

## RESIDENTIAL ESS SERIES

# RPES-GMAIO3 LiFePO4 Lithium Battery

All-In-One Solar ESS



**R** INVERTER MODE

**G** PV MODE

**B** UTILITY MODE



Built-in Lithium battery automatic activation



BMS protection



Integrated design



Receptacle



RGB lights



Universal wheel



Constant voltage technology protects the circuit



Dustproof

### »» Features

- Pure sine wave solar inverter(on/off Grid)
- Output power factor 1.0
- WIFI&GPRS available for IOS and Android
- One-key restoration to factory Settings
- Built-in Lithium battery automatic activation
- Integrated design
- Built-in 120A MPPT Solar charge
- High PV input voltage range(60~ 500VDC)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- Dual output

MODEL	RPES-GMAIO3 (6.0KW PLUS-100AH)
Phase	
Maximum PV Input Power	6200W
Rated Output Power	6000W
Maximum Solar Charging Current	27A
<b>GRID-TIE OPERATION</b>	
<b>PV INPUT (DC)</b>	
Nominal DC Voltage/Maximum DC Voltage	380/450VDC
Start-up Voltage	75VDC
MPPT Voltage Range	85~450VDC
Maximum Input Current	27A
Number of MPPT Trackers	1
Max short-circuit current per MPPT	35A
<b>GRID OUTPUT (AC)</b>	
Nominal Output Voltage	220/230/240VAC
Output Voltage Range	220~240VAC
Nominal Output Current	27.3A
Power Factor	1
<b>EFFICIENCY</b>	
Maximum Conversion Efficiency (DC/AC)	98%
<b>TWO LOAD OUTPUT POWER</b>	
Full Load	6000W
Maxium Main Load	6000W
Maxium Load Cut Off Voltage	30VDC
Maxium Load Return Voltage	30VDC
<b>OFF-GRID OPERATION</b>	
<b>AC INPUT</b>	
AC Start-up Voltage / Auto Restart Voltage	220~240VAC
Acceptable Input Voltage Range	220~240VAC
Frequency Range	50/60Hz
Maximum AC Input Current	22A
<b>PV INPUT (DC)</b>	
Nominal DC Voltage/Maximum DC Voltage	380/450VDC
MPPT Voltage Range	85~450VDC
Maximum Input Current	27A
<b>BATTERY MODE OUTPUT (AC)</b>	
Nominal Output Voltage	220/230/240VAC
Efficiency (DC to AC)	95%
<b>BATTERY &amp; CHARGER</b>	
Nominal DC Voltage	51.2VDC
Maximum Solar Charging Current	27A
Maximum AC Charging Current	120A
Maximum Solar+AC Charging Current	120A
<b>HYBRID OPERATION</b>	
<b>PV INPUT (DC)</b>	
Nominal DC Voltage/Maximum DC Voltage	380/450VDC
Start-up Voltage	75VDC
MPPT Voltage Range	85~450VDC
Maximum Input Current	27A
<b>GRID OUTPUT (AC)</b>	
Nominal Output Voltage	220/230/240VAC
Output Voltage Range	220~240VAC
Nominal Output Current	27.0A
<b>AC INPUT</b>	
AC Start-up Voltage / Auto Restart Voltage	220/230/240VAC
Acceptable Input Voltage Range	220~240VAC
Maximum AC Input Current	50A
Maximum AC Charging Current	50A

»» Product Data Sheet

MODEL	RPES-GMAIO3 (6.0KW PLUS-100AH)
<b>BATTERY</b>	
MODEL	51.2V100AH
Normal charging voltage	51.2V
Maximum charging current	100A(Recommended)
Discharge termination voltage	40V
Maximum discharge current	100A
Single cell charging overvoltage protection	3.2V
Overvoltage protection for the whole battery	3.6V
Low voltage protection for single cell discharge	57.6V
Low voltage protection for whole group discharge	40V
Charge overcurrent protection	95A
Discharge overcurrent protection	102A
BMS Features	High accuracy cell level voltage, current measuring Over-charge, over-discharge protection Short-circuit protection Self-learning intelligent SOC calculation Cell level active equalization Multiple communication type Parallel connect function
Working temperature	-20°C ~ 65°C
Storage temperature	0°C ~ 65°C
<b>GENERAL</b>	
<b>PHYSICAL</b>	
Dimension ,H*W*D(mm)	510*440*270
Cartoon Dimension ,H*W*D(mm)	585*500*310
Net Weight (kgs)	58KG
Gross Weight(kgs)	62KG
<b>INTERACE</b>	
Communication Port	RS232/RS485/WIFI
<b>ENVIRONMENT</b>	
Humidity	5% to 95% Relative Humidity(Non~condensing)
<b>STANDARD</b>	
Compliance Safety	CE UN38.3; MSDS



# Cyprus Renewable Energy Solutions

