PRODUCTS BROCHURE

Energy Technologies Build Life Better

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EENOVANCE

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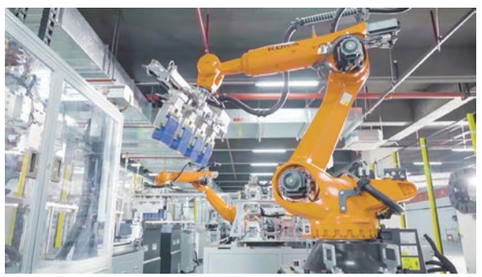
ABOUT EENOVANCE

EENOVANCE is a global technology company dedicated to energy storage innovation. We provide efficient, reliable, and intelligent energy solutions for residential, commercial, industrial, and utility-scale applications.With our self-developed core technologies - EMS, BMS and PCS, we provide fully integrated energy storage systems to meet different needs.Our products are certified by UL, IEC, EU CE, VDE, UN 38.3, and NFPA, and are widely deployed across global markets, with over 700,000 units shipped to date.

Driven by continuous innovation, EENOVANCE is advancing the deep integration of AI and energy storage. Its wholly owned subsidiary, AIMAN Technology, is applying artificial intelligence to the energy sector, leveraging advanced AI models and data analytics to develop next-generation intelligent energy solutions.

These solutions are helping to accelerate the energy storage industry's shift toward digital, intelligent, and platform-based operations, while supporting the global energy transition. Together with partners and customers worldwide, EENOVANCE is working to build a greener, smarter, and more sustainable energy future.



Employees
Worldwide

300+

Offices
Worldwide

10+

Production
Base

20,000 +m^2

Annual
Capacity

5G Wh+

Total
shipments

700,000 +units

Countries and Regions'
Business Coverage

60+

GLOBAL LAYOUT

Headquarter

Offices

Subsidiaries

In Progress

5+

Business covers Asia, Europe, Africa, South America, North America

10+

local office & global service center

7*24

hours response service

CHUBB

world coverage up to $6 million

INVERTER COMPATIBILITY LIST FOR EENOVANCE PRODUCTS

SOLAX POWER
MUST
LUXPOWER TEK
Solplanet
SUNGROW
SRNE
GOODWE
SOFAR
Deye 德業
victron energy
GROWATT
SOSEN
Voltronic Power Advancing Power
SUN SYNK
solis

Low-Voltage
LiFePO4 Battery

EENOVANCE

High-Voltage
LiFePO4 Battery

solis
ATESS
Deye 德業
SOFAR
MEGAREVO
SINENG
SINEXCEL

RESIDENTIAL ENERGY STORAGE SOLUTION

The EENOVANCE home smart energy system is equipped with high-efficiency inverters, batteries and real-time monitoring. It reduces electricity costs through intelligent scheduling, improves the utilization rate of new energy, and has emergency power backup functions.

At the same time, it can automatically optimize the operation strategy based on the user's electricity usage habits and peak and valley electricity prices, adapt to multiple electricity usage scenarios, and help families achieve low-carbon life upgrades.

Accurate prediction enables energy efficiency management, and intelligent regulation responds to electricity price fluctuations

Multiple device access, intelligent energy scheduling, and create a smart energy ecosystem

Intelligent switching mechanism to ensure the operation of key electrical appliances and say goodbye to power outages

Cloud interconnection, intelligent adjustment of power consumption plans, and adaptation to diverse scenarios

RESIDENTIAL STORAGE INVERTER

SQ 4kW / 6kW-LV-1P Ecco

Single Phase

Features

- Hybrid Inverter With PV Self-Use Function
- Opened Front Wiring
- Easy Cleaning IP41 Dust Cover
- Smart Fan Control, Less Noise
- UPS 10ms On / Off-Grid Switching
- User Friendly LCD Display + Wifi / Bluetooth Monitoring
- Max. Efficiency Up to 97.6%

Scenarios

Houses

Off-grid Cabins

Small Stores

Small Offces

Small Farms

DATASHEET

Model	SQ 4kW-LV-1P Ecco	SQ 6kW-LV-1P Ecco
Battery Input Parameters		
Supported battery type	$LiFePO_4$ or Lead-acid	
Battery input voltage range	40 ~ 60 V	
Max. charge / discharge current	60 A (Configurable) / 90 A (Configurable)	120 A (Configurable) / 130 A (Configurable)
Battery capacity (Recommend)	70~1000Ah	100~1000Ah
Battery communication	CAN	
PV String Input Parameters		
Max. DC input power	4800 W	4000 × 2=8000 W
Max. DC input voltage	500 V	
MPPT voltage range	120 ~ 450 V	
Start-up voltage	150 V	
Max. input current	15 A // 1 MPPT channels	15 × 2 =30 A // 2 MPPT channels
AC Output Parameters (Back-Up) (Feed to essential load)		
Max. output power	4000 W	6000 W
Max. / Peak output apparent power	4000 VA / 8000 VA	6000 VA / 12000 VA
Max. output current	18 A	27 A
Nominal output voltage	220 V / 230 V / 240 V (Configurable) 1 phase	
Nominal output frequency	50Hz / 60Hz (±0.2%) (Configurable)	
Max. bypass current	40 A	
Shift time (Bypass and inverter)	10ms	
Output THD (Resistor load)	<3%	
AC Input Parameters (Bypass to essential load & Charge the battery/ Feed to home load)		
Max. (apparent) power for bypass/ battery charging / home load feeding	4000 W	6000 W
Nominal input / output voltage	220 V / 230 V / 240 V (Auto adjusted)	
Nominal input / output frequency	50Hz / 60Hz (Auto adjusted)	
Efficiency		
Max. efficiency	97.60%	
Europe efficiency	97.60%	
MPPT efficiency	99.90%	
Max. battery to load efficiency	94.00%	
Protection		
Protection	Battery over charge / discharge, Over temperature, Output over load, Output short circuit, Output over voltage	
Monitoring&HMI		
Monitoring	WIFI / Bluetooth	
HMI	Indicators+LCD	
Certifications & Standards Compliance		
Grid regulation	IEC 61727 / IEC 62116	
Safety regulation	IEC / EN62109-112, IEC / EN 62477-1	
EMC	IEC / EN61000-6-1/3	
General Parameters		
Ingress protection	IP20	
Operating temperature range	-25°C ~ 60°C	
Net weight / Gross weight	9.5 kg / 12.5 kg	13. 7 kg / 16.6 kg
Product size / Packing size (WxDxH)	307×133×430 mm / 423×230×518 mm	353×134×500 mm / 475×240×620 mm

RESIDENTIAL BATTERY

ECO 2.5 / ECO 5.2 / ECO 8.0

Low Voltage UN38.3 IEC

ECO 2.5 ECO 5.2 ECO 8.0

Features

- One - Touch Parallel Scaling
- Mainstream Inverter Compatibility
- Auto Aerosol Fire Extinguishing Ultimate Security, Strengthen Defenses
- Remote App Control & Updates
- Smart BMS & Precise Detection and Protection

Scenarios

Houses

Off-grid Cabins

Small Stores

Small Offces

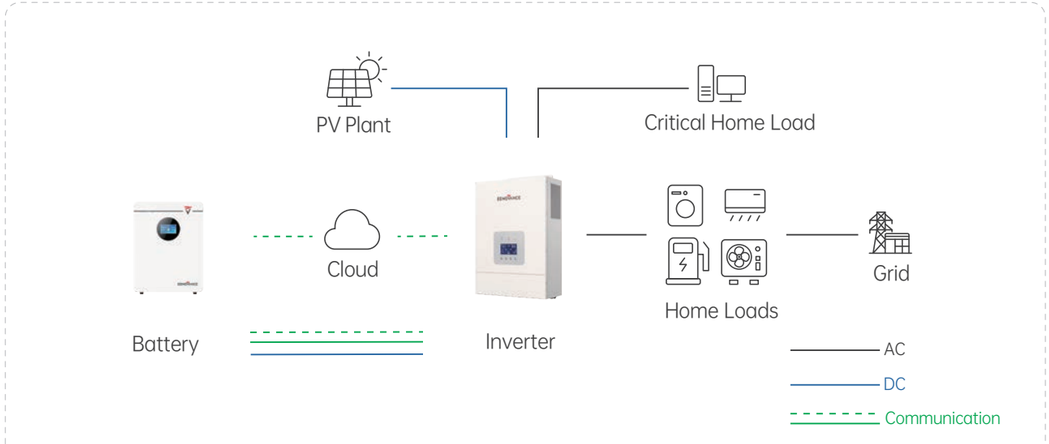
Small Farms

DATASHEET

Model	ECO 2.5	ECO 5.2	ECO 8.0
Performance			
Cell technology		LFP ($LiFePO_4$)	
Battery usable energy [1]	2.56 kWh	5.24 kWh	8.03 kWh
Nominal capacity	100 Ah	205 Ah	314 Ah
Nominal voltage		25.6 V	
Operating voltage		22.4 ~ 28.08 V	
Max. charge and discharge current [2]	100 A	200 A	200 A
Recommend Depth of Discharge		90%	
Communication			
Display		SOC status indicator, LED indicator, LCD display	
Communication		CAN / RS485 / RS232 / Wi-Fi	
General Specification			
Dimension (W×D×H)	360×160×473 mm	410×245×538 mm	420×245×540 mm
	14.17×6.29×18.26 inch	16.14×9.65×21.18 inch	16.54×9.65×21.25 inch
Weight	25 Kg (55.1 lbs)	47 kg (103.6 lbs)	70 kg (154.3 lbs)
Installation		Floor stand or Wall mounted	
Operating temperature [3]		Charge: 0 to 50°C (32 to 122°F) Discharge: -15 to 50°C (5 to 122°F)	
Environmental humidity		≤ 95%RH (No condensation)	
Ingress protection rating		IP20	
Warranty Period [4]		5 years / 10years (Optional)	
Scalability		Max. 15 batteries in parallel	
Application		ON Grid / ON Grid + Backup / OFF grid	
Compatible inverters		Refer to compatible inverter list (Compatible with major PCS brands)	
Standard Compliance			
Compliance		UN38.3 / IEC62619/ IEC61000 (More available upon request)	

[1] Test conditions: 100% depth of discharge (DOD), 0.2C rate charge & discharge at 25°C.
[2] There is 0.5C or 1C configurations optional in factory default.
[3] Charge/discharge derating occurs when the temperature is below 0°C or above 45°C.
[4] Please refer to the Warranty Letter for applicable conditions.

SYSTEM DIAGRAM



RESIDENTIAL BATTERY

MANA 5.1 / MANA 10.4 / MANA 16.0 / MANA 20.0

Low Voltage UN38.3 IEC

MANA 5.1 MANA 10.4 MANA 16.0 MANA 20.0

Features

- One - Touch Parallel Scaling
- Remote App Control & Updates
- Mainstream Inverter Compatibility
- Smart BMS & Precise Detection and Protection
- Auto Aerosol Fire Extinguishing Ultimate Security, Strengthen Defenses

Scenarios

Houses

Off-grid Cabins

Small Stores

Small Offces

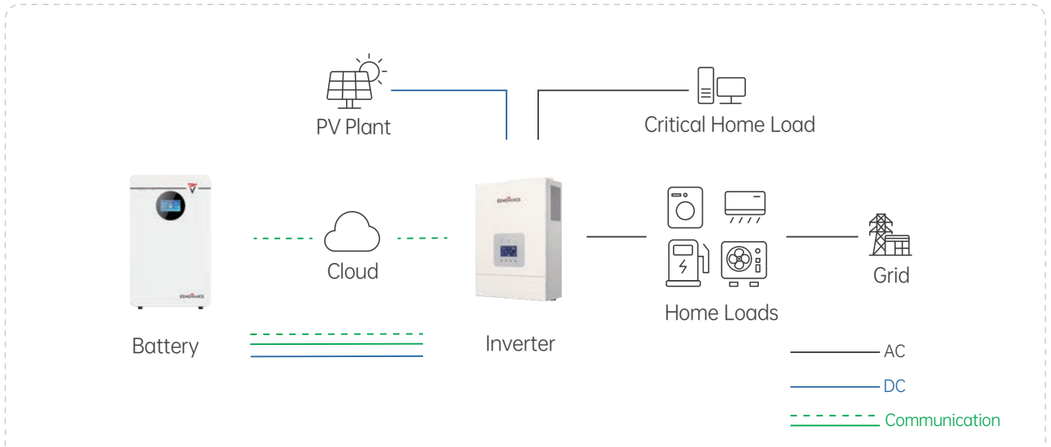
Small Farms

DATASHEET

Model	MANA 5.1	MANA 10.4	MANA 16.0	MANA 20.0
Performance				
Cell technology	LFP ($LiFePO_4$)			
Battery usable energy [1]	5.12 kWh	10.49 kWh	16.07 kWh	20.07 kWh
Nominal capacity	100 Ah	205 Ah	314 Ah	392 Ah
Nominal voltage	51.2 V			
Operating voltage	44.8 ~ 56.16 V			
Max. charge and discharge current [2]	100 A	200 A	200 A	200 A
Recommend Depth of Discharge	90%			
Communication				
Display	SOC status indicator, LED indicator, LCD display (Optional)			
Communication	CAN / RS485 / RS232 / Wi-Fi			
General Specification				
Dimension (W×D×H)	390×160×643 mm	420×245×706 mm	485×245×785 mm	500×270×892 mm
	15.35×6.3x25.31 inch	16.73×9.65×25.31 inch	19.1×9.6×30.91 inch	19.7×10.6×35.1 inch
Weight	47 Kg (103.6 lbs)	82 kg (180.77 lbs)	122 kg (265.96 lbs)	145 kg (319.7 lbs)
Installation	Floor stand or Wall mounted			
Operating temperature [3]	Charge: 0 to 50°C (32 to 122°F) Discharge: -15 to 50°C (5 to 122°F)			
Environmental humidity	≤ 95%RH (No condensation)			
Ingress protection rating	IP20			
Warranty Period [4]	5 years / 10years (Optional)			
Scalability	Max. 15 batteries in parallel			
Application	ON Grid / ON Grid + Backup / OFF grid			
Compatible inverters	Refer to compatible inverter list (Compatible with major PCS brands)			
Standard Compliance				
Compliance	UN38.3 / IEC62619 / IEC61000 / IEC62040-1 (More available upon request)			

[1] Test conditions: 100% depth of discharge (DOD), 0.2C rate charge & discharge at 25°C.
[2] There is 0.5C or 1C configurations optional in factory default.
[3] Charge/discharge derating occurs when the temperature is below 0°C or above 45°C.
[4] Please refer to the Warranty Letter for applicable conditions.

SYSTEM DIAGRAM



RESIDENTIAL BATTERY

MANA 5.1-1P1 / MANA 10.4-1P1 / MANA 16.0-1P1 / MANA 20.0-1P1

Low Voltage UN38.3

IP65

MANA 5.1-1P1 MANA 10.4-1P1 MANA 16.0-1P1 MANA 20.0-1P1

Features

- One - Touch Parallel Scaling
- Remote App Control & Updates
- Mainstream Inverter Compatibility
- Smart BMS & Precise Detection and Protection
- IP65 - Certified, Higher Protection Level
- Auto Aerosol Fire Extinguishing Ultimate Security, Strengthen Defenses

Scenarios

Houses

Off-grid Cabins

Small Stores

Small Offces

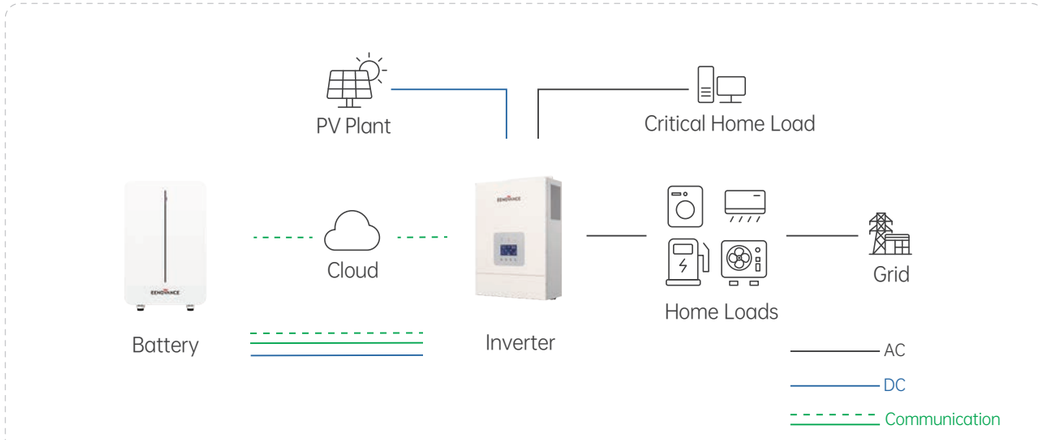
Small Farms

DATASHEET

Model	MANA 5.1-1P1	MANA 10.4-1P1	MANA 16.0-1P1	MANA 20.0-1P1
Performance				
Cell technology	LFP ($LiFePO_4$)			
Battery usable energy [1]	5.12 kWh	10.49 kWh	16.07 kWh	20.07 kWh
Nominal capacity	100 Ah	205 Ah	314 Ah	392 Ah
Nominal voltage	51.2 V	51.2 V	51.2 V	51.2 V
Operating voltage	44.8 ~ 56.16 V	44.8 ~ 56.16 V	44.8 ~ 56.16 V	44.8 ~ 56.16 V
Max. charge and discharge current [2]	100 A	200 A	200 A	200 A
Recommend Depth of Discharge	90%			
Communication				
Display	SOC status indicator, LED indicator			
Communication	CAN / RS485 / RS232 / Wi-Fi			
General Specification				
Dimension (W×D×H)	470×160×635 mm	530×245×660mm	530×245×847mm	535×270×880 mm
	18.5×63×25 inch	20.87×9.65×25.98 inch	20.8×9.6×33.3 inch	21.1×10.6×34.6 inch
Weight	48.8 kg (107.5 lbs)	88 kg (194.0 lbs)	120 kg (264.55 lbs)	148 kg (326.28 lbs)
Installation	Floor stand or wall mounted			
Operating temperature [3]	Charge: 0 to 50°C (32 to 122°F) Discharge: -15 to 50°C (5 to 122°F)			
Environmental humidity	≤ 95%RH (No condensation)			
Ingress protection rating	IP65			
Warranty Period [4]	5 years / 10years (Optional)			
Scalability	Max. 15 batteries in parallel			
Application	ON Grid / ON Grid + Backup / OFF grid			
Compatible inverters	Refer to compatible inverter list (Compatible with major PCS brands)			
Standard Compliance				
Compliance	UN38.3 / IEC62619 / IEC61000 / IEC62040-1 / FCC / UL1973 / UL9540A (More available upon request)			

[1] Test conditions: 100% depth of discharge (DOD), 0.2C rate charge & discharge at 25°C.
[2] There is 0.5C or 1C configurations optional in factory default.
[3] Charge/discharge derating occurs when the temperature is below 0°C or above 45°C.
[4] Please refer to the Warranty Letter for applicable conditions.

SYSTEM DIAGRAM



RESIDENTIAL BATTERY

RT 5.1

Low Voltage UN38.3 IEC

Features

- Full Automatic Manufacturing Products
- Standard 3u Rack Modular Design
- 100% Tested for Safety, Readability and Capacity
- Precise Voltage / Temperature / SOC Detection
- Top-Notch LFP Class A Cell / Strict Capacity Grading
- One Button Start / Stop and Parallel Connection

Scenarios

Houses

Off-grid Cabins

Small Stores

Small Offces

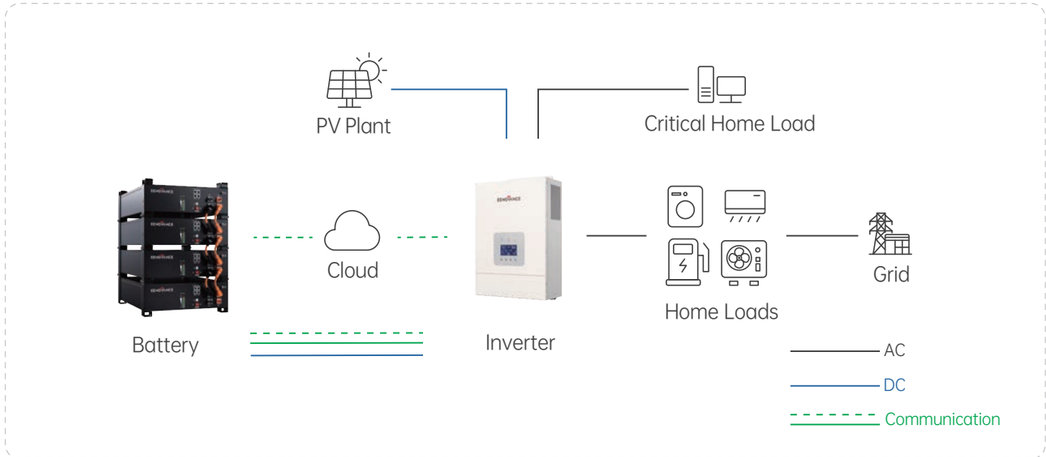
Small Farms

DATASHEET

Model	RT 5.1
Performance	
Cell technology	LFP ($LiFePO_4$)
Battery usable energy [1]	5.12 kWh
Nominal capacity	100 Ah
Nominal voltage	51.2 V
Operating voltage	44.8 ~ 56.16 V
Max. charge and discharge current [2]	100 A
Recommend Depth of Discharge	90%
Communication	
Display	SOC status indicator, LED indicator
Communication	CAN / RS485 / RS232
General Specification	
Dimension (W×D×H)	440×130×550 mm
	17.3×21.7×5.1 inch
Weight	46 kg (101.4 lbs)
Installation	Rack / Wall / Cabinet-Mounted
Operating temperature [3]	Charge: 0 to 50°C (32 to 122°F) Discharge: -15 to 50°C (5 to 122°F)
Environmental humidity	≤ 95%RH (No condensation)
Ingress protection rating	IP20
Warranty period [4]	5 years / 10years (Optional)
Scalability	Max. 15 batteries in parallel
Application	ON Grid / ON Grid + Backup / OFF grid
Compatible inverters	Refer to compatible inverter list (Compatible with major PCS brands)
Standard Compliance	
Compliance	UN38.3 / IEC62619 / IEC61000 (More available upon request)

[1] Test conditions: 100% depth of discharge (DOD), 0.2C rate charge & discharge at 25°C.
[2] There is 0.5C or 1C configurations optional in factory default.
[3] Charge/discharge derating occurs when the temperature is below 0°C or above 45°C.
[4] Please refer to the Warranty Letter for applicable conditions.

SYSTEM DIAGRAM



RESIDENTIAL BATTERY

CHAKRA 2.5-HX Pro
(High Voltage)

5.12kWh~25.6kWh UN38.3 IEC

Features

- Plug&Play Installation, Less Wiring
- Precise Voltage / Temperature / SOC Detection
- Top-Notch LFP Class A Cell / Strict Capacity Grading
- Build in Wifi for Monitoring and Firmware Update
- IP65-Certified, Suitable for More Outdoor Applications
- LCD Display Shows Data Visually
- Modular Design, 5 - 25 kWh Flexible Configuration

Scenarios

Houses

Off-grid Cabins

Small Stores

Small Offces

Small Farms

DATASHEET

Model	CHAKRA 2.5-H2 Pro CHAKRA 2.5-H7 Pro	CHAKRA 2.5-H3 Pro CHAKRA 2.5-H8 Pro	CHAKRA 2.5-H4 Pro CHAKRA 2.5-H9 Pro	CHAKRA 2.5-H5 Pro CHAKRA 2.5-H10 Pro	CHAKRA 2.5-H6 Pro
Performance					
Cell technology	LFP ($LiFePO_4$)				
Battery module	2.56 kWh, 51.2 V, 30 kg (67 lbs)				
Number of modules	2	3	4	5	6
	7	8	9	10	
Battery usable energy [1]	5.12 kWh	7.68 kWh	10.24 kWh	12.8 kWh	15.36 kWh
	17.92 kWh	20.48 kWh	23.04 kWh	25.60 kWh	
System nominal voltage	102.4 V	153.6 V	204.8 V	256.0 V	307.2 V
	358.4 V	409.6 V	460.8 V	512.0 V	
System operating voltage	89.6 ~ 112.32 V	134.4 ~ 168.48 V	179.2 ~ 224.64 V	224 ~ 280.8 V	268.8 ~ 336.96 V
	313.6 ~ 393.12 V	358.4 ~ 449.28 V	403.2 ~ 505.44 V	448 ~ 561.6 V	
System Max.charge and discharge current [2]	50 A				
Recommend Depth of Discharge	90%				
Communication					
Display	LCD Display (battery operating status, SOC, alerts, etc.)				
Communication	CAN / RS485 / RS232 / Wi-Fi / LAN				
General Specification					
Dimension (W×D×H)	570×370×525 mm	570×370×665 mm	570×370×805 mm	570×370×945 mm	570×370×1085 mm
	22.4×14.6×20.6 inch	22.4×14.6×26.1 inch	22.4x14.6×31.6 inch	22.4×14.6×37.2 inch	22.4×14.6×42.7 inch
	570×370×1225 mm	570×370×1365 mm	570×370×1505 mm	570×370×1645 mm	
	22.4×14.6×48.2 inch	22.4×14.6×53.7 inch	22.4x14.6×59.2 inch	22.4×14.6×64.7 inch	
Weight	86 kg (189.60 lbs)	117 kg (257.94 lbs)	148 kg (326.28 lbs)	179 kg (394.63 lbs)	210 kg (462.97 lbs)
	241 kg (531.3 lbs)	272 kg (599.66 lbs)	303 kg (668.00 lbs)	334 kg (736.34 lbs)	
Installation	Floor stand				
Operating temperature [3]	Charge : 0 to 50°C (32 to 122°F) Discharge: -20 to 50°C (-4 to 122°F)				
Environmental humidity	≤ 95%RH (No condensation)				
Ingress protection rating	IP65				
Warranty period [4]	5 years / 10years (Optional)				
Scalability	Max. 10 modules per stack, 15 stacks in parallel				
Application	ON Grid / ON Grid + Backup / OFF grid				
Compatible inverters	Refer to compatible inverter list (Compatible with major PCS brands)				
Standard Compliance					
Compliance	UN38.3 / IEC62619 / IEC62040-1 / IEC61000-6-2 / IEC1000-6-4 / IEC62477-1 (More available upon request)				
Ordering and Delivery Parts					
Parts	CHAKRA 2.5-H Pro (Battery Pack)				
	CHAKRA 2.5-H Pro-BCU (Battery Control Unit) and battery base is packed together				

[1] Test conditions: 100% depth of discharge (DOD), 0.2C rate charge & discharge at 25°C.

[2] There is 0.5C or 1C configurations optional in factory default.

[3] Charge/discharge derating occurs when the temperature is below 0°C or above 45°C.

[4] Please refer to the Warranty Letter for applicable conditions.

RESIDENTIAL BATTERY

CHAKRA 5.1-HX-1P1
(High Voltage)

20.48kWh~61.44kWh UN38.3 IEC

Features

Safe and Durable
The LFP battery cells offer 6,000 cycles of longevity and an IP65 rating for enhanced safety, ensuring reliable performance in any conditions.

Hassle-Free Setup
Enjoy the convenience of plug-and-play installation—no external wiring required. Automatic ID assignment makes for quick and easy setup.

Flexible and Expandable
With a 5.1 kWh modular design, each cluster supports up to 12 packs, connecting up to 4 clusters for versatile energy solutions.

Smart Home
Control your home energy effortlessly via App or Web, keeping you connected anytime, anywhere.

Scenarios


Houses


Off-grid Cabins


Small Stores


Small Offces


Small Farms

DATASHEET

Model	CHAKRA 5.1-H4 1P1 CHAKRA 5.1-H9 1P1	CHAKRA 5.1-H5 1P1 CHAKRA 5.1-H10 1P1	CHAKRA 5.1-H6 1P1 CHAKRA 5.1-H11 1P1	CHAKRA 5.1-H7 1P1 CHAKRA 5.1-H12 1P1	CHAKRA 5.1-H8 1P1
Performance					
Cell technology	LFP ($LiFePO_4$)				
Battery module	5.12 kWh, 51.2 V, 44 kg (97 lbs)				
Number of modules	4	5	6	7	8
	9	10	11	12	
Battery usable energy [1]	20.48 kWh	25.60 kWh	30.72 kWh	35.84 kWh	40.96 kWh
	46.08 kWh	51.20 kWh	56.32 kWh	61.44 kWh	
System nominal voltage	204.8 V	256.0 V	307.2 V	358.4 V	409.6 V
	460.8 V	512.0 V	563.2 V	614.4 V	
System operating voltage	179.2 ~ 224.64 V	224 ~ 280.8 V	268.8 ~ 336.96 V	313.6 ~ 393.12 V	358.4 ~ 449.28 V
	403.2 ~ 505.44 V	448 ~ 561.6V	492.8 ~ 617.76 V	537.6 ~ 673.92 V	
System Max.charge and discharge current [2]	50 A				
Communication					
Display	LCD Display (battery operating status, SOC, alerts, etc.)				
Communication	CAN / RS485 / RS232 / Wi-Fi				
General Specification					
Dimension (W×D×H)	660x420x845 mm	660x420x995 mm	660x420x1145 mm	660x420x1295 mm	660x420x1445 mm
	26.0x16.5x33.3 inch	26.0x16.5x39.2 inch	26.0x16.5x45.1 inch	26.0x16.5x51.0 inch	26.0x16.5x56.9 inch
	660x420x1595 mm	660x420x1745 mm	660x420x1895 mm	660x420x2045 mm	
	26.0x16.5x62.8 inch	26.0x16.5x68.7 inch	26.0x16.5x74.6 inch	26.0x16.5x80.5 inch	
Weight	204 kg (449.7 lbs)	248 kg(546.7 lbs)	292 kg (643.7 lbs)	336 kg (740.7 lbs)	380 kg (837.8 lbs)
	424 kg (934.8 lbs)	468 kg (1031.8 lbs)	512 kg (1128.8 lbs)	556 kg (1225.8 lbs)	
Installation	Floor stand				
Operating temperature [3]	Charge : 0 to 50°C (32 to 122°F) Discharge: -20 to 50°C (-4 to 122°F)				
Environmental humidity	≤ 95%RH (No condensation)				
Ingress protection rating	IP65				
Warranty period	5 years / 10years (Optional)				
Scalability	Max 12 modules per stack, 4 stacks in parallel				
Application	ON Grid / ON Grid + Backup / OFF grid				
Compatible inverters	Refer to compatible inverter list (Compatible with major PCS brands)				
Standard Compliance					
Compliance	UN38.3 / IEC62619 / IEC62040-1 / IEC61000-6-2 / IEC1000-6-4 / IEC62477-1 (More available upon request)				
Ordering and Delivery Parts					
Parts	CHAKRA 5.1-HP12-PQC1(Battery Pack)				
	CHAKRA 5.1-HB12-PQC1 (Battery Control Unit) and battery base is packed together				

[1] Test conditions: 100% depth of discharge (DOD), 0.2C rate charge & discharge at 25°C.
[2] There is 0.5C or 1C configurations optional in factory default.
[3] Charge/discharge derating occurs when the temperature is below 0°C or above 45°C.

COMMERCIAL & INDUSTRIAL ENERGY STORAGE SOLUTION

It offers multiple advantages such as safety, reliability, ease of use, and flexible adaptability.

It can be widely used in various application scenarios including industrial parks, community business districts, and photovoltaic storage charging stations to meet company needs such as peak shaving and valley filling, dynamic capacity expansion, demand-side response, and virtual power plants, thereby promoting efficient energy utilization.

Safety Protection

- Multi-level fire protection ensures safety
- Multi-layer collaboration between cloud, edge and end predicts battery safety

Cost-effective

- Dynamic adjustment of temperature control system
- Effectively reduce auxiliary power consumption

Flexible Configuration

- Modular integration, debugging-free installation, and easy deployment
- Flexible capacity modification and expansion
- Scene digital coupling, supporting multi-platform scheduling interaction

Intelligent Management

- Remote upgrade and intelligent maintenance
- Active balancing technology, intelligent optimization of battery status
- Full life cycle management system

COMMERCIAL BATTERY

RT 5.12-HX

High Voltage 20.48~61.44kWh

UN38.3 IEC

Features

- Full Automatic Manufacturing, CCS Technique
- Precise Voltage / Temperature / SOC Detection
- Top - Notch LFP Class A Cell / Strict Capacity Grading
- Build in Wifi for Monitoring and Firmware Update
- Plug & Play Wiring Cable, Easy Installation
- LCD Display Shows Data Visually
- Modular Design, 20 - 61kWh Flexible Configuration

Scenarios

Industrial Parks

Commercial Parks

Livestock Farms

Farms

Manufacturing Bases

DATASHEET

Model	RT 5.12-H4 RT 5.12-H7	RT 5.12-H5 RT 5.12-H8	RT 5.12-H6	RT 5.12-H9 RT 5.12-H11	RT 5.12-H10 RT 5.12-H12
Performance					
Cell technology	LFP ($LiFePO_4$)				
Battery mudule	5.12 kWh, 51.2 V, 43 kg				
Number of modules	4	5	6	9	10
	7	8		11	12
Battery usable energy [1]	20.48 kWh	25.6 kWh	30.72 kWh	46.08 kWh	51.2 kWh
	35.84kWh	40.96 kWh		56.32 kWh	61.44kWh
System nominal voltage	204.8 V	256 V	307.2 V	460.8 V	512 V
	358.4 V	409.6 V		563.2 V	614.4 V
System operating voltage	179.2 ~ 224.64 V	224.0 ~ 280.80 V	268.8 ~ 336.96 V	403.2-505.44 V	448.0-561.60 V
	313.6-393.12 V	358.4-449.28 V		492.8-617.76 V	537.6-673.92 V
System Max. continuous charge and discharge current [2]	100 A				
Recommend Depth of Discharge	90%				
Communication					
Display	LCD Display (battery operating status, SOC, alerts, etc.)				
Communication	CAN / RS485 / RS232 / Wi-Fi / LAN				
General Specification					
Dimension (W×D×H)	566×630×1652 mm			566×630×2220 mm	
	22.3×24.8×65.0 inch			22.3×24.8×87.4 inch	
Weight	250 kg (551.2 lbs)	295 kg (650.4 lbs)	340 kg (749.6 lbs)	542.5 kg (1196.0 lbs)	628.5 kg (1385.6 lbs)
	385 kg (848.8 lbs)	430 kg (948.0 lbs)		585.5 kg (1290.8 lbs)	671.5 kg (1480.4 lbs)
Installation	Floor stand				
Operating temperature [3]	Charge : 0 to 50°C (32 to 122°F) Discharge: -15 to 50°C (5 to 122°F)				
Environmental humidity	≤ 95%RH (No condensation)				
Ingress protection rating	IP20				
Warranty period [4]	5 years / 10years (Optional)				
Scalability	Max. 12 modules per stack, 15 stacks in parallel				
Application	ON Grid / ON Grid + Backup / OFF grid				
Compatible inverters	Refer to compatible inverter list (Compatible with major PCS brands)				
Standard Compliance					
Compliance	UN38.3 / IEC62619 / IEC62040-1 / IEC61000-6-2 / IEC61000-6-4 / IEC62477-1 (More available upon request)				
Ordering and Delivery Parts					
Parts	RT-5.12-QC-A (Battery Pack)				
	RT 5.12-H-BCU (Battery Control Unit)				
	RT-R8-A (Battery Rack)			RT-R12-A (Battery Rack)	

[1] Test conditions: 100% depth of discharge (DOD), 0.2C rate charge & discharge at 25°C.

[2] There is 0.5C or 1C configurations optional in factory default.

[3] Charge/discharge derating occurs when the temperature is below 0°C or above 45°C.

[4] Please refer to the Warranty Letter for applicable conditions.

COMMERCIAL BATTERY

E-MATE 112R-257R

High Voltage 112.5 ~ 257.2 kWh

UN38.3 IEC

Features

- Scalable Capacity Up to 257 kWh
- High - Safety LFP Cell System
- Zero - Maintenance Air Cooling
- Intelligent Monitoring & O&M
- Industrial - Grade Mechanical Design
- Rapid Plug - and - Play Deployment

Scenarios

Industrial Parks

Commercial Parks

Livestock Farms

Farms

Manufacturing Bases

DATASHEET

Model	E-MATE-112R E-MATE-192R	E-MATE-128R E-MATE-208R	E-MATE-144R E-MATE-225R	E-MATE-160R E-MATE-241R	E-MATE-176R E-MATE-257R
Performance					
Cell technology	LFP ($LiFePO_4$)				
Battery module	16.0768 kWh, 51.2 V, 115kg (253.53 lbs)				
Number of modules	7	8	9	10	11
	12	13	14	15	16
Battery usable energy [1]	112.5376kWh	128.6144kWh	144.6912kWh	160.768kWh	176.8448kWh
	192.9216kWh	208.9984kWh	225.0752kWh	241.152kWh	257.2288kWh
System nominal voltage	358.4V	409.6V	460.8V	512V	563.2V
	614.4V	665.6V	716.8V	768V	819.2V
System operating voltage	313.6~403.2V	358.4～460.8V	403.2～518.4V	448～576V	492.8～633.6V
	537.6～691.2V	582.4～748.8 V	627.2～806.4V	672～864V	716.8～921.6V
System Max. charge and discharge current	157 A				
Recommend Depth of Discharge	90%				
Communication					
Display	LCD Display (battery operating status, SOC, alerts, etc.)				
Communication	CAN / RS485/Bluetooth+wi-fi				
General Specification					
Dimension (W×D×H)	1052*802*1776mm				1573*802*1502mm
	1573*802*1502mm	1573*802*1502mm			
	41.42×31.57×69.92 inch				61.93×31.57×59.13 inch
	61.93×31.57×59.13 inch	61.93×31.57×69.92 inch			
Weight	1020 kg (2248.71 lbs)	1140 kg (2513.27 lbs)	1260 kg (2777.82 lbs)	1380 kg (3042.38 lbs)	1520 kg (3351.02 lbs)
	1640 kg (3615.58 lbs)	1760 kg (3880.13 lbs)	1880 kg (4144.69 lbs)	2000 kg (4409.24 lbs)	2120 kg (4673.79 lbs)
Installation	Floor stand				
Operating temperature [2]	Charge: 0°C to 55°C (32°F to 131°F) Discharge:-20°C to 55°C (-4°F to 131°F)				
Environmentalhumidity	≤ 95%RH (No condensation)				
Ingress protection rating	IP20				
Warranty period [3]	5 years / 10years (Optional)				
Scalability	Max. 16 modules per stack, 9 stacks in parallel				
Cooling method	Natural cooling				
Application	ON Grid / ON Grid + Backup / OFF grid				
Compatible inverters	Refer to compatible PCS list				
Cycle life	8000 cycles (25±2°C, 0.5P / 0.5P, 70% SOH)				
Standard Compliance					
Compliance	UN38.3/IEC62619/63056/60730/IEC6100-6-2/IEC62477-1				
Ordering and Delivery Parts					
Battery Pack	E-MATE- 16 -QC				
Battery Control Unit	E-MATE-BCU-M-112-QC	E-MATE-BCU-M-128-QC	E-MATE-BCU-M-144-QC	E-MATE-BCU-M-160-QC	E-MATE-BCU-M-176-QC
	E-MATE-BCU-M-192-QC	E-MATE-BCU-M-208-QC	E-MATE-BCU-M-225-QC	E-MATE-BCU-M-241-QC	E-MATE-BCU-M-257-QC
Battery Rack	E-MATE-R12	E-MATE-R12	E-MATE-R12	E-MATE-R12	E-MATE-R15
	E-MATE-R15	E-MATE-R18	E-MATE-R18	E-MATE-R18	E-MATE-R18

[1] Test conditions: 100% depth of discharge (DOD), 0.5C rate charge & discharge at 25°C.

[2] Charge/discharge derating occurs when the temperature is below 0°C or above 45°C.

[3] Please refer to the Warranty Letter for applicable conditions.

C&I ENERGY STORAGE SYSTEM

E-MATE 50-61-A

Air Cooling 50kW/61kWh

UN38.3

Features

- PV / Battery / AC / DG All in One Hybrid System
- 4*MPPT / 2* Bat and 2* Coms
- Used in Both On-Grid and Off-Grid Application
- 10ms UPS Switching Backup Power
- Supports 6 in Parallel Both AC and DC Side
- Multi-Level Protection and Alarm (Gas, Water, Ventilation)
- IP55-Certified, Suitable for More Outdoor Applications
- Intelligent EMS, Remote Monitoring and Fault Diagnose

Scenarios

Industrial Parks

Commercial Parks

Livestock Farms

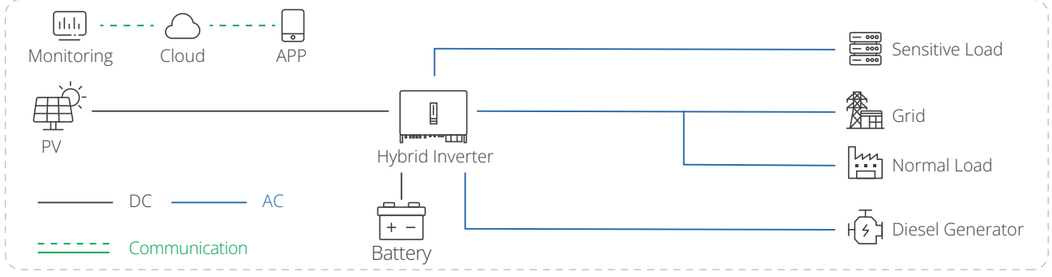
Farms

Manufacturing Bases

DATASHEET

Model	E-MATE 50-61-A
Battery Parameters	
Cell technology	LFP-3.2 V / 100 Ah
Battery pack	5.12 kWh, 51.2 V
Number of packs	12
Rated capacity	61.44 kWh
Rated voltage	614.4 V
Rated current	80 A
Voltage range	480 V ~ 700.8 V
Charge / discharge rate	0.8P
AC Side Parameters	
Rated output power	50 kW
Rated grid voltage	3L / N / PE220 / 380, 230 / 400Vac
Rated output current	76 A
Allowable grid voltage range	230 V ~ 400 V
Rated grid frequency	50Hz / 60Hz
Output THDi	< 3%
Power factor	-1 ~ 1
Overload capacity	110% (long term), 120% (1 min)
On / Off-grid switching time	< 20ms
Charge / discharge switching time	< 100ms
Maximum efficiency	97.80%
PV Side Parameters	
PV side voltage range	150 V-850 V (full power above 500 V)
DC maximum current	4*30 A
DC maximum power	75 kW
MPPT quantity	4
Other Parameters	
Dimension (W×D×H)	740×1040×2330 mm 29.1x40.9x91.7 inch
Weight	1220 kg (2689.6 lbs)
Operating temperature	-20°C~+50°C (-22°F~+131°F) (Derating Below-15°C or above 45°C)
Relative humidity	0~95% (No condensation)
Maximum working altitude	≤4000 m (> 2000 m Derating)
Noise	≤75dB
IP Rating	IP55
Cooling method	Forced air cooling
FSS	Aerosol: module-level + stack-level, water firefighting, combustible gas detection and exhaust
Communication	CAN / RS485 / TCP
Cycle life	6000 cycles (25±2°C, 0.5P / 0.5P, 70% SOH)
Standard Compliance	
Compliance	UN38.3 / UN3480 / IEC62619 / IEC6100-6-2 / IEC62477-1 / CQC (More available upon request)

SYSTEM DIAGRAM



C&I ENERGY STORAGE SYSTEM

E-MATE 105-221-A

Air Cooling 105kW/221kWh

UN38.3 UN3480

Features

- Battery + PCS On - Grid Storage System
- Used in On - Grid Storage / PV AC Couple System
- Supports 10 in Parallel in AC Side
- 20kWh Modular - Design Air Cooling Battery
- Multi - Level Protection and Alarm (Gas, Water, Ventilation)
- Intelligent EMS, Remote Monitoring and Fault Diagnose

Scenarios

Industrial Parks

Commercial Parks

Livestock Farms

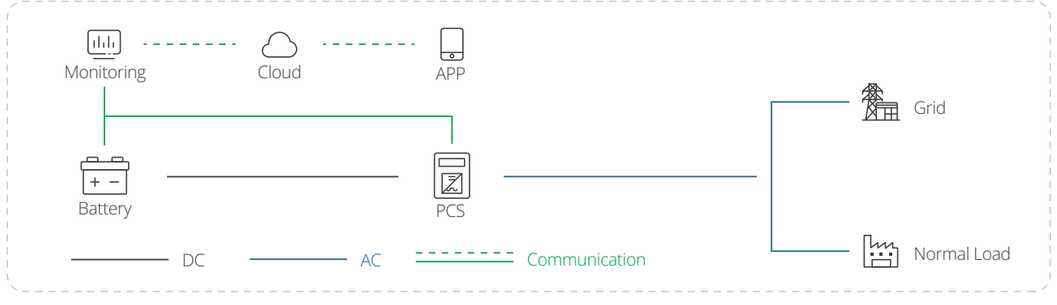
Farms

Manufacturing Bases

DATASHEET

Model	E-MATE 105-221-A
Battery Parameters	
Cell technology	LFP-3.2 V / 314 Ah
Battery pack	20. 096 kWh, 64 V
Number of packs	11
Rated capacity	221.056 kWh
Rated voltage	704 V
Rated current	157 A
Voltage range	616 V ~ 792 V
Charge / discharge rate	0.5P
AC Side Parameters (optional)	
Rated output power	105 kW
Rated grid voltage	400 V
Rated output current	167 A
Allowable grid voltage range	340 V ~ 440 V
Rated grid frequency	50Hz / 60Hz
Output THDi	< 3%
Power factor	-1 ~ 1
AC output format	3W+PE+N
Overload capacity	110% (long-term), 120% (1min)
Charge / discharge switching time	<100ms
Maximum efficiency	98.5%
Other Parameters	
Dimension (W×D×H)	1380×1540×2330 mm 54×61×90 inch
Weight	2750 kg (6062.71 lbs)
Operating temperature	-20°C~+50°C (-22°F~+131°F) (Derating Below-15°C or above 45°C)
Relative humidity	0 ~ 95% (No condensation)
Maximum working altitude	≤4000 m (> 2000 m Derating)
Noise	≤75dB
IP Rating	IP55
Cooling method	Forced air cooling
FSS	Aerosol: module-level + stack-level, water firefighting, combustible gas detection and exhaust
Communication	CAN / RS485 / TCP
Cycle life	8000 cycles (25±2°C, 0.5P / 0.5P, 70% SOH)
Standard Compliance	
Compliance	UN38.3 / UN3480

SYSTEM DIAGRAM



C&I ENERGY STORAGE SYSTEM

E-MATE 128-A

Air Cooling 80.3 ~ 128.6kWh

UN38.3 IEC

Features

- Scalable Capacity Up to 128 kWh
- High - Safety LFP System With Multi-Level BMS
- Precision Thermal Management
- Intelligent Cloud Monitoring & Control
- Industrial - Grade IP55 Enclosure
- Rapid Plug - and-Play Deployment

Scenarios

Mall and medium-sized industrial And commercial enterprises

Factories, workshops, commercial Complexes and office buildings

Outdoor sites

Communication base stations and signal towers, Meteorological and environmental monitoring stations, Outdoor construction and temporary camps

Remote areas

Islands and mountainous villages, Border guard posts and field workstations

Special emergencies

Emergency disaster relief and rescue, Large-scale events and sports event support

DATASHEET

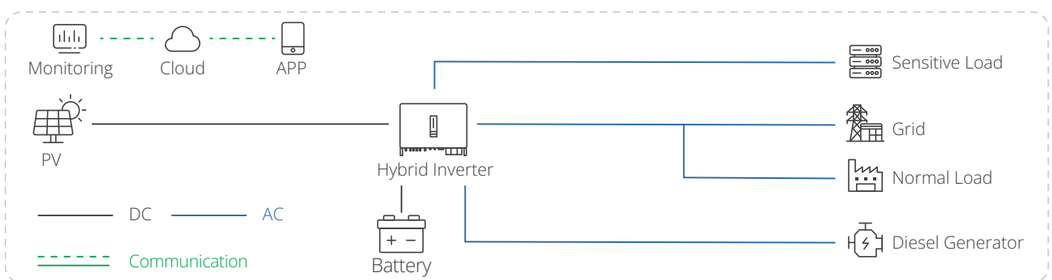
Model	E-MATE 80-A	E-MATE 96-A	E-MATE 112-A	E-MATE 128-A
Battery Parameters				
Cell technology	LFP (LiFePO4)			
Battery module	16.0768 kWh, 51.2 V, 112kg (246.92 lbs)			
Number of modules	5	6	7	8
Battery usable energy [1]	80.384kWh	96.4608kWh	112.5376kWh	128.6144kWh
System nominal voltage	256V	307.2V	358.4V	409.6V
System operating voltage	224~288V	268.8～345.6V	313.6～403.2V	358.4～460.8V
System Max. charge and discharge current	157A			
Recommend Depth of Discharge	90%			
Charge / discharge rate	0.5P			
Other Parameters				
Dimension (W×D×H)	780*1257*2373mm			
	30.71 × 49.49 × 93.43 inch			
Weight	1264 kg(2786.64 lbs)	1376 kg(3033.56 lbs)	1488 kg(3280.47 lbs)	1600 kg(3527.39 lbs)
Installation	Floor stand			
Operating temperature [2]	Charge: 0°C to 50°C (32°F to 122°F) Discharge:-20°C to 50°C (-4°F to 122°F)			
Environmental humidity	≤ 95%RH (No condensation)			
IP Protection	IP55			
Anti Corrosion Level	C4-M			
Warranty period [3]	5 years / 10years (Optional)			
Cooling method	Forced air cooling			
Altitude	≤4000 m(> 2000m Derating)			
Display	LCD Display (battery operating status, SOC, alerts, etc.)			
Communication	CAN / RS485/Bluetooth+wi-fi			
Application	ON Grid / ON Grid + Backup / OFF grid			
Compatible inverters	Refer to compatible PCS list			
Cycle life	8000 cycles (25±2°C, 0.5P / 0.5P, 70% SOH)			
Fire Protection System	Gas fire fighting (aerosol): cabinet level, water fire fighting, smoke sensing, temperature sensing, pressure relief valve			
Standard Compliance				
Compliance	UN38.3/IEC62619/63056/60730/IEC6100-6-2/IEC62477-1			

[1] Test conditions: 100% depth of discharge (DOD), 0.5C rate charge & discharge at 25°C.

[2] Charge/discharge derating occurs when the temperature is below 0°C or above 45°C.

[3] Please refer to the Warranty Letter for applicable conditions.

SYSTEM DIAGRAM



C&I ENERGY STORAGE SYSTEM

E-MATE 257-A

Air Cooling 144.6kW/257.2kWh

UN38.3 IEC

Features

- Scalable Capacity Up to 257 kWh
- High - Safety LFP System With Multi-Level BMS
- Zero - Maintenance Air Cooling
- Intelligent Cloud Monitoring & Control
- Industrial - Grade IP55 Enclosure
- Rapid Plug - and-Play Deployment

Scenarios

Mall and medium-sized industrial And commercial enterprises

Factories, workshops, commercial Complexes and office buildings

Outdoor sites

Communication base stations and signal towers, Meteorological and environmental monitoring stations, Outdoor construction and temporary camps

Remote areas

Islands and mountainous villages, Border guard posts and field workstations

Special emergencies

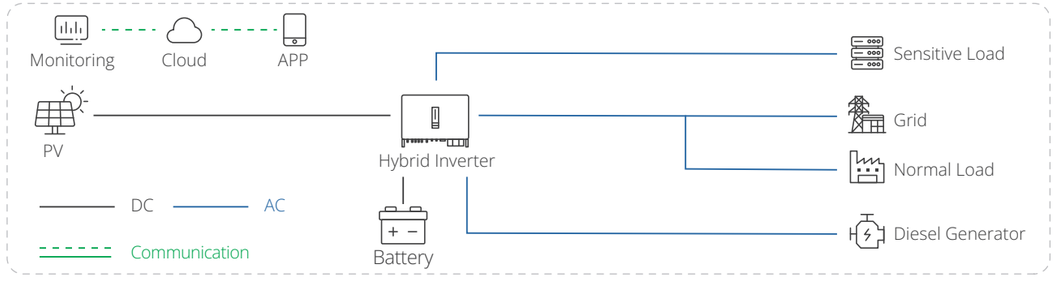
Emergency disaster relief and rescue, Large-scale events and sports event support

DATASHEET

Model	E-MATE 144-A E-MATE 208-A	E-MATE 160-A E-MATE 225-A	E-MATE 176-A E-MATE 241-A	E-MATE 192-A E-MATE 257-A
Battery Parameters				
Cell technology	LFP (LiFePO4)			
Battery pack	16.0768 kWh, 51.2 V, 112kg (246.92 lbs)			
Number of modules	9	10	11	12
	13	14	15	16
Battery usable energy [1]	144.6912kWh	160.768kWh	176.8448kWh	192.9216kWh
	208.9984kWh	225.0752kWh	241.152kWh	257.2288kWh
System nominal voltage	460.8V	512V	563.2V	614.4V
	665.6V	716.8V	768V	819.2V
System operating voltage	403.2～518.4V	448～576V	492.8～633.6V	537.6～691.2V
	582.4～748.8 V	627.2～806.4V	672～864V	716.8～921.6V
System Max. charge and discharge current	157A			
Recommend Depth of Discharge	90%			
Charge / discharge rate	0.5P			
Other Parameters				
Dimension (W×D×H)	1400*1335*2373mm			
	55.12 × 52.56 × 93.43 inch			
Weight	2216 kg(4885.44 lbs)	2328 kg(5132.36 lbs)	2440 kg(5379.27 lbs)	2552 kg(5626.19 lbs)
	2664 kg(5873.11 lbs)	2776 kg(6120.03 lbs)	2888 kg(6366.94 lbs)	3000 kg(6613.86 lbs)
Installation	Floor stand			
Operating temperature [2]	Charge: 0°C to 50°C (32°F to 122°F) Discharge:-20°C to 50°C (-4°F to 122°F)			
Environmental humidity	≤ 95%RH (No condensation)			
IP Protection	IP55			
Anti Corrosion Level	C4-M			
Warranty period [3]	5 years / 10years (Optional)			
Cooling method	Forced air cooling			
Altitude	≤4000 m(> 2000m Derating)			
Display	LCD Display (battery operating status, SOC, alerts, etc.)			
Communication	CAN / RS485/Bluetooth+wi-fi			
Application	ON Grid / ON Grid + Backup / OFF grid			
Compatible inverters	Refer to compatible PCS list			
Cycle life	8000 cycles (25±2°C, 0.5P / 0.5P, 70% SOH)			
Fire Protection System	Gas fire fighting (aerosol): cabinet level, water fire fighting, smoke sensing, temperature sensing, pressure relief valve			
Standard Compliance				
Compliance	UN38.3/IEC62619/63056/60730/IEC6100-6-2/IEC62477-1			

[1] Test conditions: 100% depth of discharge (DOD), 0.5C rate charge & discharge at 25°C.
[2] Charge/discharge derating occurs when the temperature is below 0°C or above 45°C.
[3] Please refer to the Warranty Letter for applicable conditions.

SYSTEM DIAGRAM



C&I ENERGY STORAGE SYSTEM

E-MATE 125-261-L

Liquid Cooling 125kW/261kWh

UN38.3

CHUBB

Features

- Battery + PCS On Grid Storage System
- 52.25kWh Modular Design Liquid Cooling Battery
- Used in On Grid Storage / PV AC Couple System
- Multi - Level Protection and Alarm (Gas, Water, Ventilation)
- Supports 10 in Parallel in AC Side
- Intelligent Ems, Remote Monitoring and Fault Diagnose

Scenarios


Industrial Parks


Commercial Parks


Livestock Farms

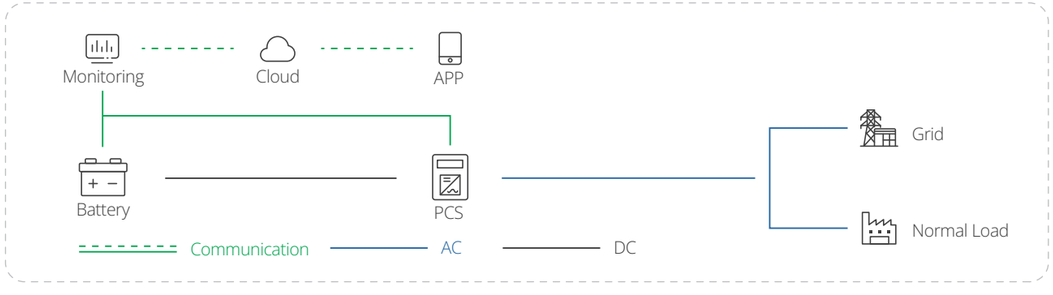

Farms


Manufacturing Bases

DATASHEET

Model	E-MATE 125-261-L
Battery Parameters	
Cell technology	LFP-3.2 V / 314 Ah
Battery pack (Wh/V)	52.25 kWh, 166.4 V
Number of packs	5
Battery pack protection level	IP67
Rated capacity	261.25 kWh
Rated voltage	832 V
Rated current	157 A
Voltage range	728 V ~ 936 V
Charge / discharge rate	0.5 P
AC Side Parameters	
Rated power	125 kW
Rated voltage	400V±15%
Rated frequency	50Hz / 60Hz
Rated output current	180 A
Power factor	-1 ~ 1
Charge/discharge switching time	< 100ms
PCS maximum efficiency	98.5%
Overload capacity	110% (long-term), 120%(1 min)
Other Parameters	
Dimension (W×D×H)	1100×1424×2350 mm 43.31×56.06×92.52 inch
Weight	2700 kg
IP Rating	IP55
Cooling method	Liquid cooling
FFS	Aerosol + combustible gas detection and exhaust
Cycle life	8000 cycles (25±2°C,0.5P/0.5P, 70% SOH)
Operating temperature	-20°C ~ +50°C (-22°F ~ +122°F) (Derating below-15°C or above 45°C)
Relative humidity	0 ~ 95% (No condensation)
Maximum working altitude	≤ 4000m (> 2000m Derating)
Noise	≤75dB
Communication	CAN/RS485/4G+LAN
Corrosion Resistance	C4
Standard Compliance	
Compliance	UL9540A (system level) / PGS 37-1 / UN38.3 / IEC62619 / IEC62477 / IEC61000 / EN18031-1 / EU / NRS097-2-1 / EN50549-1 / EN50549-2

SYSTEM DIAGRAM



C&I ENERGY STORAGE SYSTEM

E-MATE 200-418-L

Liquid Cooling 200kW/418kWh

UN38.3 IEC RoHS CE

Features

- Battery + PCS On Grid Storage System
- 52.25kWh Modular Design Liquid Cooling Battery
- Used in On Grid Storage / PV AC Couple System
- Multi - Level Protection and Alarm (Gas, Water, Ventilation)
- Supports 10 in Parallel in AC Side
- Intelligent EMS, Remote Monitoring and Fault Diagnose

Scenarios


Industrial Parks


Commercial Parks


Livestock Farms

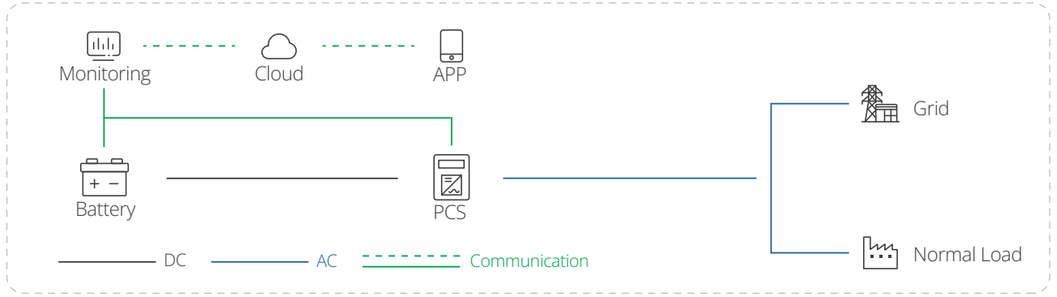

Farms


Manufacturing Bases

DATASHEET

Model	E-MATE 200-418-L
Battery Parameters	
Cell technology	LFP-3.2 V / 314 Ah
Battery packs	52.25 kWh, 166.4 V
Number of packs	8
Rated capacity	418 kWh
Rated voltage	1331.2 V
Voltage range	1164.8 V ~ 1497.6 V
Charge / discharge rate	0.5P
AC Side Parameters (optional)	
Rated output power	200 kW
Rated grid voltage	800 V
Rated output current	144 A
Allowable grid voltage range	3W+PE, -15% ~ +10% (Settable)
Rated grid frequency	50Hz / 60 Hz
Output THDi	< 3%
Power factor	-1 ~ 1
Overload capacity	110% (long term), 120% (1 min)
Charge / discharge switching time	< 100ms
Maximum efficiency	99%
Other Parameters	
Dimension (W×D×H)	1520*1450*2390 mm
	59.8*57*94.1 inch
Weight	4000 kg (8816 lbs)
Operating temperature	-20°C ~ +50°C (-22°F ~ +122°F) (Derating below-15°C or above 45°C)
Relative humidity	0 ~ 95% (No condensation)
Maximum working altitude	≤ 4000m (> 2000m Derating)
Noise	≤75dB
IP Rating	IP55
Cooling method	Liquid cooling
FSS	Aerosol: module-level + stack-level, water firefighting, combustible gas detection and exhaust
Communication	CAN / RS485 / 4G+LAN
Cycle life	8000 cycles (25 ± 2°C, 0.5P / 0.5P, 70% SOH)
Standard Compliance	
Compliance	IEC62619,IEC63056,IEC62477-1,IEC61000-6-2/-4,IEC60730,UN38.3,Rohs

SYSTEM DIAGRAM



C&I ENERGY STORAGE SYSTEM

E-MATE 261-L

Liquid Cooling 125kW-261kWh

UN38.3 MSDS Material Safety Data Sheet IEC

Hybrid Inverter

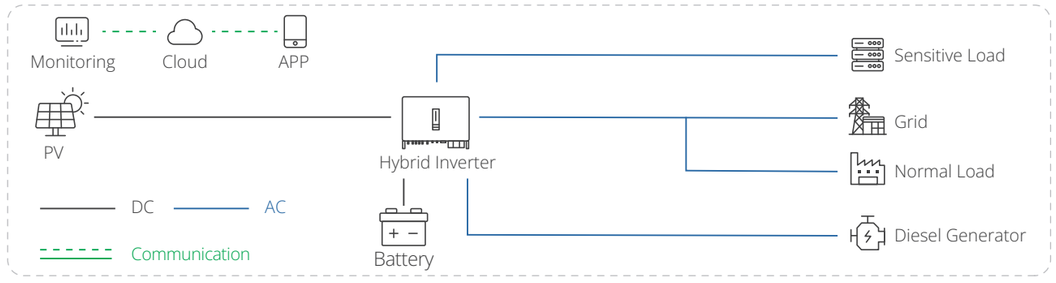
Battery Cabinet

Hybrid Inverter + Battery Cabinet

Features

- Use in Different Applications By Choosing Cabinets
- Intelligent EMS, Remote Monitoring and Fault Diagnose
- Multi - Level Protection and Alarm (Gas, Water, Ventilation)
- Single Cluster Battery Management

SYSTEM DIAGRAM (FlexCore 125kW~500kW/261kWh~1044kWh)



DATASHEET

Model	E-MATE 261-L	
System Composition		
125kW three-phase high-voltage hybrid inverter	Includes PCS / MPPT / STS , 1174 x 814 x 400 mm , 170 kg , No transformer	1 set
Battery cabinet (optional, <12)	261 kWh , 1000×1450×2300 mm , 2.7 t	1 set
DC input (photovoltaic side)		
Recommended maximum PV component power	250 kW	
Maximum available PV input power	250 kW	
Maximum input voltage	1000 V	
Rated input voltage	600 V	
Starting voltage	180 V	
MPPT voltage range	150 V - 950 V	
Maximum input current	10*42 A	
Maximum input short-circuit current	10*60 A	
Number of MPPT/Maximum number of input group serials	10/20	
Battery		
Battery type	LFP	
Battery voltage range	300 - 950 V	
Maximum charging/discharging current	200 A / 100 A + 100 A	
Number of battery ports	2	
The maximum charge and discharge current of each battery port	100 A	
The way of communication	CAN/RS 485	
AC output (power grid side)		
Rated output power	125 kW	
Maximum output apparent power	125 kVA	
Rated power grid voltage	3/N/PE , 220 V / 380 V , 230 V / 400 V	
Rated power grid frequency	50 Hz / 60 Hz	
Rated power grid output current	189.9 A / 180.4 A	
Power factor	>0.99 (0.8 Ahead ..0.8 Lag behind)	
Total current harmonic distortion rate	<3%	
AC output (out-grid side)		
Rated output power	125 kW	
Maximum output depends on the power.	125K: 1.2x rated overload, 100 seconds; 1.4x rated overload, 10 seconds; 1.6x rated overload, 200 ms	
Switching time off the Internet	<10 ms	
Rated output voltage	3 / N / PE , 220 V / 380 V 230 V / 400 V	
Rated frequency	50 Hz / 60 Hz	
Total voltage harmonic distortion rate	<2%	
AC input (generator)		
Maximum input power	125 kW	
Rated input current	189.9 A / 180.4 A	
Rated input voltage	3 / N / PE, 220 V / 380 V ; 3 / N / PE, 230 V / 400 V	
Rated input frequency	50 Hz / 60 Hz	
Basic parameters		
Maximum allowable phase imbalance (grid side and off-grid side)	100 %	
Maximum power per phase (grid side and off-grid side)	41.66kW	
Size (width x height x depth)	1174 x 814 x 400 mm	
Weight	170 kg	
Topology	No transformer	
Working environment temperature/humidity	-25 ~ +60℃ / 0 ~ 100 %	
Protection level	IP66	
Cooling method	Intelligent air cooling	
The highest working altitude	3000 m	
Standard Compliance		
Compliance	UN38.3 & MSDS/IEC62619/63056/60730/IEC61000-2/-4	

C&I ENERGY STORAGE SYSTEM

FlexCore Series

Liquid Cooling 125kW~1MW/261kWh~2088kWh

UN38.3 MSDS Material Safety Data Sheet IEC

Battery Cabinet **Electrical Cabinet** **STS Cabinet** **PV Cabinet**

Features

- Use in Different Applications By Choosing Cabinets
- Intelligent EMS, Remote Monitoring and Fault Diagnose
- Multi - Level Protection and Alarm (Gas, Water, Ventilation)
- Single Cluster Battery Management

Scenarios

Industrial Parks

Commercial Parks

Livestock Farms

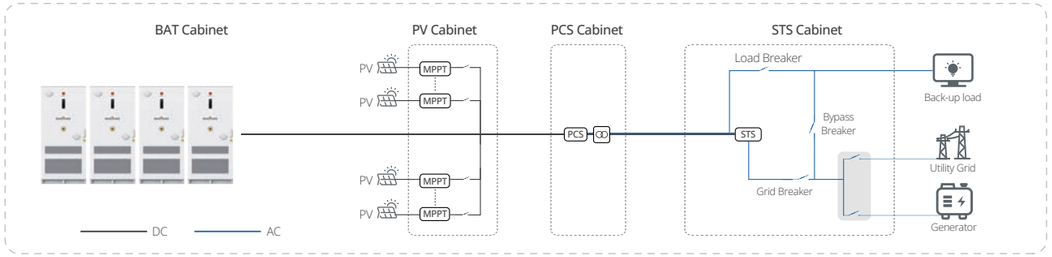
Farms

Manufacturing Bases

DATASHEET

Model	FlexCore 125kW-261kWh		FlexCore 250kW-522kWh		FlexCore 500kW-1044kWh		FlexCore 1000kW-2088kWh	
System Composition								
Electrical cabinet	Includes PCS / MPPT / STS/ATS, 1200*1100*2100mm,1110kg	1 set	Includes PCS / STS/ATS, 1300*1100*2100mm,1700kg	1 set	Includes STS/ATS etc., 950*900*2100mm,600kg	1 set	Includes STS/ATS etc., 1500*1000*2100mm800kg	1 set
PCS (PCS cabinet)	125 kW isolated type, built into electrical cabinet	/	250 kW isolated type, built into electrical cabinet	/	500 kW isolated type, 1300*1100*2100mm,2200kg	1 set	1000 kW isolated type, 1450*1100*2100mm,1240kg	1 set
MPPT (MPPT cabinet)	180 kW, built into electrical cabinet	/	360 kW, 650*900*2100mm,360kg	1 set	360 kW, 650*900*2100mm,360kg	2 set	360 kW, 650*900*2100mm,360kg	4 set
Battery cabinet (optional, <16)	261 kWh, 1000×1450×2300 mm, 2700kg	1 set	261 kWh,1000×1450×2300 mm, 2700kg	2 set	261 kWh,1000×1450×2300 mm, 2700kg	4 set	261 kWh,1000×1450×2300 mm, 2700kg	8 set
PV DC Input (Optional)								
Input voltage range	150-Vbat, min							
Full power MPPT voltage range	340-Vbat, min							
Maximum input voltage	1000 V							
Maximum module number	3		6		6		6	
Maximum PV power	180 kW (60 kW*3)		360 kW (60 kW*6)		360 kW (60 kW*6)		360 kW (60 kW*6)	
Single module MPPT channel number	4							
Maximum MPPT current of each channel	45 A							
Maximum MPPT power of each channel	15 kW							
Battery DC Input								
Input voltage range	728 V ~ 936 V							
Maximum charge and discharge power	0.5P							
Battery cabinet energy (single)	261 kWh							
AC Grid Connection								
Rated capacity	125 kVA		250 kVA		500 kVA		1000 kVA	
Rated AC voltage	400 V							
Rated frequency	50 / 60Hz							
Rated output current	182 A		364 A		728 A		1456 A	
Maximum input current	364 A		364 A		728 A		1456 A	
Power factor range	>0.99 (-0.8 ~ 0.8)							
AC connection	3W+N+PE							
AC off-grid								
Rated output power	125 kW (@ Resistive load)		250 kW (@ Resistive load)		500 kW (@ Resistive load)		1000 kW (@ Resistive load)	
Rated output voltage	400 V							
Rated output current	182 A		364 A		728 A		1456 A	
Rated frequency	50 / 60Hz							
Basic Parameters								
Built-in isolation transformer	Yes		Yes		Yes		No	
Diesel Generator connection	Yes		Yes		Yes		Yes	
IP Rating	IP54							
On-grid to off-grid switching time (with STS)	<20ms							
Cooling method	Electrical cabinet	Intelligent air cooling						
	Battery cabinet	Intelligent liquid cooling						
Operating temperature range	-25 ~ 45°C							
Relative humidity	0-95% (No condensation)							
Compliance								
Electrical cabinet	IEC 62477/IEC62109/IEC 61439							
Battery cabinet	UN38.3 / IEC62619 / IEC63056/IEC60730/IEC61000/IEC62477							

SYSTEM DIAGRAM (125kW~1MW/261kWh~2088kWh)

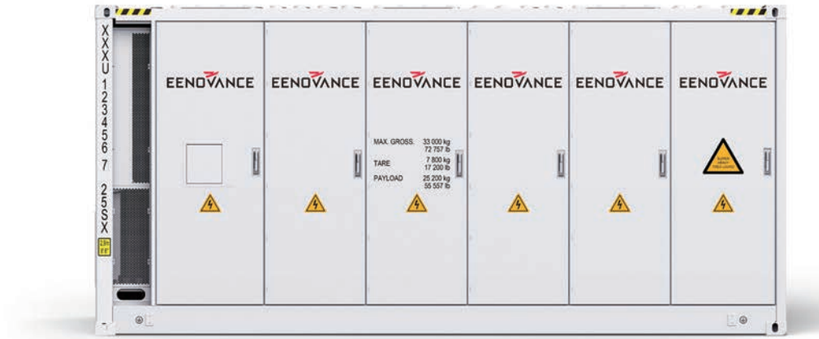


BATTERY ENERGY STORAGE SYSTEM

G-Power 1500-3134-L

Liquid Cooling 1.5MW/3MWh

UN3536 UN38.3



Features

- High - Density 1.5MW/3.134MWh Container System
- Advanced Liquid Cooling Technology
- Full-Scenario Grid Support
- Intelligent Cloud Platform
- Multi - Level Safety Protection
- Rapid Deployment Capability

Scenarios


Industrial Parks


Commercial Parks


Livestock Farms


Farms


Manufacturing Bases

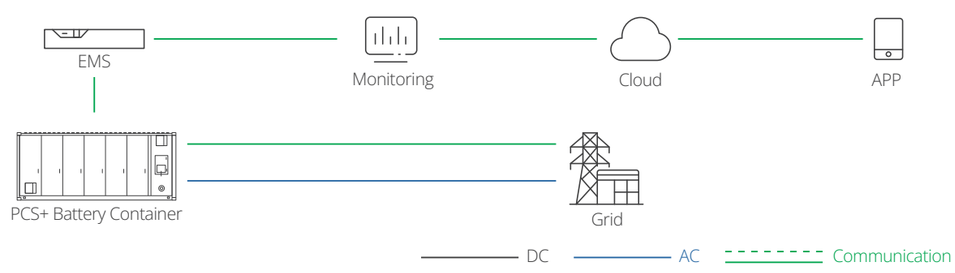

Photovoltaic Parks


Wind Power Bases

DATASHEET

Model	G-Power 1500-3134-L
Battery Parameters	
Cell technology	LFP-3.2 V / 314 Ah
Battery pack configuration	1P52S
Battery cluster configuration	1P260S
System configuration	12*1P260S
Rated power	3.134 MWh
Rated voltage	832 Vdc
Voltage range	728 Vdc ~ 936 Vdc
Charge / discharge rate	0.5P
AC Side Parameters (optional)	
Rated output power	12*125 kW
Rated grid voltage	400Vac
Rated output current	12*18 0 A
Allowable grid voltage range	3W+N+PE, -15% ~ +15% (Settable)
Rated grid frequency	50Hz / 60 Hz
Output THDi	< 3%
Power factor	-1 ~ 1
Overload capacity	110% (long term), 120% (1 min)
Charge / discharge switching time	< 100ms
Maximum efficiency	99%
Other Parameters	
Dimension (W×D×H)	6058×2438×2896 mm
	238.5×96×114 inch
Weight	33 T (99208.0 lbs)
Operating temperature	-20°C~+50°C (-68°F~+ 122°F) (Derating below -15°C or above 45°C)
Relative humidity	5 ~ 95% (No condensation)
Maximum working altitude	≤4000 m (> 2000 m Derating)
Noise	≤75dB
IP Rating	IP54
Cooling method	Liquid cooling
FSS	Aerosol: module-level + containerized-level, water firefighting, combustible gas detection and exhaust, explosion venting design
Communication	CAN/RS485/4G+LAN
Cycle life	8000 cycles (25±2°C, 0.5P/0.5P, 70% SOH)
Corrosion Resistance	C4M
Standard Compliance	
Compliance	UN3536,IEC62619,IEC63056,IEC62477-1,IEC61000-6-2/-4,IEC60730,UN38.3,Rohs

SYSTEM DIAGRAM



BATTERY ENERGY STORAGE SYSTEM

G-Power 5016-L

Liquid Cooling 5.016MWh

UN38.3 IEC RoHS CE

Features

- Supports (BMS, PMS, EMS) Deep Integration
- Modular Design, Flexible Cluster Selection
- Electrical Safety / Isolation and Fire Resistance
- Multi - Level Protection and Alarm (Gas, Water, Ventilation)
- IP55 Protection Rating, Outdoor Installation
- Intelligent EMS, Remote Monitoring and Fault Diagnose

Scenarios


Industrial Parks


Commercial Parks


Livestock Farms


Farms


Manufacturing Bases

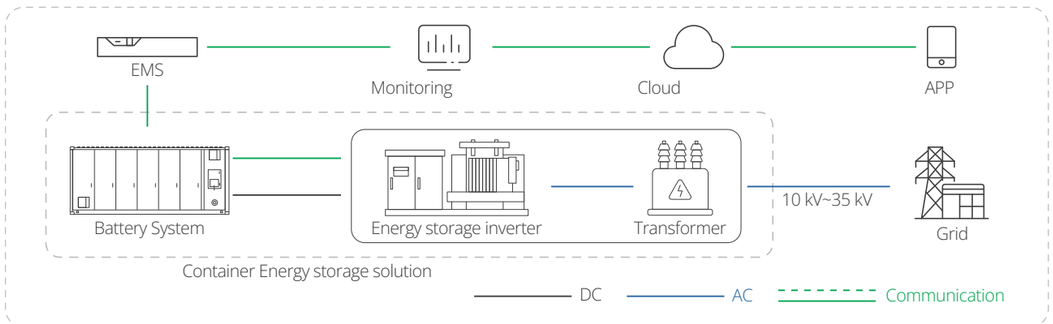

Photovoltaic Parks


Wind Power Bases

DATASHEET

Model	G-Power 5016-L
Battery Parameters	
Cell technology	LFP-3.2 V / 314 Ah
Battery pack configuration	1P104S
Battery cluster configuration	1P416S
System configuration	12*1P416S
Rated power	5.016 MWh
Rated voltage	1331.2 V
Voltage range	1164.8 V ~1497.6V
Charge / discharge rate	0.5P
Other Parameters	
Dimension (W×D×H)	6058×2438×2896 mm
	238.5×96×114 inch
Weight	42 (92594.04lbs)
Operating temperature range	-20 ~ +50°C (-4 ~ +122°F)(Derating below -15°C or above 45°C)
Relative humidity	5 ~ 95% (No condensation)
Maximum working altitude	≤4000 m (> 2000 m Derating)
Noise	≤75dB
IP Rating	IP55
Cooling method	Liquid cooling
FSS	Aerosol: module-level + containerized-level, water firefighting, combustible gas detection and exhaust, explosion venting design
Communication	CAN / RS485 / 4G+LAN
Cycle life	8000 cycles (25±2°C, 0.5P/0.5P, 70% SOH)
Corrosion Resistance	C4-M
Standard Compliance	
Compliance	IEC62619,IEC63056,IEC62477-1,IEC61000-6-2/-4,IEC60730,UN38.3,Rohs

SYSTEM DIAGRAM



SMART ENERGY MANAGEMENT SYSTEM

AIMAN Technology — AI + ENERGY STORAGE

EENOVANCE's wholly owned subsidiary, AIMAN Technology, is advancing innovative applications of artificial intelligence in the energy sector. By integrating intelligent algorithms with energy storage systems, EENOVANCE enables real-time monitoring, smart scheduling, and predictive optimization of storage assets, enhancing the safety, efficiency, and economic performance of energy systems.

Relying on advanced AI models and data analysis capabilities, Aimean Technology is committed to creating intelligent energy solutions for the future, accelerating the upgrade of the energy storage industry towards digitalization, intelligence, and platformization. It empowers global energy transformation with AI technology and collaborates with global partners and customers to jointly build a greener, smarter, and more sustainable energy future.

Build in WIFI for monitoring and firmware update effortless smart energy management

Core control system — EMS

With EENOVANCE' s solutions, you can easily manage your home energy anytime, monitor and optimize your power plants, and drive commercial success wherever you are.

Data Acquisition and Real - Time Monitoring

Data Analysis and Optimization

Intelligent Control and Scheduling Security and Alarms

Data Visualization and Integrated Management

App and Web Real - Time Monitoring

Global Marketing

EENOVANCE actively works on a variety of online and offline marketing events to promote interactions with customers, speed up brand promotion, and expand a broader market space, and empowers global clients to grow together.

CASES

Residential Storage System Cases

15.96kWh

- August, 2025
- Location: Germany
- Configuration:
  3 * MANA 5.3 batteries

32.14kWh

- July, 2025
- Location: Pakistan
- Configuration:
  2 * MANA 16.0 batteries

48.21kWh

- December, 2025
- Location: Philippines
- Configuration:
  3 * MANA 16.0 battery

10.65kWh

- July, 2025
- Location: South Africa
- Configuration:
  MANA 10.6 battery

48.21kWh

- September, 2025
- Location: Vietnam
- Configuration:
  3 * MANA 16.0 batteries

32.14 kWh

- October, 2025
- Location: Nigeria
- Configuration:
  2 * MANA 16.0 batteries

20.48 kWh

- July, 2025
- Location: Vietnam
- Configuration:
  2 * MANA 10.24 ecco batteries

32.14kWh

- November, 2025
- Location: Thailand
- Configuration:
  2 * MANA 16.0 batteries

30.72kWh

- September, 2025
- Location: Myanmar
- Configuration:
  3 * MANA 10.24 ecco batteries

32kWh

- September , 2025
- Location: Yangon City ,Myanmar.
- Configuration:
  2 * MANA 16.0 batteries

32kWh

- August , 2025
- Location: Yangon City ,Myanmar.
- Configuration:
  2 * MANA 16.0 batteries

192kWh

- February, 2026
- Location: Myanmar
- Configuration:
  12*MANA 16-1M1(16.0kWh battery)

16kWh

- July , 2025
- Location: Yangon City ,Myanmar.
- Configuration:
  1*MANA 16-1M1(16.0kWh battery)

C&I Energy Storage Cases

Factory_1MW / 2.29MWh

- August, 2025
- Location: South Africa
- Configuration:
  2 * 500kW inverters +
  10 * E-MATE-229R (229kWh batteries)

Factory_100kW / 286kWh

- December,2025
- Location: Myanmar
- Configuration: 2 * 50kW inverters +
  2 * E-MATE 114-229R (143kWh batteries)

Sports & Leisure Hub_100kW / 400kWh

- October,2025
- Location: YEMEN
- Configuration:
  2 * 50kW inverters (SINEXCEL) +
  2 * E-MATE 114-229R (200kWh batteries)

Farm_200kW / 600kWh

- July, 2025
- Location: Thailand
- Configuration: 4 * 50kW inverters +
  E-MATE -100R * 6=600 kWh

Hotel_50kW / 82kWh

- February,2026
- Location: Taunggyi,Myanmar
- Configuration:
  50kW Inverter+
  2*RT 5.12-H8 (40.96 kWh battery)

Hotel_100kW / 286kWh

- January,2026
- Location: Naypyitaw,Myanmar
- Configuration:
  2*E-MATE 143R (286 kWh battery)

Factory_50kW / 122kWh

- September,2025
- Location: Yangon, Myanmar
- Configuration:
  50kW Inverter+
  2*RT 5.12 - H12 (61.44kWh battery)

Villages_250kW / 744kWh

- March, 2026
- Location: Bogalay, Myanmar
- Configuration:
  4*E-MATE 186R (186.368 kWh battery)

Small Factory_50kW / 61kWh

- June, 2025
- Location: Poland
- Configuration:
  50kW inverter +RT 5.12 - H12 (61kWh battery)

Farm_50 kW / 122 kWh

- September,2025
- Location: Switterland
- Configuration:
  E-MATE 50-61-A + E-MATE 61-A

Factory_200kW / 244kWh

- November, 2025
- Location: Guinea
- Configuration:
  4 * 50kW inverter +4 * RT 5.12 - H12 (61kWh battery)

Poultry Farm_RT 5.12-H 12*3

- August,2025
- Location: Damascus, Syria
- Configuration: 3*50kW Hybrid inverter +
  3*RT5.12 - H12 (61kWh battery)

Farm_125kW / 261kWh

- September,2025
- Location: Netherlands
- Configuration:
  E-MATE 125-261-L (261kWh all in one system)

Farm_500kW / 1044kWh

- September,2025
- Location: Netherlands
- Configuration:
  4*E-MATE 125-261-L

Farm_250kW / 522kWh

- September,2025
- Location: Netherlands
- Configuration:
  2 * E-MATE 125-261-L

Farm_10 MWh

- November, 2025
- Location: Africa
- Configuration:
  2*G-Power 5016-L (5MWh batteries)

Environment, Social and Governance (ESG)

As a global new energy solution provider, EENOVANCE has been contributing to addressing global resource shortages and mitigating climate change for many years.

It provides clean energy infrastructure - related products and services to continuously supply clean energy to the world.

EENOVANCE recognizes the vital role of ESG (Environmental, Social, and Governance) in its growth and embeds these principles at the heart of its brand. By aligning with the expectations of stakeholders across all its operations, the company actively embraces responsible practices and takes on social responsibility to advance sustainable development for both society and the environment.

10+
Global Shipments of Renewable Energy - GW

7500+
CO_2 reduction per year - T

410,000+
Trees per year - equivalent to planting

Environment
Emissions Reduction & Recycling

Partnership
Shared Growth

Social
Employee Well-being & Community Contribution

Governance
Corporate Governance

Long-Term Value
Energy Technologies Build Life Better

Public Welfare Activities

Myanmar Disaster Relief Donations

Vietnam Electricity Upgrade Donation