



Product Catalogue

# XIAMEN MARS ROCK SCIENCE TECHNOLOGY CO.,LTD



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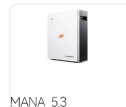


Revised in 2023

# Model MANA 5.0 / 5.3 / 10.6 / 16.0



MANA 5.0



MANA 5.3



MANA 10.6



MANA 16.0

### [ More Usable Energy ]

100% Depth of Discharge

### [ Flexible Investment ]

Up to 15 units in parallel

### [ Safe & Reliable ]

Premium Lithium Iron Phosphate(LFP)  
6000 cycles

### [ Easy Installation ]

Floor Stand or Wall Mounted

### [ Quick Commissioning ]

One Button ON/OFF  
Automatic ID Assignment

### [ Perfect Compatibility ]

Compatible with Major PCS Brands

## DATASHEET

Model	MANA 5.0	MANA 5.3	MANA 10.6	MANA 16.0
<b>Performance</b>				
Cell technology	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)
Battery usable energy [1]	5.120 kWh	5.324 kWh	10.649 kWh	15.974 kWh
Nominal voltage	51.2 V	51.2 V	51.2 V	51.2 V
Operating voltage	45.6 - 56.16 V	45.6 - 56.16 V	45.6 - 56.16 V	45.6 - 56.16 V
Nominal output current	100 A / 50 A	100 A / 50 A	200 A / 100 A	300 A / 150 A
BMS protection current	110 A, 1 s	110 A, 1 s	210 A, 1 s	310 A, 1 s

### Communication

Display	SOC status indicator, LED indicator
Communication	CAN / RS485 / RS232

### General Specification

Dimension (W*D*H)	450x150x533 mm 17.7x5.9x20.9 inch	450x150x533 mm 17.7x5.9x20.9 inch	550x160x836 mm 21.6x6.3x32.9 inch	720x160x916 mm 28.3x6.3x36.1 inch
Weight	45 kg (99 lbs)	46 kg (101 lbs)	89 kg (196 lbs)	130 kg (287 lbs)
Installation	Floor stand or Wall mounted			
Operating temperature [2]	-20 to 60 °C (-4 to 140 °F)			
Environmental humidity	≤ 95%RH (No condensation)			
Protection rating	IP 20			
Cycle life [3]	6000 Cycles @ 80% DOD / 25°C / 0.5C, 60% EOL			
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

Certificates	Cell: UN38.3 / IEC62619 / UL 1642 / JET Battery pack: UN38.3 / IEC62619 / IEC61000 / UKCA (More available upon request)
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### Ordering and Deliverable Part

Part	MANA 5.0 Battery	MANA 5.3 Battery	MANA 10.6 Battery	MANA 16.0 Battery
	MANA 5.0 Parallel cable	MANA 5.3 Parallel cable	MANA 10.6 Parallel cable	MANA 16.0 Parallel cable
	MANA 5.0 To PCS cable	MANA 5.3 To PCS cable	MANA 10.6 To PCS cable	MANA 16.0 To PCS cable

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

[2] Charge/discharge derating occurs when the operating temperature from -10°C to 5 °C & 45 °C to 55 °C

[3] Condition apply. Refer to Warranty Letter

# Model MANA 5.0 Pro / 5.3 Pro / 10.6 Pro / 16.0 Pro



### [ More Usable Energy ]

100% Depth of Discharge

### [ Flexible Investment ]

Up to 15 units in parallel

### [ Safe & Reliable ]

Premium Lithium Iron Phosphate(LFP)  
6000 cycles

### [ Easy Installation ]

Floor Stand or Wall Mounted

### [ Quick Commissioning ]

One Button ON/OFF  
Automatic ID Assignment

### [ Perfect Compatibility ]

Compatible with Major PCS Brands

## DATASHEET

Model	MANA 5.0 Pro	MANA 5.3 Pro	MANA 10.6 Pro	MANA 16.0 Pro
<b>Performance</b>				
Cell technology	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)
Battery usable energy [1]	5.120 kWh	5.324 kWh	10.649 kWh	15.974 kWh
Nominal voltage	51.2 V	51.2 V	51.2 V	51.2 V
Operating voltage	45.6 - 56.16 V	45.6 - 56.16 V	45.6 - 56.16 V	45.6 - 56.16 V
Nominal output current	100 A / 50 A	100 A / 50 A	200 A / 100 A	300 A / 150 A
BMS protection current	110 A, 1 s	110 A, 1 s	210 A, 1 s	310 A, 1 s

### Communication

Display	SOC status indicator, LED indicator
Communication	CAN / RS485 / RS232 / WIFI

### General Specification

Dimension (W*D*H)	500x150x563 mm 19.7x5.9x22.2 inch	500x150x563 mm 19.7x5.9x22.2 inch	600x160x836 mm 23.6x6.3x32.9 inch	750x160x950 mm 29.5x6.3x37.4 inch
Weight	45 kg (99 lbs)	46 kg (101 lbs)	89 kg (196 lbs)	130 kg (287 lbs)
Installation	Floor stand or Wall mounted			
Operating temperature [2]	-20 to 60 °C (-4 to 140 °F)			
Environmental humidity	≤ 95%RH (No condensation)			
Protection rating	IP 55			
Cycle life [3]	6000 Cycles @ 80% DOD / 25°C / 0.5C, 60% EOL			
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

Certificates	Cell: UN38.3 / IEC62619 / UL 1642 / JET Battery pack: UN38.3 / IEC62619 / IEC61000 / UKCA (More available upon request)
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### Ordering and Deliverable Part

Part	MANA 5.0 Pro Battery	MANA 5.3 Pro Battery	MANA 10.6 Pro Battery	MANA 16.0 Pro Battery
	MANA 5.0 Pro Parallel cable	MANA 5.3 Pro Parallel cable	MANA 10.6 Pro Parallel cable	MANA 16.0 Pro Parallel cable
	MANA 5.0 Pro To PCS cable	MANA 5.3 Pro To PCS cable	MANA 10.6 Pro To PCS cable	MANA 16.0 Pro To PCS cable

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

[2] Charge/discharge derating occurs when the operating temperature from -10°C to 5 °C & 45 °C to 55 °C

[3] Condition apply. Refer to Warranty Letter

# Model RT5120 / RT5320



### [ More Usable Energy ]

100% Depth of Discharge

### [ Flexible Investment ]

Modular Design  
Max 15 batteries in parallel

### [ Safe & Reliable ]

Premium Lithium Iron Phosphate(LFP)  
6000 Cycles

### [ Easy Installation ]

Rack / Wall / Cabinet-Mounted

### [ Quick Commissioning ]

Automatic ID Assignment

### [ Perfect Compatibility ]

Compatible with Major PCS Brands

## DATASHEET

Model	RT5120	RT5320
<b>Performance</b>		
Cell technology	LFP (LiFePO4)	LFP (LiFePO4)
Battery usable energy [1]	5.120 kWh	5.324 kWh
Nominal voltage	51.2 V	51.2 V
Operating voltage	45.6 - 56.16 V	45.6 - 56.16 V
Nominal output current	100 A / 50 A	100 A / 50 A
BMS protection current	110 A, 1 s	110 A, 1 s

### Communication

Display	SOC status indicator, LED indicator
Communication	CAN / RS485 / RS232

### General Specification

Dimension (W*D*H)	440*550*130 mm 17.3*21.6*5.12 inch	440*550*130 mm 17.3*21.6*5.12 inch
Weight	45 kg (99 lbs)	46 kg (101 lbs)
Installation	Rack / Wall / Cabinet-Mounted	
Operating temperature [2]	-20 to 60 °C (-4 to 140 °F)	
Environmental humidity	≤ 95%RH (No condensation)	
Protection rating	IP 20	
Cycle life [3]	6000 Cycles @ 80% DOD / 25°C / 0.5C, 60% EOL	
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

Certificates	Cell: UN38.3 / IEC62619 / UL 1642 / JET Battery pack: UN38.3 / IEC62619 / IEC61000 / UKCA (More available upon request)
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### Ordering and Deliverable Part

Part	RT5120 Battery	RT5320 Battery
	RT5120 to PCS cable	RT5320 to PCS cable
	RT5120 Parallel cable	RT5320 Parallel cable

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

[2] Charge/discharge derating occurs when the operating temperature from -10°C to 5 °C & 45 °C to 55 °C

[3] Condition apply. Refer to Warranty Letter

# Model CHAKRA 2.5 - H



### [ More Usable Energy ]

100% Depth of Discharge

### [ Flexible Investment ]

2.5 kWh Modular Design  
Max 10 modules per stack, 4 stacks in parallel

### [ Safe & Reliable ]

Cobalt Free Lithium Iron Phosphate (LFP) Battery  
Maximum Safety and 6000 Cycles

### [ Easy Installation ]

Internal Plug Design and  
No Additional Wiring

### [ Quick Commissioning ]

One Button ON/OFF  
Automatic ID Assignment

### [ Perfect Compatibility ]

Compatible with Leading PCS brands

## DATASHEET

Model	CHAKRA 2.5-H4	CHAKRA 2.5-H5	CHAKRA 2.5-H6	CHAKRA 2.5-H7	CHAKRA 2.5-H8	CHAKRA 2.5-H9	CHAKRA 2.5-H10
<b>Performance</b>							
Battery module (Wh/V)	2.56 kWh, 51.2 V, 30 kg (67 lbs)						
Number of modules	4	5	6	7	8	9	10
Cell technology	LFP (LiFePO4)						
Battery usable energy [1]	10.24 kWh	12.8 kWh	15.36 kWh	17.92 kWh	20.48 kWh	23.04 kWh	25.60 kWh
Nominal voltage	204.8 V	256.0 V	307.2 V	358.4 V	409.6 V	460.8 V	512.0 V
Operating voltage	182.40 - 224.64 V	228 - 280.8 V	273.6 - 336.96 V	319.2 - 393.12 V	364.8 - 449.28 V	410.4 - 505.44 V	456 - 561.6 V
Max output current	25 A (0.5C)						

## Communication

Display	SOC status indicator, LED indicator
Communication	CAN / RS485 / RS232

## General Specification

Dimension (W*D*H)	560*359*815 mm 22.1*14.2*32.1 inch	560*359*950 mm 22.1*14.2*37.4 inch	560*359*1085 mm 22.1*14.2*42.7 inch	560*359*1220 mm 22.1*14.2*48.0 inch	560*359*1355 mm 22.1*14.2*53.4 inch	560*359*1490 mm 22.1*14.2*58.7 inch	560*359*1625 mm 22.1*14.2*64.0 inch
Weight	160 kg (352.8 lbs)	190 kg (418.9 lbs)	220 kg (485 lbs)	250 kg (551 lbs)	280 kg (617 lbs)	310 kg (683 lbs)	340 kg (750 lbs)
Installation	Floor stand						
Operating temperature [2]	-20 to 60 °C (-4 to 140 °F)						
Environmental humidity	≤ 95%RH (No condensation)						
Protection rating	IP 20						
Cycle life [3]	6000 Cycles @ 80% DOD / 25°C / 0.5C, 60% EOL						
Scalability	Max 10 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

Certificates	UN38.3 / IEC62619 / IEC62040-1 (More available upon request)
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## Ordering and Deliverable Part

Part	CHAKRA 2.5 - H (Battery module) CHAKRA 2.5 -H - BCU
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[1] Test conditions: 100% depth of discharge (DoD), 0.2C rate charge & discharge at 25°C

[2] Charge/discharge derating occurs when the operating temperature from -10°C to 5°C & 45°C to 55°C

[3] Condition apply. Refer to Warranty Letter

# Model E-MATE 50



## [ Overview ]

Indoor battery rack with IP20 protection level, inbuilt lithium-ion battery and BMS

## [ Easy Installation And Maintenance ]

Local and remote management, standard rack&module design, front maintenance

## [ Safety & Reliable ]

Self-developed 2-level / 3-level BMS, complex protection, safe and reliable

## [ High Density ]

LP high-capacity Li-ion battery with aluminum shell, over 130wh/kg

## [ Long Lifespan ]

Long cycle life, 6000 cycles\*

## [ Cell Balancing Technology ]

Active cell balancing and passive cell balancing

## DATASHEET

Model	E-MATE 50
<b>Performance</b>	
Battery module (Wh/V)	6.144 kWh, 51.2V, 64kg (141lbs)
Number of modules	8
Cell technology	LFP (LiFePO4)
Battery usable energy [1]	49.152 kWh
Nominal voltage	409.6 V
Operating voltage	364.8-449.28 V
Nominal output current	48 A

## Communication

Display	SOC status indicator, LED indicator
Communication	CAN / RS485 / RS232

## General Specification

Dimension (W*D*H)	1610x305x1150 mm 63.4x12x45.3 inch
Weight	About 564 kg (1243 lbs)
Operating temperature [2]	-20 to 60 °C (-4 to 140 °F)
Environmental humidity	≤ 95%RH (No condensation)
Protection rating	IP 20
Cycle life [3]	6000 Cycles @ 80% DOD / 25°C / 0.5C, 60% EOL
Scalability	Yes
Application	ON Grid / ON Grid + Backup / OFF grid
Compatible PCS	Refer to compatible PCS list

## Standard Compliance

Certificates	Cell: UN38.3 / IEC62619 / UL 1642 / JET
	Pack: UN38.3 / IEC62619 / IEC61000
	Available upon request

## Ordering and Deliverable Part

Part	E-MATE-6.1P-OT (Battery module)
	E-MATE-BCU-050H1-OT (Main control box)
	E-MATE-6.1BP (Battery pedestal)

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

[2] Charge/discharge derating occurs when the operating temperature from -10°C to 5 °C & 45 °C to 55 °C

[3] Condition apply. Refer to Warranty Letter

# Model E-MATE 80



### [ Overview ]

Indoor battery rack with IP20 protection level, inbuilt lithium-ion battery and BMS

### [ Easy Installation And Maintenance ]

Local and remote management, standard rack&module design, front maintenance

### [ Safety & Reliable ]

Self-developed 2-level / 3-level BMS, complex protection, safe and reliable

### [ High Density ]

LP high-capacity Li-ion battery with aluminum shell, over 130wh/kg

### [ Long Lifespan ]

Long cycle life, 6000 cycles\*

### [ Cell Balancing Technology ]

Active cell balancing and passive cell balancing

## DATASHEET

Model	E-MATE 80
<b>Performance</b>	
Battery module (Wh/V)	6,144 kWh, 51.2V, 64kg (141lbs)
Number of modules	13
Cell technology	LFP (LiFePO4)
Battery usable energy [1]	79.82 kWh
Nominal voltage	665.6 V
Operating voltage	592.8-730.08 V
Nominal output current	48 A

### Communication

Display	SOC status indicator, LED indicator
Communication	CAN / RS485 / RS232

### General Specification

Dimension (W*D*H)	2420x305x1150 mm 95.3x12x45.3 inch
Weight	About 886kg (1953lbs)
Operating temperature [2]	-20 to 60°C (-4 to 140°F)
Environmental humidity	≤ 95%RH (No condensation)
Protection rating	IP 20
Cycle life [3]	6000 Cycles @ 80% DOD / 25°C / 0.5C, 60% EOL
Scalability	Yes
Application	ON Grid / ON Grid + Backup / OFF grid
Compatible PCS	Refer to compatible PCS list

### Standard Compliance

Certificates	Cell: UN38.3 / IEC62619 / UL 1642 / JET
	Pack: UN38.3 / IEC62619 / IEC61000
	Available upon request

### Ordering and Deliverable Part

Part	E-MATE-6,1P-OT (Battery module)
	E-MATE-BCU-080H1-OT (Main control box)
	E-MATE-6,1BP (Battery pedestal)

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

[2] Charge/discharge derating occurs when the operating temperature from -10°C to 5°C & 45°C to 55°C

[3] Condition apply. Refer to Warranty Letter

# Model E-MATE 143R



### [ Overview ]

Indoor rack with IP20 protection level, inbuilt lithium-ion battery and BMS

### [ Easy Installation And Maintenance ]

Local and remote management, standard rack&module design, front maintenance

### [ Safety & Reliable ]

Self-developed 2-level / 3-level BMS, complex protection, safe and reliable

### [ High Density ]

LP high-capacity Li-ion battery with aluminum shell, over 130wh/kg

### [ Long Lifespan ]

Long cycle life, 6000 cycles\*

### [ Cell Balancing Technology ]

Active cell balancing and passive cell balancing

## DATASHEET

Model	E-MATE 114R	E-MATE 129R	E-MATE 143R
<b>Performance</b>			
Battery module (Wh/V)	14.336 kWh, 51.2 V, 110 kg (242.5 lbs)		
Number of modules	8	9	10
Cell technology	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)
Battery usable energy [1]	114.688 kWh	129.024 kWh	143.36 kWh
Nominal voltage	409.6 V	460.8 V	512 V
Operating voltage	364.8-449.28 V	410.4-505.44 V	456-561.6 V
Nominal output current	140 A / 280 A	140 A / 280 A	140 A / 280 A

### Communication

Display	SOC status indicator, LED indicator, LCD display
Communication	Ethernet / CAN / RS485

### General Specification

Dimension (W*D*H)	1164x840x1776 mm 45.8x33.1x69.9 inch		
Weight	1130kg (2491lbs)	1240kg (2734lbs)	1350kg (2976lbs)
Operating temperature [2]	-20 to 60 °C (-4 to 140 °F)		
Environmental humidity	≤ 95%RH (No condensation)		
Protection rating	IP 20		
Cycle life [3]	6000 Cycles @ 80% DOD / 25°C / 0.5C, 60% EOL		
Scalability	Yes		
Application	ON Grid / ON Grid + Backup / OFF grid		
Compatible PCS	Refer to compatible PCS list		

### Standard Compliance

Certificates	Cell: UN38.3 / IEC62619 / UL 1642 / JET
	Pack: UN38.3 / IEC62619 / IEC61000
	System: UL 9540 (More available upon request)

### Ordering and Deliverable Part

Part	E-MATE-14.3P-F-OT		
	E-MATE-BCU-114H1-OT	E-MATE-BCU-129H1-OT	E-MATE-BCU-143H1-OT
	E-MATE-R12		

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

[2] Charge/discharge derating occurs when the operating temperature from -10°C to 5 °C & 45 °C to 55 °C

[3] Condition apply. Refer to Warranty Letter



# Model E-MATE 229R



### [ Overview ]

Indoor battery rack with IP20 protection level, inbuilt lithium-ion battery and BMS

### [ Easy Installation And Maintenance ]

Local and remote management, standard rack&module design, front maintenance

### [ Safety & Reliable ]

Self-developed 2-level / 3-level BMS, complex protection, safe and reliable

### [ High Density ]

LP high-capacity Li-ion battery with aluminum shell, over 130wh/kg

### [ Long Lifespan ]

Long cycle life, 6000 cycles\*

### [ Cell Balancing Technology ]

Active cell balancing and passive cell balancing

## DATASHEET

Model	E-MATE 157R	E-MATE 200R	E-MATE 215R	E-MATE 229R
<b>Performance</b>				
Battery module (Wh/V)	14.336 kWh, 51.2 V, 110 kg (242.5 lbs)			
Number of modules	11	14	15	16
Cell technology	LFP (LiFePO4)			
Battery usable energy [1]	157.696 kWh	200.704 kWh	215.04 kWh	229.376 kWh
Nominal voltage	563.2 V	716.8 V	768.0 V	819.2 V
Operating voltage	501.6~617.76 V	638.4~786.24 V	684~898.6 V	729.6~898.5 V
Nominal output current	140 A / 280 A	140 A / 280 A	140 A / 280 A	140 A / 280 A

### Communication

Display	SOC status indicator, LED indicator, LCD display
Communication	Ethernet / CAN / RS485

### General Specification

Dimension (W*D*H)	1721x840x1776 mm 66.8x33.1x69.9 inch			
Weight	1540kg (3395lbs)	1870kg (4122lbs)	1980kg (4365lbs)	2090kg (4608lbs)
Operating temperature [2]	-20 to 60 °C (-4 to 140 °F)			
Environmental humidity	≤ 95%RH (No condensation)			
Protection rating	IP 20			
Cycle life [3]	6000 Cycles @ 80% DOD / 25°C / 0.5C, 60% EOL			
Scalability	Yes			
Application	ON Grid / ON Grid + Backup / OFF grid			
Compatible PCS	Refer to compatible PCS list			

### Standard Compliance

Certificates	Cell: UN38.3 / IEC62619 / UL 1642 / JET
	Pack: UN38.3 / IEC62619 / IEC61000
	System: UL 9540 (More available upon request)

### Ordering and Deliverable Part

Part	E-MATE-14.3P-F-OT			
	E-MATE-BCU-157H1-OT	E-MATE-BCU-200H1-OT	E-MATE-BCU-215H1-OT	E-MATE-BCU-229H1-OT
	E-MATE-R18			

# Model E-MATE 200C



## [ Overview ]

Outdoor battery cabinet with IP55 protection level, inbuilt lithium-ion battery and BMS

## [ Easy Installation And Maintenance ]

Local and remote management, standard rack&module design, front maintenance

## [ Safety & Reliable ]

Self-developed 2-level / 3-level BMS, complex protection, safe and reliable

## [ High Density ]

LP high-capacity Li-ion battery with aluminum shell, over 130wh/kg

## [ Long Lifespan ]

Long cycle life, 6000 cycles

## [ Cell Balancing Technology ]

Active cell balancing and passive cell balancing

## DATASHEET

Model	E-MATE 200C
<b>Performance</b>	
Battery module (Wh/V)	14.336 kWh, 51.2 V, 110 kg (242.5 lbs)
Number of modules	14
Cell technology	LFP (LiFePO4)
Battery usable energy [1]	200.704 kWh
Nominal voltage	716.8 V
Operating voltage	638.4 - 786.24 V
Nominal output current	140 A / 280 A
<b>Communication</b>	
Display	SOC status indicator, LED indicator, LCD display
Communication	Ethernet / CAN / RS485
<b>General Specification</b>	
Dimension (W*D*H)	1500x1050x2200 mm 50.1x41.3x86.6 inch
Weight	1900 kg (4189 lbs)
Operating temperature [2]	-20 to 60 °C (-4 to 140 °F)
Environmental humidity	≤ 95%RH (No condensation)
Protection rating	IP 55
Cycle life [3]	6000 Cycles @ 80% DOD / 25°C / 0.5C, 60% EOL
Scalability	Yes
Application	ON Grid / ON Grid + Backup / OFF grid
Compatible PCS	Refer to compatible PCS list
<b>Standard Compliance</b>	
Certificates	Cell: UN38.3 / IEC62619 / UL 1642 / JET
	Pack: UN38.3 / IEC62619 / IEC61000
	System: UL 9540 (More available upon request)

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

[2] Charge/discharge derating occurs when the operating temperature from -10°C to 5 °C & 45 °C to 55 °C

[3] Condition apply. Refer to Warranty Letter

# Model E-MATE 500GP



### [ Overview ]

Outdoor battery container with IP55 protection level, inbuilt lithium-ion battery and BMS

### [ Easy Installation And Maintenance ]

Local and remote management, standard rack&module design, front maintenance

### [ Safety & Reliable ]

Self-developed 2-level / 3-level BMS, complex protection, safe and reliable

### [ High Density ]

LP high-capacity Li-ion battery with aluminum shell, over 130wh/kg

### [ Long Lifespan ]

Long cycle life, 6000 cycles\*

### [ Cell Balancing Technology ]

Active cell balancing and passive cell balancing

## DATASHEET

Model	E-MATE 500GP
<b>Performance</b>	
Battery module (Wh/V)	14.336 kWh, 51.2 V, 110 kg (242.5 lbs)
Number of modules	18*2
Cell technology	LFP (LiFePO4)
Battery usable energy [1]	516.096 kWh
Nominal voltage	921.6 V
Operating voltage	820.8 - 1010.9 V
Nominal output current	140 A*2 / 280 A*2
<b>Communication</b>	
Display	SOC status indicator, LED indicator, LCD display
Communication	Ethernet / CAN / RS485
<b>General Specification</b>	
Dimension (W*D*H)	2991*2438*2591 mm 117.8*95.9*102 inch
Weight	8000 kg (17637 lbs)
Operating temperature [2]	-20 to 60 °C (-4 to 140 °F)
Environmental humidity	≤ 95%RH (No condensation)
Protection rating	IP 55
Cycle life [3]	6000 Cycles @ 80% DOD / 25°C / 0.5C, 60% EOL
Scalability	Yes
Application	ON Grid / ON Grid + Backup / OFF grid
Compatible PCS	Refer to compatible PCS list
<b>Standard Compliance</b>	
Certificates	Cell: UN38.3 / IEC62619 / UL 1642 / JET
	Pack: UN38.3 / IEC62619 / IEC61000
	System: UL 9540 (More available upon request)

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

[2] Charge/discharge derating occurs when the operating temperature from -10°C to 5 °C & 45 °C to 55 °C

[3] Condition apply. Refer to Warranty Letter