency (Hz)				50.0
					Max. Chargeable Power (kW)				142.0
					Max. Dischargeable Power (kW)				
					AC Switch Status				
	AC Side Capacitive Rea	ctive Power (kV	ar)		DC Switch	h Status			



ProControl Base

Station Level Local EMS

Reliable control and display solution for large distributed energy storage systems.



Advanced Graphics and Al



High-Brightness Touch Display



Robust and Durable Design

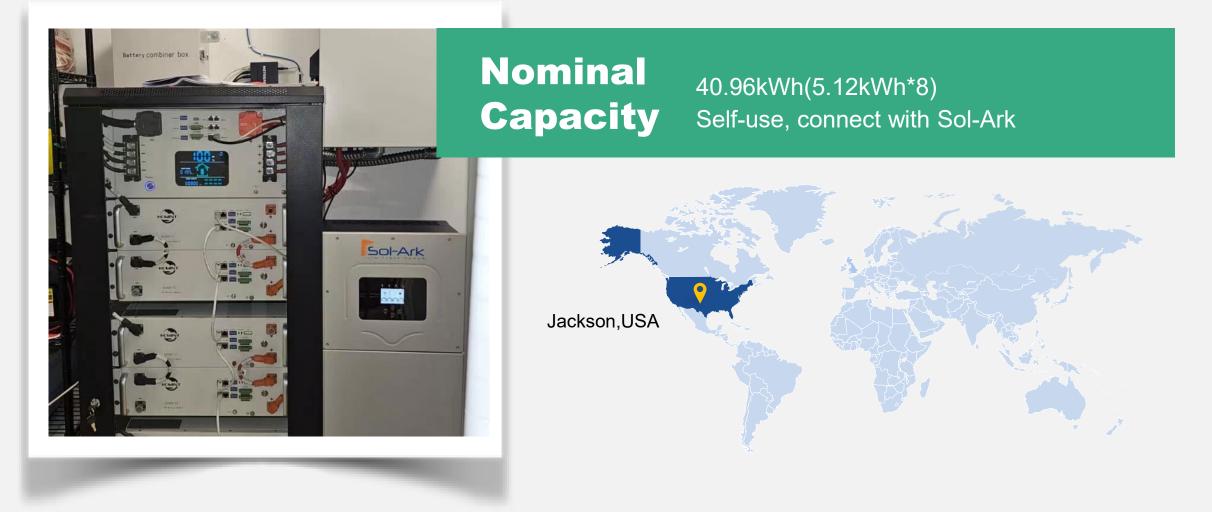
- ୢୢୖ୷
 - Comprehensive Communication Interfaces



High-Performance Data Processing Flexible Cloud Connectivity Residential Case

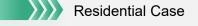


R40KL 40kWh









R5000 184.32kWh



Nominal Capacity

184.32kWh(5.12kWh*36) Off-Grid use, connect with Megarevo





S40K 60kWh

Nominal Capacity

61.44kWh(30.72kWh*2) Self-use, connect with Sol-Ark











W16K16kWh

Nominal Capacity

61.44kWh(30.72kWh*2) Self-use, connect with Sol-Ark







Kowint DC KS-23kWh*4

Nominal Capacity

PV 100kWp PV inverter 10kW*4











C&I Case

Kowint DC KS-157kWh

Nominal Capacity

PV 60kWp PV inverter 20kW







C&I Case

Kowint DC KS-5.8MWh

Nominal Capacity

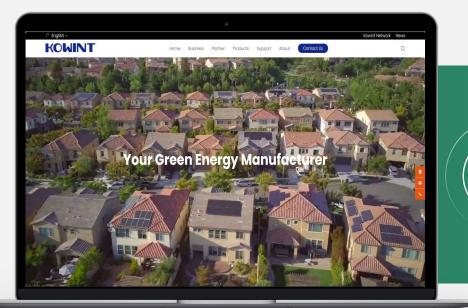
PV 2.4 MWp PV PCS 49.5 kW 🦻 Japan

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