YOUR GREEN ENERGY MANUFACTURER

Commercial & Industrial (for EU)

Energy Storage Solution

KOWINT ENERGY

Kowint Energy (Shenzhen) Co,. Ltd.

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+
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

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

60kWh Air-Cooling Battery

KS-60A

HIGH PERFORMANCE

- >8000 life cycles.

SAFE AND RELIABLE

- IP55 design, minimize external environmental impact.

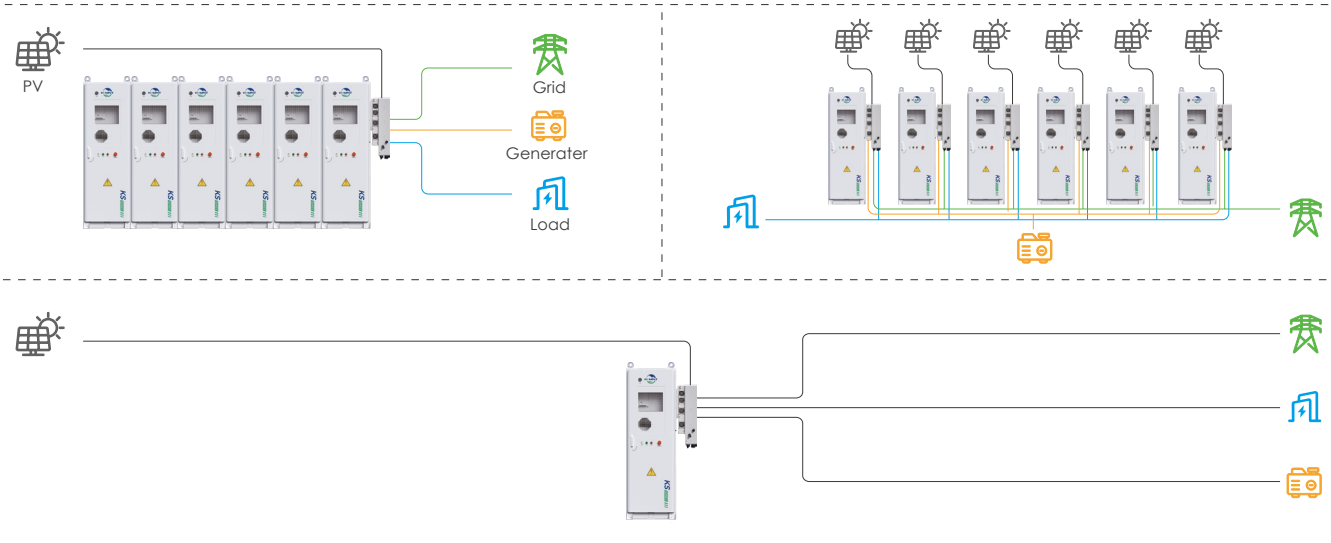
FLEXIBLE APPLICATION

- Modular design for ease of expansion.
- Off-grid ops.

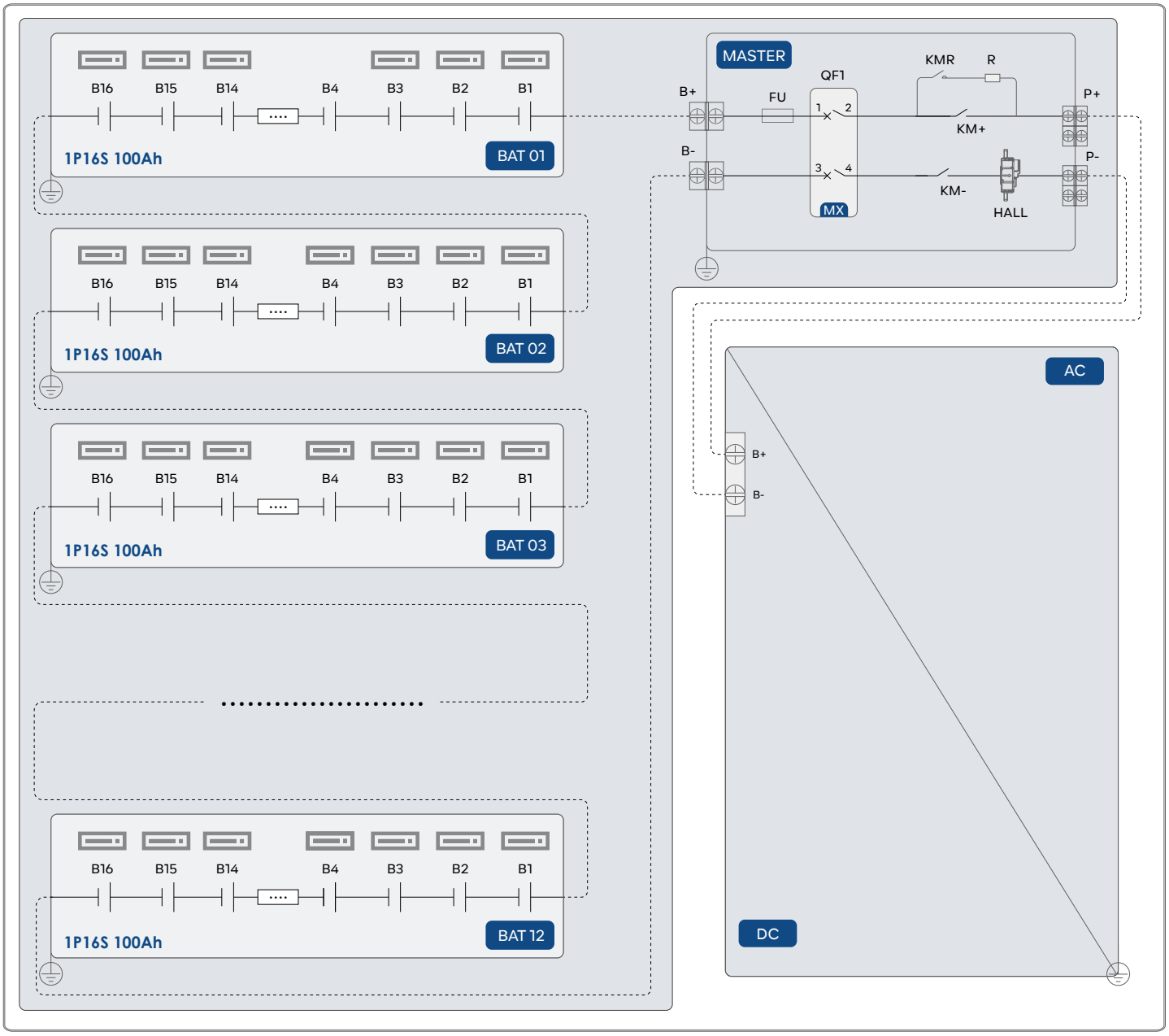
SMART ENERGY MANAGEMENT

- Efficient bms technology.
- Remote monitoring capabilities.

Max. Parallel/Single System Layout



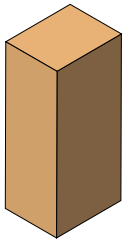
Product Topology



Packaging & Shipping Details

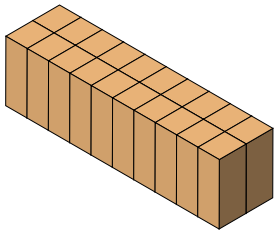
Product

750*950*2280 mm
1050 kg



1Set

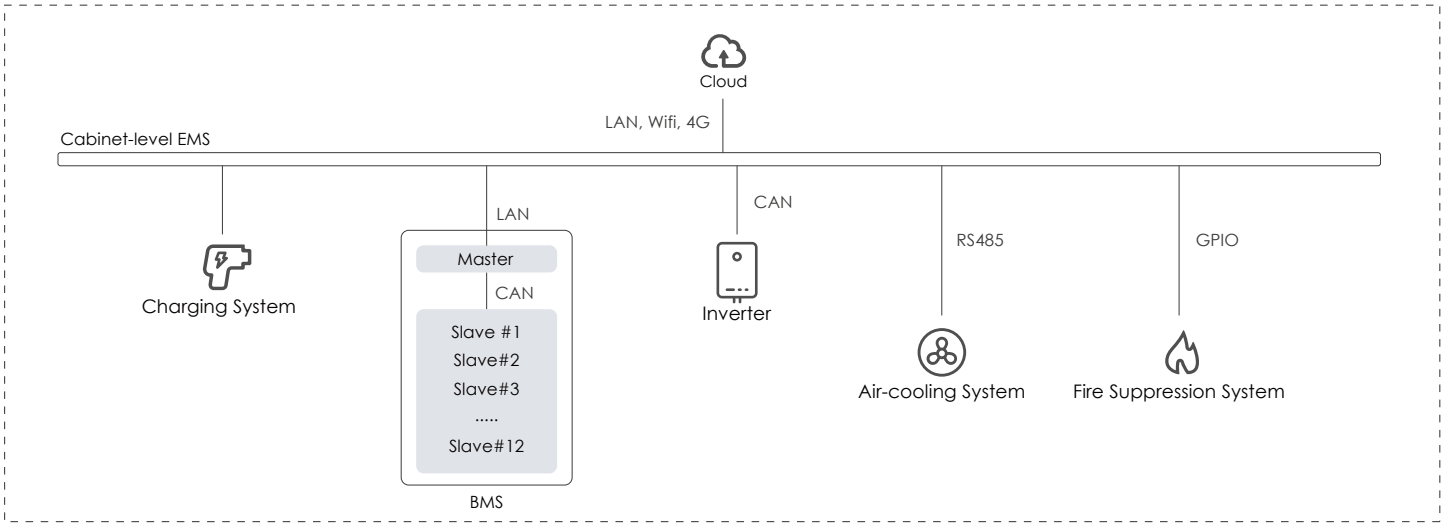
850*1050*2350 mm
1100 kg

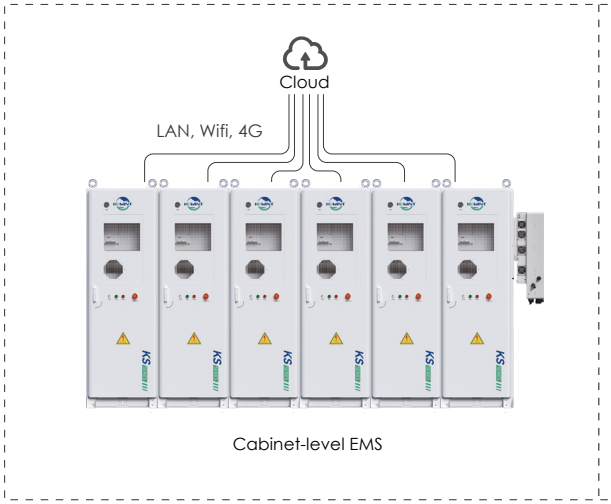


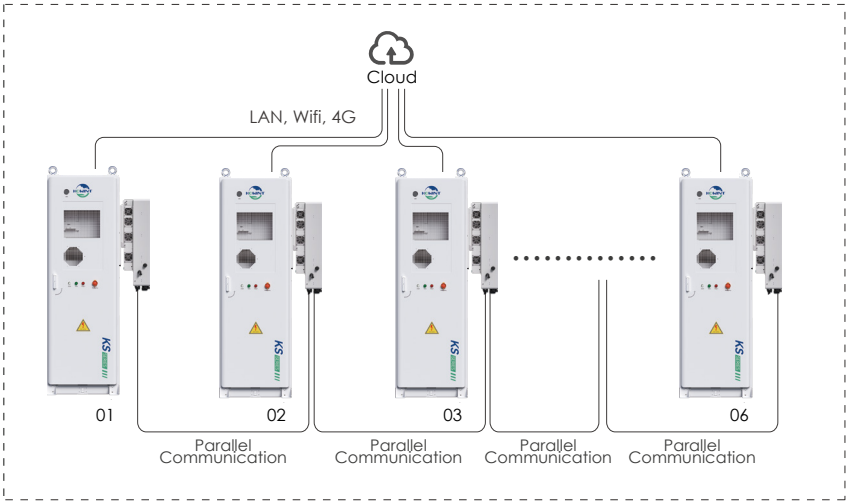
40C

20 Set
22000 kg

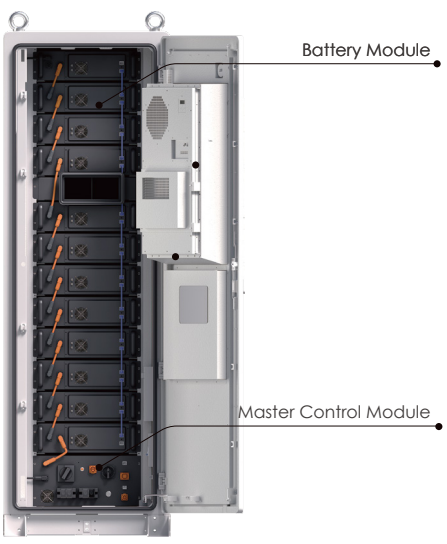
Energy Management System(EMS) Structure







System Demonstration



Product Specifications

Battery Energy Storage

Cell Chemistry	LiFePO4
Module Energy (kwh)	5.12
Module Nominal Voltage (V)	51.2
Module Capacity (Ah)	100
Battery Module Combination	12S1P
System Nominal Voltage (V)	614.4
System Operating Voltage (V)	562.5~681.6
System Energy (kWh)	61.44
Charge/Discharge Curent (A)	95

PV Input

Max. Input Power (kW)	96
Max. Input Voltage (V)	1000
Start-up Voltage (V)	180
Rated Voltage (V)	600
MPPT Voltage Range (V)	150-850
Max. Short Circuit Curent per MPPT (A)	60
Number of MPP Trackers	4
Number of PV Strings per MPPT	8
Max.Curent per MPPT(A)	40

Charging System(Optional)

Charging Type	Charging Mode 3 Case B & Case C
Outlet options	AC Type 2 (IEC 62196-2)
Input/Output Current Rating (A)	32, three phase
Input/Output Power Rating (kW)	23@415Vac
Input/ouput voltage (VAC)	380~415
Input Frequency (Hz)	50/60
Cable Length	TT, TN system
Distribution Systems	5.0 m, Optional: 7.5 m
ConnectorType	3P + N + PE
Certifications	IEC/EN 61851-1,IEC 61851-21-2 IEC 62196-1,IEC 62196-2,IEC62109

AC Output(On-Grid)

Rated Output Power (kV)	50
Max. Output Power (kVA)	50
Rated Output Current (A)	76
Max. Input Power from Grid (kW)	50
Max. Input Current from Grid (A)	76
Rated Grid Voltage	3/N/PE,230V/400 Vac
Rated Grid Frequency (Hz)	50/60
Max. AC Passthrough Current (A)	152
THDi (@Rated Power)	＜3%
Power Factor	0.8 leading- 0.8 lagging

AC Output(On-Grid)

Rated Output Power (kW)	50
Max.Apparent Output Power	1.6 times/2s
Rated Output Current (A)	76
Switch Time	<10ms
Rated Voltage	3/N/PE，230V/400Vac
Rated Frequency (Hz)	50/60
THDv (@linear load)	<2%

General Parameters

Product Mode	K-KS061060A1-EU
Dimension -W*D*H(mm)	750*950*2280
Weight (kg)	-1050
Operating Temperature (°C/°F)	-30~50/-22~122
Communication Interface	CAN, RS485, Wi-Fi, LTE
Humidity(RH)	5%~85%, non-condensation
Altitude	≤4000m/13122ft(2000m/6561ft derating)
IP Rating	IP55
Storage Temperature (°C/°F)	-20~35/-4~95
Recommend Depth of Dischargel	90%
Cycle Life	>8000 cycles
Warranty	10 years
Certification	EC/EN62619:2022, IEC/EN62477-1:2012+A11+A1+A12 IEC/EN61000-4-2:2019, IEC/EN61000-4-2:2019 EN301908-1 V15.2.1:2013, EN301908-13 V13.2.1:2022 EN301489-1:2019 V2.2.3:2019, EN301489-52 V1.2.1:2021

233kWh Liquid-Cooling Battery

KS-233A

HIGH PERFORMANCE

- High-efficiency liquid cooling.

SAFE AND RELIABLE

- Battery monitoring, fire prevention, a top venting design.
- Ai management.

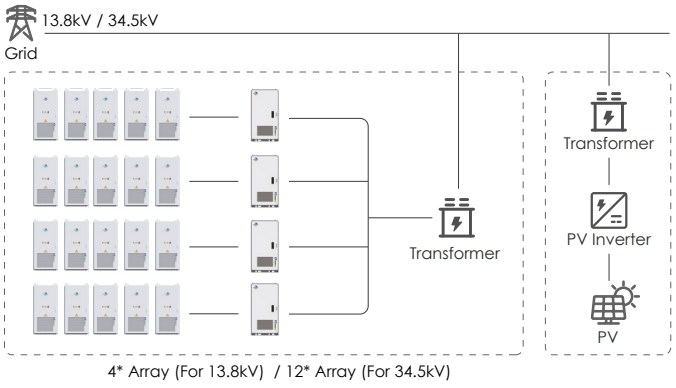
FLEXIBLE APPLICATION

- Efficient BMS technology.

EASY INSTALLATION

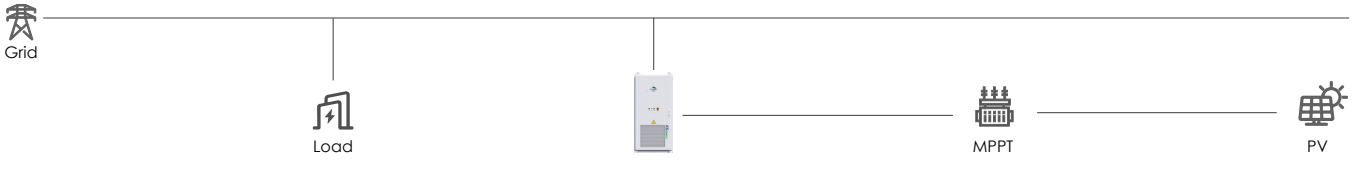
- Modular design for ease of expansion.

Max. Parallel/Single System Layout

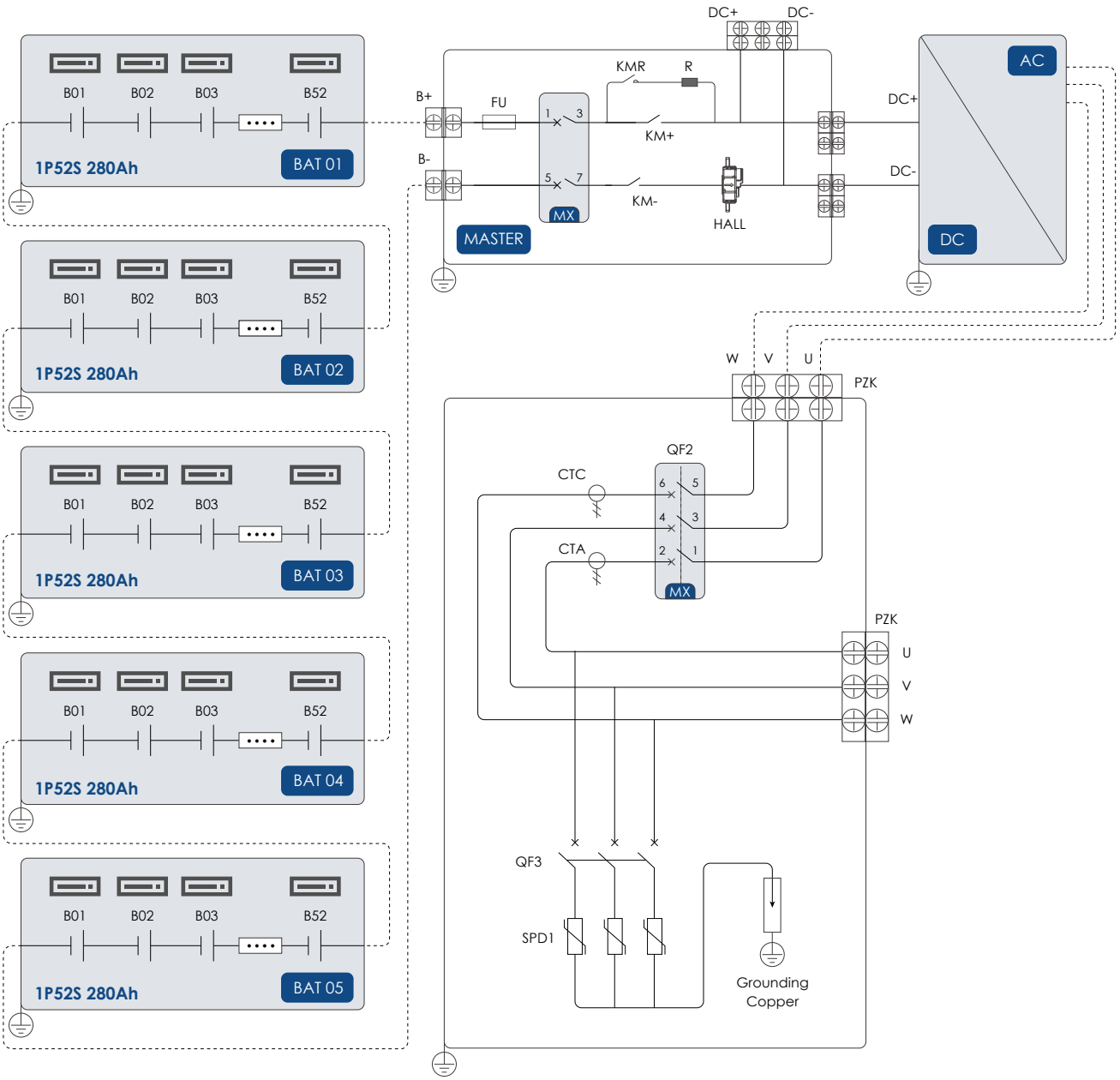


Grid Voltage	10~15kV
Number of ESS	80(4*20)
Number of Array	4
Total Capacity(MWh)	18.64(4*20*233kWh)

Grid Voltage	30~35kV
Number of ESS	240(12*20)
Number of Array	12
Total Capacity(MWh)	55.92(12*20*233kWh)



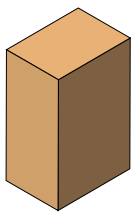
Product Topology(For 480V System)



Packaging & Shipping Details

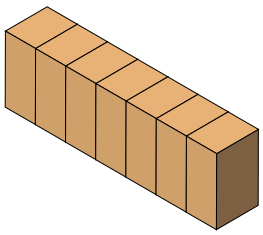
Product

1100*1455*2303 mm
~2950 kg



1Set

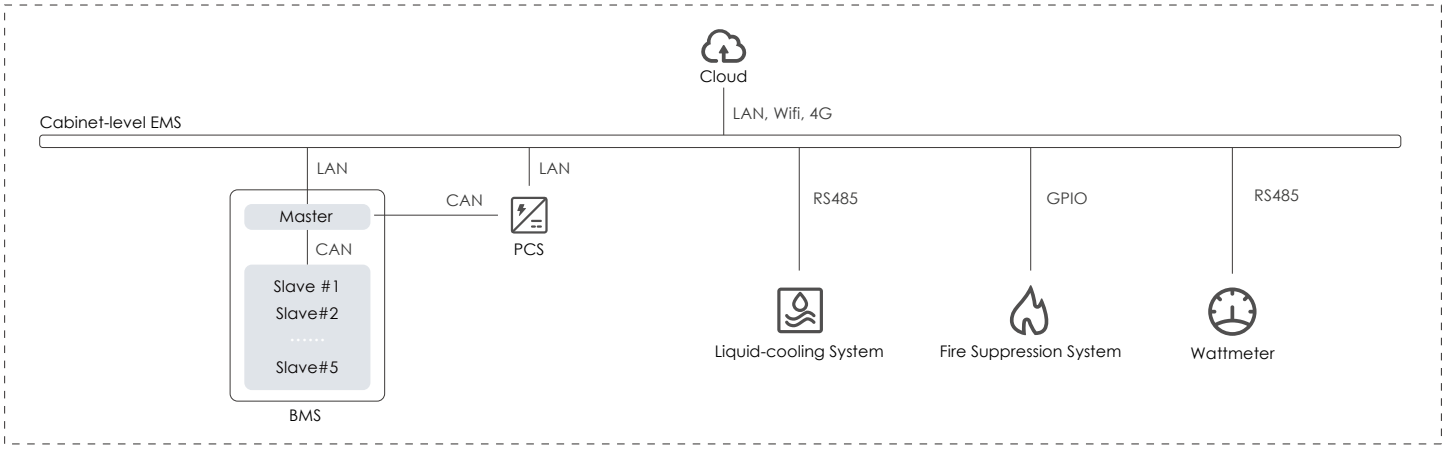
1250*1800*2520 mm
~3200 kg

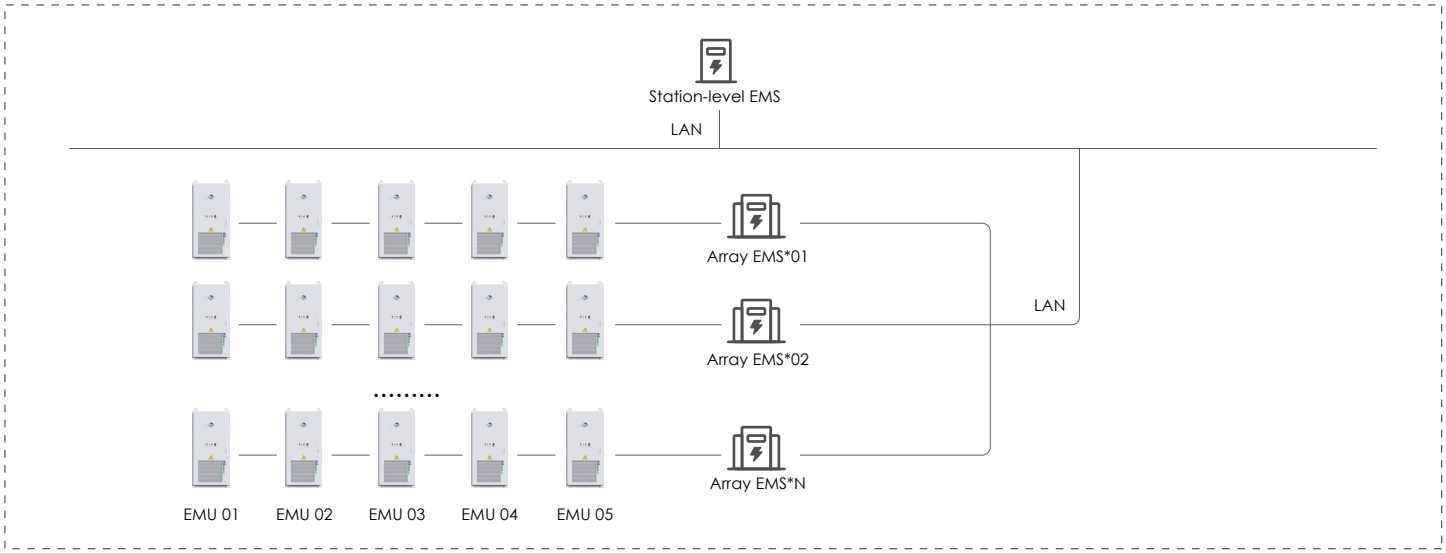


40C

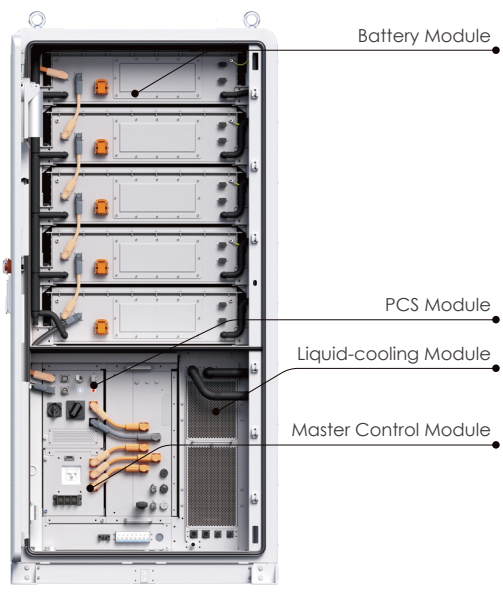
7 Set
~22400 kg

Energy Management System(EMS) Structure





System Demonstration



Product Specifications

Battery Energy Storage

Cell Type	LFP 3.2V / 280Ah
Module Combination	1P52S
System Combination (Modules)	5 in series
Capacity (kWh)	233
Nominal Voltage (V)	832
Operation Voltage Range (Vdc)	702~936
Discharge Depth	90% DoD
Thermal Management Mode	liquid-cooling
Thermal Control Management	Aerosol Extinguishing

AC Output

Rated AC Output Power (kW)	125
Max. AC Output Power (kVA)	150
Rated Output Voltage (Vac)	400
Output Voltage Range (Vac)	340~440(settable)
Rated Grid Frequency (Hz)	50/60
Max. Output Current (A)	182
Adjustable Power Factor	>0.99
THDi	<3%

DC Input/Output

Max. Power (kW)	250
Voltage Range (V)	761~923
Max. Current (A)	320

* The charging power of the DC interface is related to the load power, battery SOC and temperature.The discharge power of the DC interface is related to the battery's state of charge

System Characteristic

Communication Interface	CAN, RS485, Wi-Fi, LTE
Warranty	5 years
Certifications	IEC/EN62619:2022, IEC/EN62477-1:2012+A11+A1+A12 IEC/EN61000-6-2:2019, IEC/EN61000:-6-4:2019,EN 50549-1:2019,EN 50549-10:2022

General Parameters

Battery Model	K-KS233125A0-EU
Dimensions - W*D*H (mm)	1100*1455*2303(±10)
Total Weight (kg)	2630(±10%)
Operation Altitude	≤4000m/13122ft(2000m/6561ft derating)
Noise Level @1m	<75 dB(A)
IP Rating	IP54
Operating Temperature(°C/°F)	–20~55/-4~131
Operating Humidity (RH)	0 to 95%, non-condensation
Storage Conditions	–20-30°C/–4-86°F, Up to 95% RH, non-condensation, State of Energy (SoE): 50% initial

On/Off Grid Combiner

KS-233CG

EFFICIENT POWER ROUTING

- Smart control for charge/discharge.
- Supports multi-loop battery & DC bus.

SAFE AND RELIABLE

- IP54 design, minimize external environmental impact.
- Grid-tied cabinet without pcs.

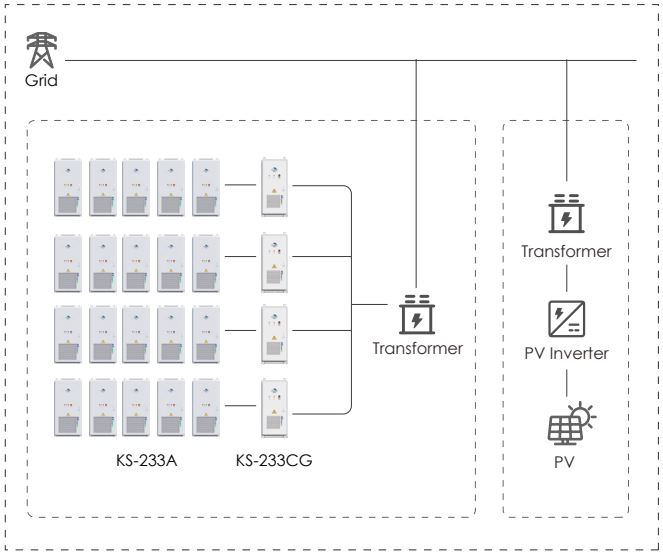
SECURE GRID INTERFACE

- Grid-tied cabinet without PCS.
- Stable, safe energy storage connection.

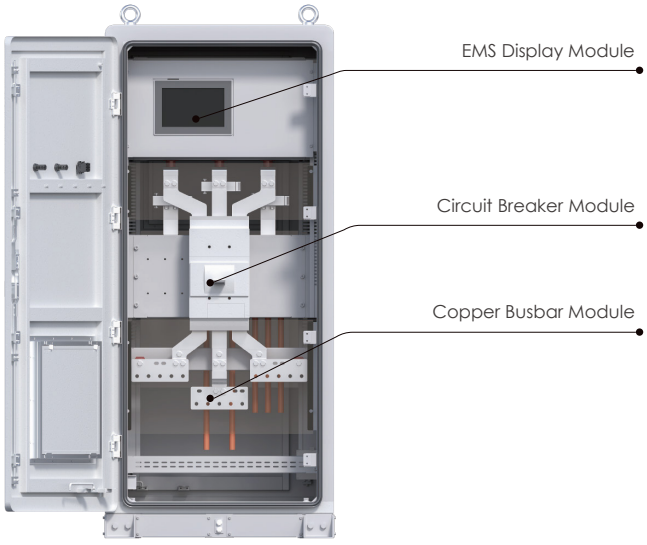
SMART ENERGY MANAGEMENT

- HMI with modbus tcp/iec 61850.
- EMS/SCADA integration ready.

System Layout



System Demonstration



Product Specifications

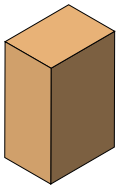
Product Parameter	
Input Voltage (Vac)	400
Access Channel	5
Output Channel	1
Rated Power (kW)	625
Rated Current(A)	900
Pcs (Power Conversion System) Switch (A)	250
Grid Switch, Load Switch (A)	1000

General Parameters	
Battery Model	K-CG625ACC01-EU
IP Rating	IP54
Dimensions - W*D*H (mm)	800*880*1800
Total Weight (kg)	~446
Operating Temperature(°C/°F)	-20~55/-4~131
Storage Temperature(°C/°F)	–20~35/-4~95
Relative Humidity (RH)	0~95%
Altitude	≤2000m / 6561ft
Noise Level @1m	<65 dB(A)
Communication Interface	RS485, CAN, LAN
Specifications Matched for Energy Storage Systems	233kWh ESS, Supports Parallel Connection of Up to 5 Units

Packaging & Shipping Details

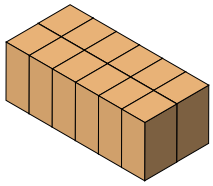
Product

~800*880*1800 mm
~446 kg



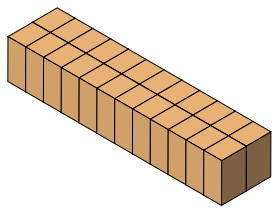
1Set

~990*1100*1900 mm
~550 kg



20C

12 Set
~6600 kg



40C

24 Set
~13200 kg

On/Off Grid Switching Combiner System

KS-233AG

HIGH PERFORMANCE

- Auto switchover between on-grid and off-grid.
- Ensures uninterrupted power during outages.

SAFE AND RELIABLE

- IP54 design, minimize external environmental impact.
- Full-system safety assurance.

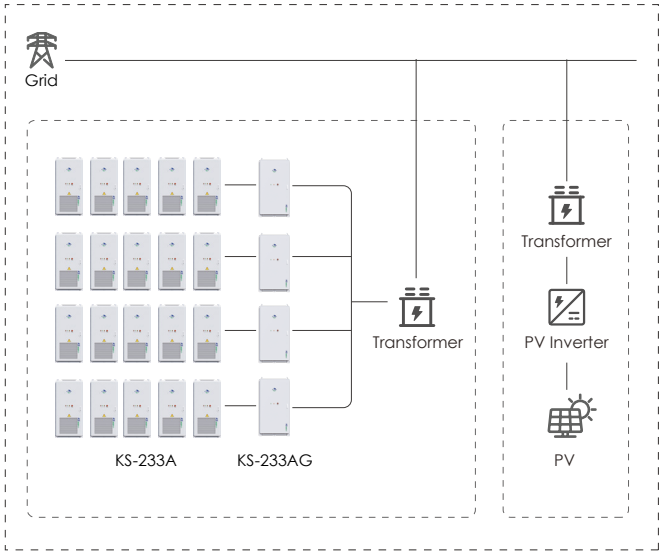
EXPANDABLE DESIGN

- Modular setup for easy install and scaling.
- Simplifies future upgrades and maintenance.

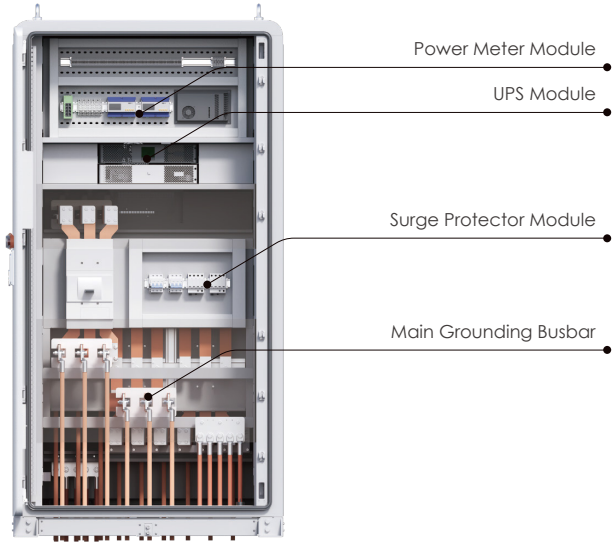
REMOTE CONTROL READY

- Real-time monitoring and remote operation.
- Enhances system management and diagnostics.

System Layout



System Demonstration



Product Specifications

Product Parameter

Input Voltage (Vac)	400
Access Channel	5
Output Channel	1
Rated Power (kW)	625
Rated Current(A)	900
Grid-connected and Off-grid Switching Time	≤3min
Anti-backflow Protection for Power Grid	Functions Included
Pcs (Power Conversion System) Switch (A)	250
Grid Switch, Load Switch (A)	1000

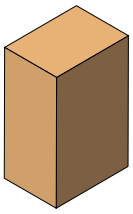
General Parameters

Battery Model	K-AG625ACC01-EU
IP Rating	IP54
Dimensions - W*D*H (mm)	1200*1456*2302
Total Weight (kg)	~1196
Operating Temperature (°C/°F)	-20~55/-4~131
Storage Temperature (°C/°F)	–20~35/-4~95
Relative Humidity (RH)	0~95%
Altitude	≤2000m/6561ft
Noise Level @1m	<65 dB(A)
Communication Interface	RS485, CAN, LAN
Specifications Matched for Energy Storage Systems	233kWh ESS, Supports Parallel Connection of Up to 5 Units

Packaging & Shipping Details

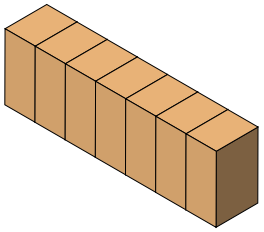
Product

~1200*1456*2302 mm
~1196 kg



1Set

~1320*1642*2530 mm
~1320 kg



40C

8 Set
~10560 kg

MPPT Combiner System

KS-600MPC

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.

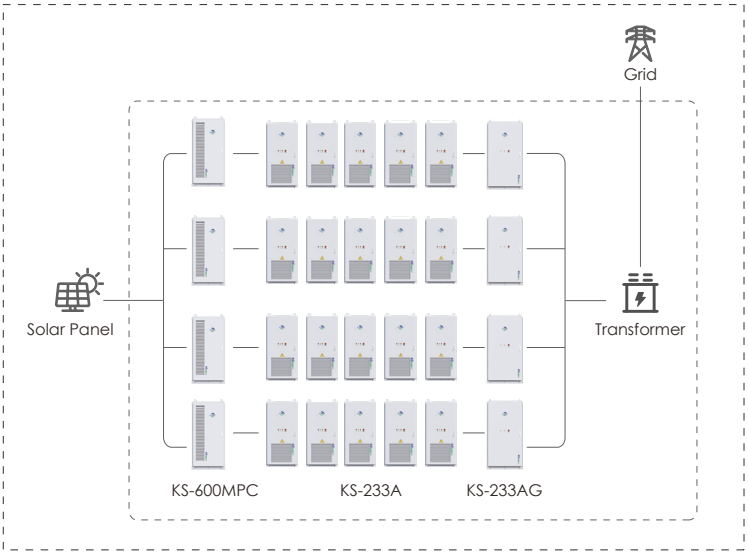
COMPLETE DC PROTECTION

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

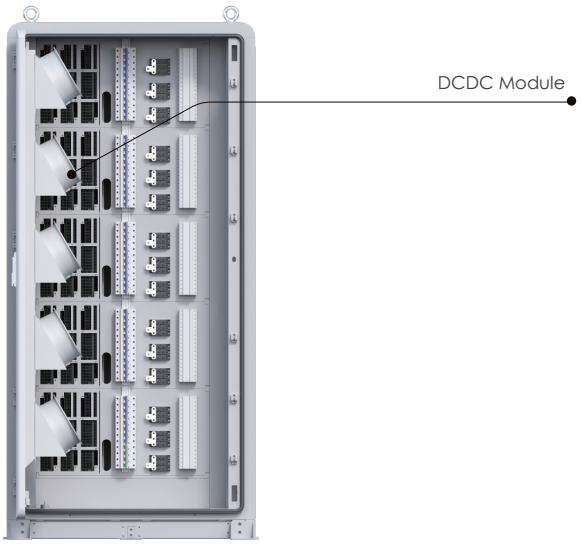
ENHANCED SYSTEM SAFETY

- IP54 design, minimize external environmental impact.
- Boosts long-term system reliability.

System Layout



System Demonstration



Product Specifications

PV Input	
Input Voltage (Vdc)	400~750
The Max. Static Voltage Borneunder No Operation (Vdc)	850
Rated Voltage (Vdc)	750
MPPT Operating Voltage Range (Vdc)	400~750
MPPT Full Load Voltage Range (Vdc)	400~750
MPPT Starting Voltage (V)	400
MPPT Efficiency	95.50%
Max. Input Current (Adc)	110*15
Number of MPPT	15
No. of PV Strings per MPP Trackers	4

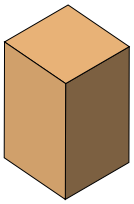
DC Output	
Individual Module Output Power(kW)	40
Max. Number of Modules	15
Total Output Power (kW)	600
Output Voltage Range (Vdc)	50 ~ 1000
Output Current Range (Adc)	0~133.3@Per MPPT
Voltage Regulation Accuracy	<±0.5%(150~1000V, 0~20MHz)
Precision of Steady Current	≤±1%(Outputload 20%~100%)
Voltage Ripple Factor	≤1%

General Parameters	
Product Model	K-MPC600PVC01-EU
Type of Cooling	Forced Air-cooling
Dimensions - W*D*H (mm)	~1100*960*2300
Total Weight (kg)	~1300
Communication Interface	CAN bus, LAN
Altitude	≤2000m/6561ft
Noise Level @1m	<75 dB(A)
IP Rating	IP54
Operating Temperature (°C/°F)	-20~55/-4~131 (above 55°C/131°F needs to be reduced)
Storage Temperature (°C/°F)	-20~35/-4~95
Relative Humidity	≤95%RH,non-condensing

Packaging & Shipping Details

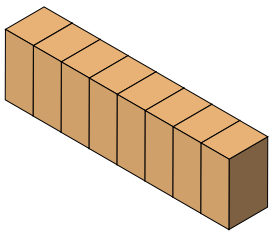
Product

~100*960*2300 mm
~1300 kg



1Set

1200*1100*2400 mm
~1400 kg



40C

8 Set
~11200 kg

Memo No. _____
Date / /

Memo No. _____
Date / /

KOWINT ENERGY
YOUR GREEN ENERGY MANUFACTURER

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