



SOLAR + ENERGY STORAGE





ABOUT SOROTEC

Founded in 2006, SOROTEC is a national high-tech enterprise specializing in the research and development and production of new energy and power electronic products. All in one optical storage integrated machine, industrial and commercial energy storage system, photovoltaic communication base station, energy storage lithium battery, smart power quality products, etc. The products comply with certification standards. SOROTEC also provides OEM and ODM services to global customers.



20 Years
Focus on energy solutions



National
National high-tech enterprise



10 TOP
Top 10 Solar Energy
Enterprises in China



3A
AAA Credit Enterprise



100+
Hundreds of patent certificates
and software copyright



1000+
Thousands of project cases
exported to many countries
around the world

Residential Energy Storage Inverter

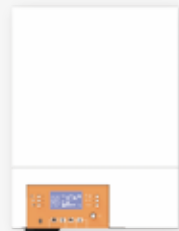
Off Grid Inverter



REVO VP/VM



REVO VM II PRO

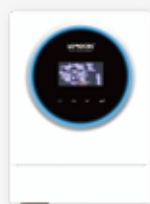


REVO VM III-T

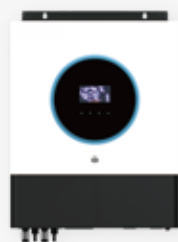
Hybrid On & Off Grid Inverter



REVO HM



REVO VM IV PRO-T



REVO VM IV



REVO HMT

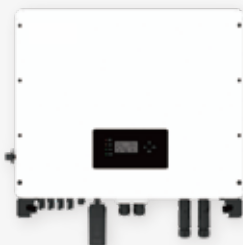
Hybrid On & Off Grid IP65 EU



REVO HES



iHESS-1P EU



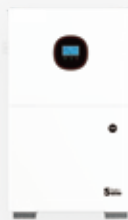
iHESS-3P EU



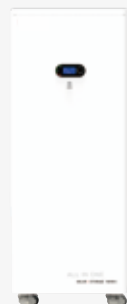
Solar Controller

MPPT-SCC

Energy Storage ALL IN ONE



REVO HESS



REVO HESS



iHESS-M (ALL IN ONE)



iHESS-M-H (ALL IN ONE)

Industrial And Commercial Energy Storage Inverter



MPG-M



MPGS

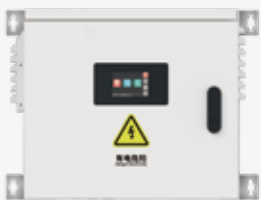


SES

Solar Power System for Telecom Station



SHW



SHWB48300

Energy Storage Battery



SL-W / SL-R



SL-W-02



SL-S-EC



SL-S-EU



SL-R

REVO VP/VM

OFF GRID Energy Storage Inverter

series 1~5kW



MPPT
Pure sine wave MPPT solar inverter
Bulit-in 50/65A MPPT solar charger



OFF-Grid
REVO VP/VM series is suitable for
off-grid applications.

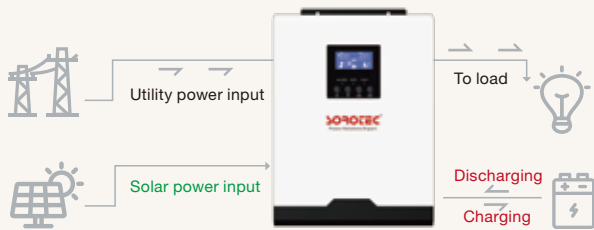


Battery
Battery equalization function extend lifecycle

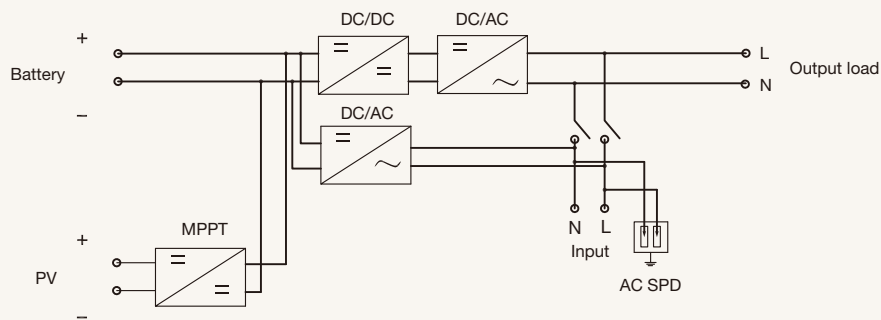


Easy access
Equalization function

● With battery connected



● Schematic diagram



Technical Specification	REVO VP 1000-12	REVO VM 1200-12	REVO VP 2000-24	REVO VM 2200-24	REVO VP 3000-24	REVO VM 3200-24	REVO VP 5000-48	REVO VM 5000-48
Rated Power	1000VA/W	1200VA/W	2000VA/W	2200VA/W	3000VA/W	3200VA/W	5000VA/W	
INPUT								
Voltage	230VAC							
Selectable Voltage Range	170-280VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances)							
Frequency Range	50/60Hz (Auto sensing)							
OUTPUT								
AC Voltage Regulation (Battery Mode)	230VAC ± 5%							
Surge Power	2000VA		4000VA		6000VA		10000VA	
Efficiency(Peak)	93%							
Transfer Time	10ms (For Personal Computers) ; 20m (For Home Appliances)							
Wave Form	Pure sine wave							
BATTERY								
Battery Voltage	12VDC		24VDC				48VDC	
Floating Charge Voltage	13.5VDC		27VDC				54VDC	
Overcharge Protection	16VDC		31VDC		33VDC		63VDC	
SOLAR CHARGER & AC CHARGER								
Solar Charger type	PWM	MPPT	PWM	MPPT	PWM	MPPT	PWM	MPPT
Maximum PV Array Open Circuit Voltage	55VDC	102VDC	80VDC	102VDC	80VDC	102VDC	105VDC	145VDC
Maximum PV Array Power	600W	700W	1200W	1400W	1200W	1800W	2400W	3000W
MPPT Range @ Operating Voltage	N/A	15~80VDC	N/A	30~80VDC	N/A	30~80VDC	N/A	60~115VDC
Maximum Solar Charge Current	50A	50A	50A	50A	50A	65A	50A	60A
Maximum AC Charge Current	20A	20A	20A	20A	25A	25A	60A	60A
Maximum Charge Current	50A	60A	50A	60A	70A	80A	110A	120A
PHYSICAL								
Dimensions D x W x H (mm)	88*225*320	103*225*320	88*225*320	103*225*330	100*285*334	118*285*360	100*300*440	100*300*440
Net Weight(KG)	4.4	4.4	5	5	6.3	6.5	8.5	9.7
Communication Interface	Standard:RS232							
ENVIRONMENT								
Humidity	5% to 95% Relative Humidity(Non-condensing)							
Operating Temperature	-10°C to 50°C							
Storage Temperature	-15°C to 60°C							

REVO VM II PRO

Hybrid Solar Energy Storage Inverter

series **1.6/3.2/4/6kW**



MPPT

Pure sine wave MPPT solar inverter
Built-in 80/120A MPPT solar charger



Hybrid

REVO VM II PRO series is suitable for
off-grid and on grid(optional) applications.



Battery

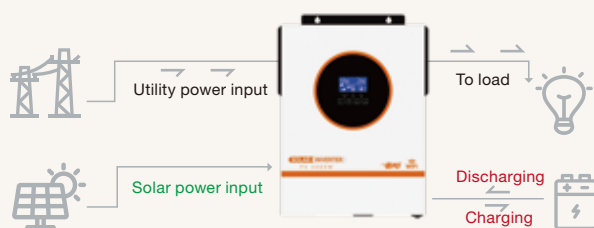
Battery equalization function extend life cycle
Reserved communication port(RS485,CAN)for BMS



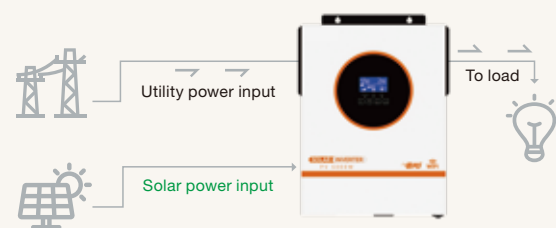
Easy access

High PV input voltage range
Two outputs for smart load management (4/6KW OPT)

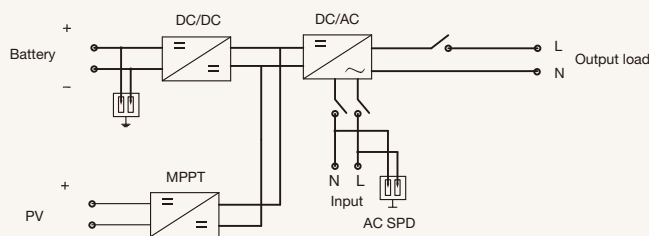
With battery connected



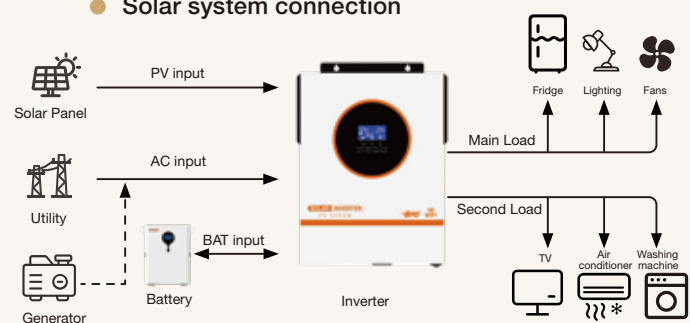
Without battery connected(4-6kw)



Schematic diagram



Solar system connection



Technical Specification	REVO VM II PRO series			
Rated Power	1600VA/1600W	3200VA/3200W	4000VA/4000W	6000VA/6000W
AC INPUT				
AC Voltage	230VAC			
Voltage Range	170~280VAC (For Personal Computers) ; 90~280 VAC (For Home Appliances)			
Frequency Range	50/60Hz (Auto sensing)			
AC OUTPUT				
Surge Power	3200VA	6400VA	8000VA	12000VA
AC Voltage Regulation (Battery Mode)	230VAC ± 5%			
Rated frequency	50/60Hz			
Efficiency (Peak)	93%			
Transfer Time	10ms (For Personal Computers) ; 20ms (For Home Appliances)			
BATTERY				
Battery Voltage	12VDC	24VDC		48VDC
Floating Charge Voltage	13.5VDC	27VDC		54VDC
Overcharge Protection	16VDC	33VDC		63VDC
Battery type	Lithium/Lead-acid			
SOLAR CHARGER & AC CHARGER				
Maximum PV Array Open Voltage(V)	500VDC			
Maximum PV Array Power	2000W	3500W	5000W	7000W
MPPT voltage range(V)	30~450VDC		60~450VDC	
Maximum input current	15A		20A	27A
MPPT tracker/strings	1			
Maximum solar charge current	100A		120A	
Maximum AC charge current	80A		100A	
Maximum charge current	100A		120A	
PROTECTION & FEATURE				
AC overcurrent	Yes			
AC overvoltage	Yes			
Over temperature protection	Yes			
Smart load management	NO		Yes(optional)	
On Grid	Yes (optional)			
GENERAL PARAMETERS				
Operation temperature	-10°C ~ 50°C			
Relative humidity	5% ~ 95% (Non-condensing)			
Altitude	(2000m Derating)			
Dimensions DxWxH(mm)	334*270*105		400*300*133	
Net Weight(KG)	5	5.5	8.9	10
COMMUNICATION				
Interface	Standard:RS232,USB; CAN&RS485; Optional:WiFi,Bluetooth			
Safety standard	EN/IEC62109-1,EN/IEC62109-2			

REVO VM II PRO-G2

Hybrid Solar Energy Storage Inverter

series **6kW**



MPPT

Pure sine wave MPPT solar inverter
Built-in 120A MPPT solar charger



Hybrid

REVO VM II PRO-G2 series is suitable for
off-grid and on grid(optional) applications.



Battery

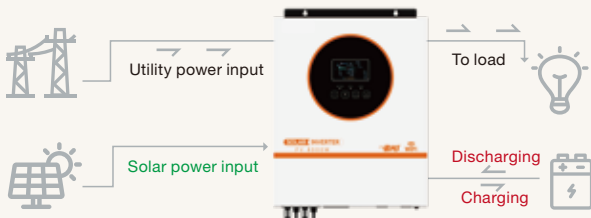
Battery equalization function extend life cycle
Reserved communication port(RS485,CAN)for BMS



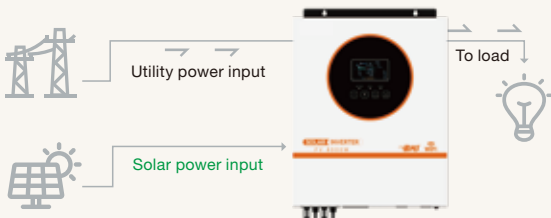
Easy access

High PV input voltage range
Two outputs for smart load management

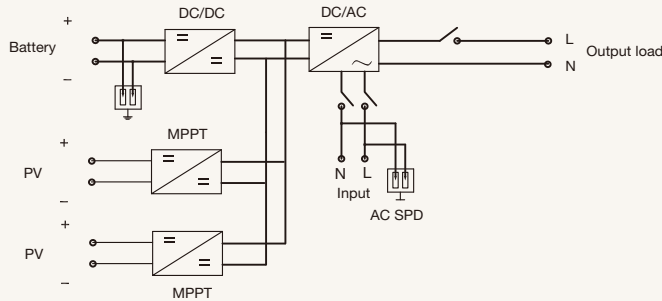
With battery connected



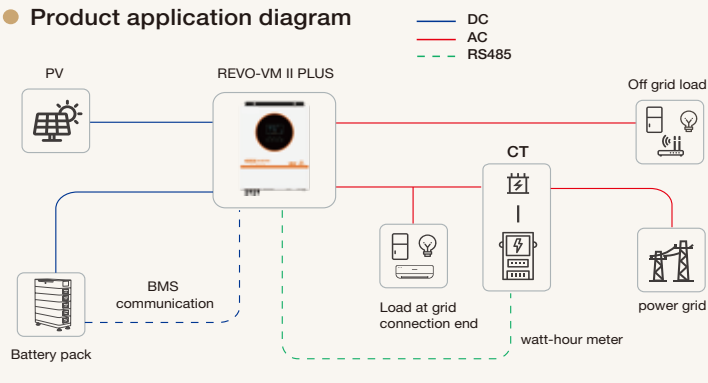
Without battery connected



Schematic diagram



Product application diagram



Technical Specification	REVO VM II PRO G2 series
Rated Power	6000VA/6000W
AC INPUT	
AC Voltage	230VAC
Voltage Range	170~280VAC (For Personal Computers) ; 90~280 VAC (For Home Appliances)
Frequency Range	50/60Hz (Auto sensing)
AC OUTPUT	
Surge Power	12000VA
AC Voltage Regulation (Battery Mode)	230VAC $\pm$ 5%
Rated frequency	50/60Hz
Efficiency (Peak)	93%
Transfer Time	10ms (For Personal Computers) ; 20ms (For Home Appliances)
BATTERY	
Battery Voltage	48VDC
Floating Charge Voltage	54VDC
Overcharge Protection	63VDC
Battery type	Lithium/Lead-acid
SOLAR CHARGER & AC CHARGER	
Maximum PV Array Open Voltage(V)	500VDC
Maximum PV Array Power	2*4000W
MPPT voltage range(V)	60~450VDC
Maximum input current	2*16A
MPPT tracker/strings	2
Maximum solar charge current	120A
Maximum AC charge current	100A
Maximum charge current	120A
PROTECTION & FEATURE	
AC overcurrent	Yes
AC overvoltage	Yes
Over temperature protection	Yes
Smart load management	Yes
Parallel Function	Yes (optional)
GENERAL PARAMETERS	
Operation temperature	-10°C ~ 50°C
Relative humidity	5% ~ 95% (Non-condensing)
Altitude	(2000m Derating)
Dimensions DxWxH(mm)	458*400*130
Net Weight(KG)	12.5
COMMUNICATION	
Interface	Standard:RS232,USB; CAN&RS485; Optional:WiFi,Bluetooth
Safety standard	EN/IEC62109-1,EN/IEC62109-2

REVO VM II PRO

Hybrid On & Off Grid Energy Storage Inverter

series 8/10kW





MPPT
Built-in two MPPT(6KW-11KW),with wide PV input range:60~450VDC



Easy to use
Configurable AC/PV output usage time and prioritization



On & Off-Grid
REVO VM IV series is suitable for on & off-grid applications

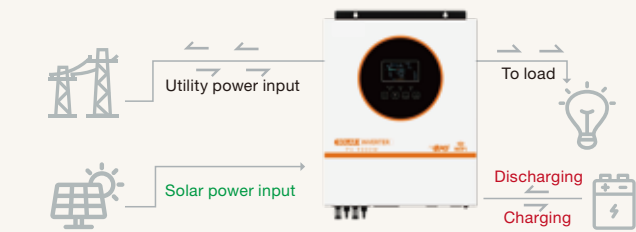


Battery
Battery equalization function extend life cycle
Reserved communication port(RS485,CAN)for BMS

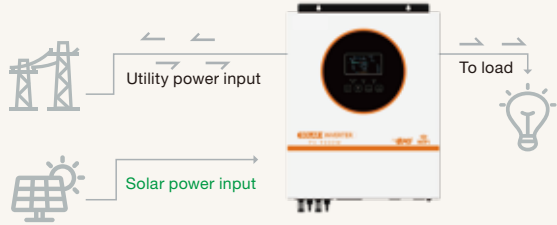


Easy access
Communication WiFi or bluetooth
Touchable button with large 5" colorful LCD

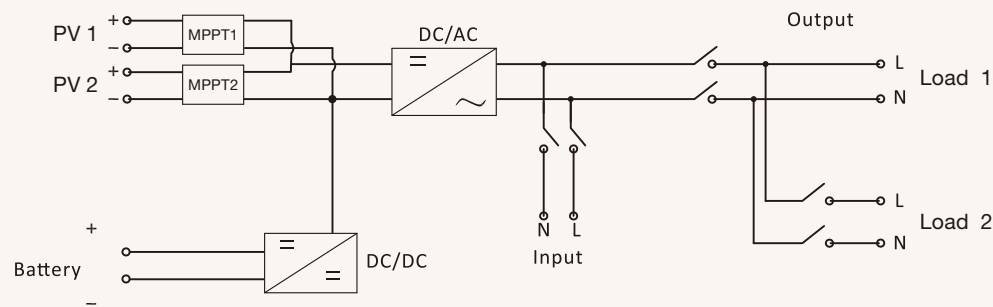
With battery connected



Without battery connected



Schematic diagram



Technical Specification	REVO VM II PRO series	
Rated Power	8000VA/8000W	10000VA/10000W
AC INPUT		
AC Voltage	230VAC	
Voltage Range	170~280VAC (For Personal Computers) ; 90~280 VAC (For Home Appliances)	
Frequency Range	50/60Hz (Auto sensing)	
AC OUTPUT		
Surge Power	16000VA	22000VA
Voltage Regulation (Battery Mode)	220VAC/230VAC/240VAC ± 5%	
Rated frequency	50/60Hz	
Efficiency (Peak)	93%	
Transfer Time	10ms (For Personal Computers) ; 20ms (For Home Appliances)	
BATTERY		
Battery Voltage	48VDC	
Floating Charge Voltage	54VDC	
Overcharge Protection	63VDC	
Battery type	Lithium/Lead-acid	
SOLAR CHARGER & AC CHARGER		
Maximum PV Array Open Circuit Voltage	500VDC	
Maximum PV Array Power	9000W(4500*2)	10000W(5000*2)
MPPT voltage range(V)	60~450VDC	60~450VDC
MPPT tracker/strings	2	2
Maximum solar charge current	120A	
Maximum AC charge current	120A	150A
Maximum charge current	120A	150A
PROTECTION & FEATURE		
AC overcurrent	Yes	
AC overvoltage	Yes	
Over temperature protection	Yes	
Smart load management	Yes	
On Grid	Yes	
Parallel function	OPTIONAL	
GENERAL PARAMETERS		
Operation temperature	-10°C ~ 50°C	
Relative humidity	5% ~ 95% (Non-condensing)	
Altitude	(>2000m Derating)	
Dimensions D x W x H(mm)	420*561.6*152.4	
Net Weight(KG)	19.5	20
DISPLAY AND COMMUNICATION		
Display	Touch button	
Interface	Standard:RS232,CAN&RS485; Optional: WiFi	
Safety standard	EN/IEC 62109-1,EN/IEC 62109-2	

REVO VM III-T

OFF GRID Energy Storage Inverter

series 4/6kW



Max PV input current 27A
Designed with 27A PV input current compatible to the market trend of increased Imp of solar panel



Interface
Global cloud platform mobile APP anytime and anywhere open APP,support power internet applications



OFF-Grid
REVO VM III-T series is suitable for off-grid applications.



Battery
Battery equalization function extend life cycle
Reserved communication port(RS485,CAN)for BMS

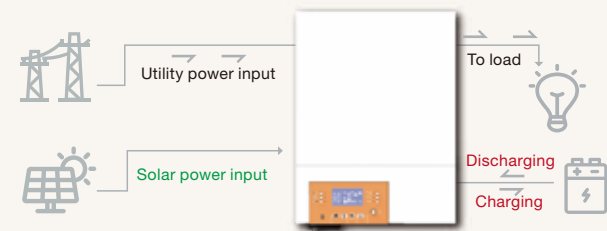


Easy access
Two outputs for smart load management
The second output can be scheduled on & off based on setting point of battery transfer to utility

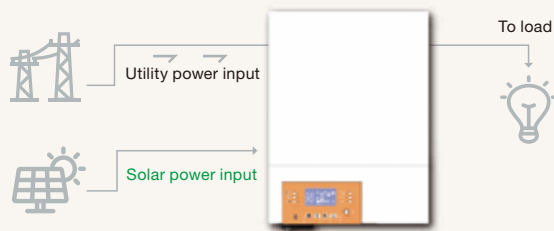


Move
Detachable LCD control module with various communications

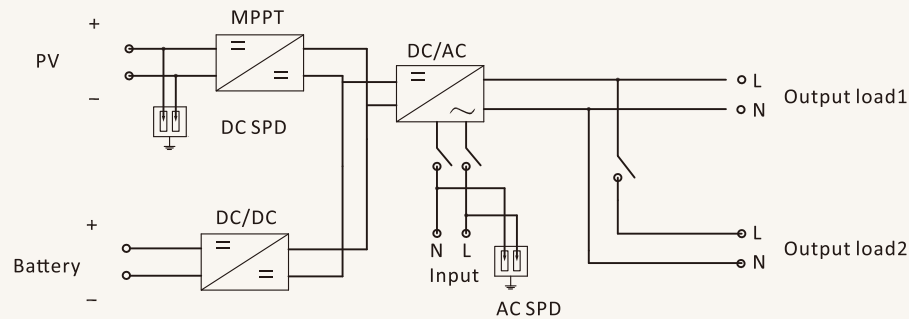
With battery connected



Without battery connected



Schematic diagram

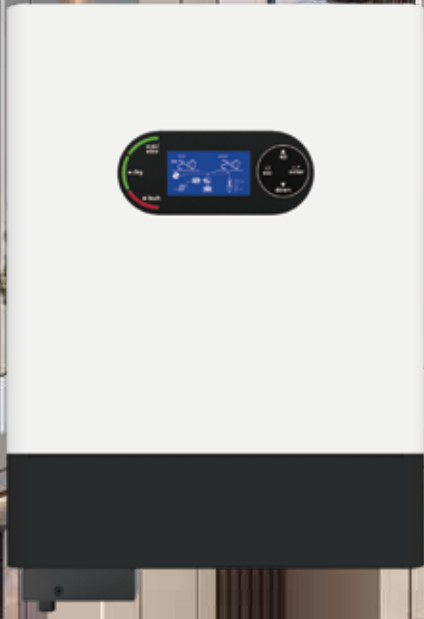


Technical Specification	REVO VM III-T series	
Rated Power	4000VA/4000W	6000VA/6000W
AC INPUT		
AC Voltage	230VAC	
Voltage Range	170–280VAC (For Personal Computers) ; 90–280 VAC (For Home Appliances)	
Frequency Range	50/60Hz (Auto sensing)	
AC OUTPUT		
Surge Power	8000VA	12000VA
AC Voltage Regulation (Battery Mode)	230VAC ± 5%	
Rated frequency	50/60Hz	
Efficiency (Peak)	93%	
Transfer Time	10ms (For Personal Computers) ; 20ms (For Home Appliances)	
BATTERY		
Battery Voltage	24VDC	48VDC
Floating Charge Voltage	27VDC	54VDC
Overcharge Protection	33VDC	63VDC
Battery type	Lithium/Lead-acid	
SOLAR CHARGER & AC CHARGER		
Maximum PV Array Open Circuit Voltage	500VDC	
Maximum PV Array Power	5000W	7000W
MPPT voltage range(V)	60~450VDC	
Maximum input current	27A	
MPPT tracker/strings	1	
Maximum solar charge current	120A	
Maximum AC charge current	100A	
Maximum charge current	120A	
PROTECTION & FEATURE		
AC overcurrent	Yes	
AC overvoltage	Yes	
Over temperature protection	Yes	
Smart load management	Yes	
GENERAL PARAMETERS		
Operation temperature	0°C ~ 50°C	
Relative humidity	5% ~ 95% (Non-condensing)	
Altitude	(>2000m Derating)	
Dimensions D x W x H(mm)	434*311*126.5	
Net Weight(KG)	8.5	9
DISPLAY AND COMMUNICATION		
Display	Touch buttons	
Interface	Standard: RS232; Optional: WiFi,Bluetooth	
Safety standard	EN/IEC62109-1,EN/IEC62109-2	

REVO HM

Hybrid On & Off Grid Energy Storage Inverter

series 4/6kW



Max PV input current 27A
Designed with 27A PV input current compatible to the market trend of increased Imp of solar panel



Interface
Global cloud platform mobile APP anytime and anywhere open APP,support power internet applications



On and Off-Grid
REVO HM series is suitable for on-grid and off-grid applications



Battery
Battery equalization function extend life cycle
Reserved communication port(RS485,CAN)for BMS

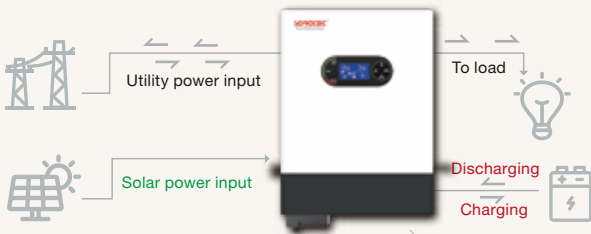


Easy access
Two outputs for smart load management
The second output can be scheduled on & off based on setting point of battery transfer to utility



Protect
Built-in anti-dust kit for harsh environment
AC overcurrent,AC overvoltage,over temperature protection

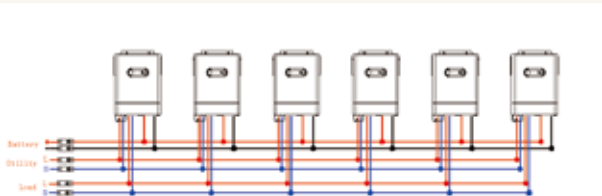
● With battery connected



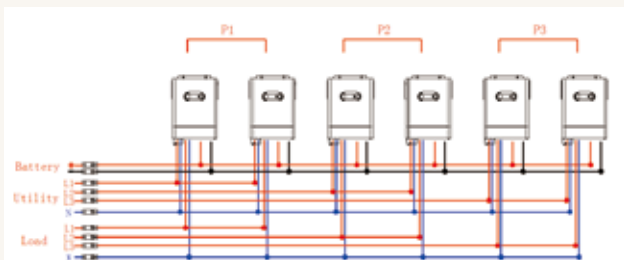
● Without battery connected



● Single phase output up to 36KW using 6 units



● Three phase output using either 3 units(18kw)or max 6 units(36kw)

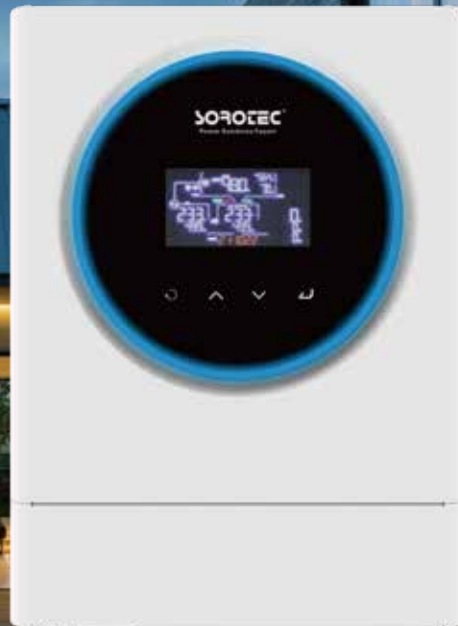


Technical Specification	REVO HM series	
Rated Power	4000VA/4000W	6000VA/6000W
AC INPUT		
AC Voltage	230VAC	
Voltage Range	170-280VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances)	
Frequency Range	50/60Hz (Auto sensing)	
AC OUTPUT		
Surge Power	8000VA	12000VA
AC Voltage Regulation (Battery Mode)	230VAC ± 5%	
Rated frequency	50/60Hz	
Efficiency (Peak)	93%	
Transfer Time	10ms (For Personal Computers) ; 20ms (For Home Appliances)	
BATTERY		
Battery Voltage	24VDC	48VDC
Floating Charge Voltage	27VDC	54VDC
Overcharge Protection	33VDC	63VDC
Battery type	Lithium/Lead-acid	
SOLAR CHARGER & AC CHARGER		
Maximum PV Array Open Voltage(V)	500VDC	
Maximum PV Array Power	5000W	7000W
MPPT voltage range(V)	60~450VDC	
Maximum input current	27A	
MPPT tracker/strings	1	
Maximum solar charge current	120A	
Maximum AC charge current	100A	
Maximum charge current	120A	
PROTECTION & FEATURE		
AC overcurrent	Yes	
AC overvoltage	Yes	
Over temperature protection	Yes	
Smart load management	Yes	
On Grid	Yes	
Parallel Function	Max 6 units	
GENERAL PARAMETERS		
Operation temperature	-10°C ~ 50°C	
Relative humidity	5% ~ 95% (Non-condensing)	
Altitude	(2000m Derating)	
Dimensions DxWxH(mm)	466*316*127	
Net Weight(KG)	8.8	10.1
DISPLAY AND COMMUNICATION		
Display	Touch buttons	
Interface	Standard:RS232,USB; CAN&RS485; Optional:WiFi,Bluetooth	
Safety standard	EN/IEC62109-1,EN/IEC62109-2	

REVO VM IV PRO-T

Hybrid On & Off Grid Energy Storage Inverter

series **4/6kW**



Max PV input current 27A

Designed with 27A PV input current compatible to the market trend of increased Imp of solar panel



Easy access

Two outputs for smart load management
The second output can be scheduled on & off based on setting point of battery transfer to utility



Hybrid On & Off Grid

REVO VM IV PRO-T series is suitable for Hybrid On & Off Grid applications



Battery

Battery equalization function extend life cycle
Reserved communication port(RS485,CAN)for BMS



Interface

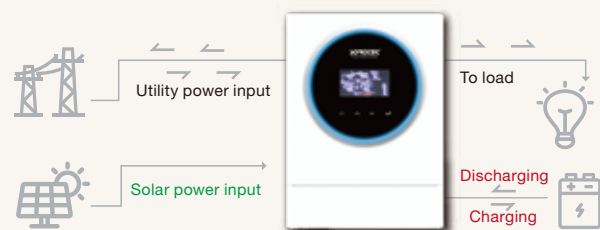
Global cloud platform mobile APP anytime and anywhere open APP,support power internet applications



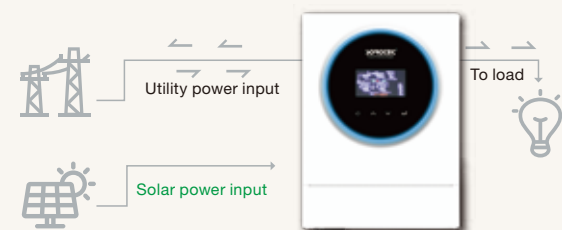
Lights

Customizable status LED ring with RGB lights

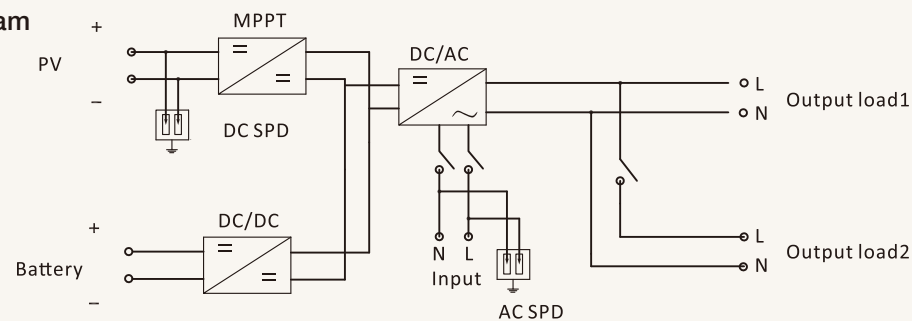
With battery connected



Without battery connected



schematic diagram



Technical Specification	REVO VM IV PRO-T series	
Rated Power	4000VA/4000W	6000VA/6000W
AC INPUT		
AC Voltage	230VAC	
Voltage Range	170~280VAC (For Personal Computers) ; 90~280 VAC (For Home Appliances)	
Frequency Range	50/60Hz (Auto sensing)	
AC OUTPUT		
Surge Power	8000VA	12000VA
AC Voltage Regulation (Battery Mode)	230VAC ± 5%	
Efficiency (Peak)	93%	
Transfer Time	10ms (For Personal Computers) ; 20ms (For Home Appliances)	
BATTERY		
Battery Voltage	24VDC	48VDC
Floating Charge Voltage	27VDC	54VDC
Overcharge Protection	33VDC	63VDC
Battery type	Lithium/Lead-acid	
SOLAR CHARGER & AC CHARGER		
Maximum PV Array Open Circuit Voltage	500VDC	
Maximum PV Array Power	5000W	7000W
MPPT voltage range(V)	60~450VDC	
Maximum input current	27A	
MPPT tracker/strings	1	
Maximum solar charge current	120A	
Maximum AC charge current	100A	
Maximum charge current	120A	
PROTECTION & FEATURE		
AC overcurrent	Yes	
AC overvoltage	Yes	
Over temperature protection	Yes	
Smart load management	Yes	
GENERAL PARAMETERS		
Operation temperature	0°C ~ 50°C	
Relative humidity	5% ~ 95% (Non-condensing)	
Altitude	(>2000m Derating)	
Dimensions DxWxH(mm)	466*316*127	
Net Weight(KG)	9.4	10.7
DISPLAY AND COMMUNICATION		
Display	Touch buttons	
Interface	Standard:RS232; CAN&RS485; Optional:WiFi,Bluetooth	
Safety standard	EN/IEC62109-1,EN/IEC62109-2	

REVO VM IV

Hybrid On & Off Grid Energy Storage Inverter

series 4/6/8/11kW



MPPT
Built-in two MPPT(6KW-11KW),with wide PV input range:60~450VDC



Easy to use
Configurable AC/PV output usage time and prioritization



On & Off-Grid
REVO VM IV series is suitable for on & off-grid applications



Battery
Battery equalization function extend life cycle
Reserved communication port(RS485,CAN)for BMS

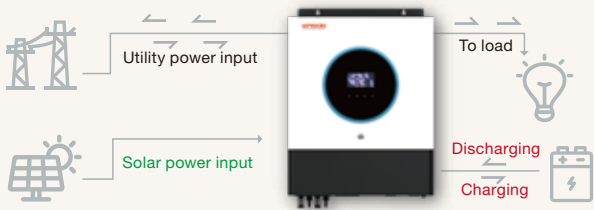


Parallel function
Parallel operation up to 6 units

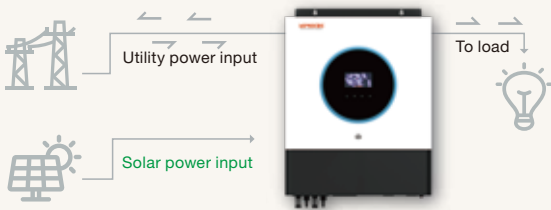


Easy access
Communication WiFi or bluetooth
Touchable button with large 5" colorful LCD

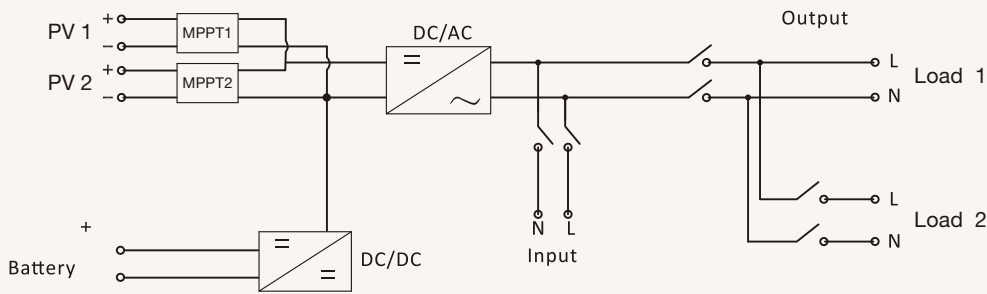
With battery connected



Without battery connected



Schematic diagram



Technical Specification	REVO VM IV series				
Rated Power(W)	4000VA/4000W	6000VA/6000W	6000VA/6000W	8000VA/8000W	11000VA/11000W
AC INPUT					
Nominal Voltage(VAC)	230VAC				
Voltage range(VAC)	170~280VAC / 90~280VAC				
Frequency range(Hz)	50/60Hz				
AC OUTPUT					
Surge power	8000	12000	16000	22000	
Output voltage(VAC)	220/230/240				
Output wave form	Pure sine wave				
Rated Frequency(Hz)	50/60				
Efficiency	93% max				
Transfer time	10ms typical (narrow range);20ms typical (wide range)				
BATTERY					
Nominal DC voltage(VDC)	24	48			
Floating charge voltage(VDC)	27	54			
Overcharge protection(VDC)	31	63			
Battery type	Lithium & Lead-acid				
SOLAR CHARGER & AC CHARGER					
Max.PV array open circuit voltage(VDC)	500				
Max.PV array power(W)	5000W	7000W	8000W (4000*2)	11000W(5500*2)	13000W(6500*2)
MPPT input voltage range@operating(VDC)	60-450				
Max.input current(A)	27	15*2	27*2(Max 40A)		
Max.solar charging current(A)	120			120	150
Max.AC charging current(A)	100			120	150
Max.charging current(A)	120			120	150
DISPLAY INTERFACE					
Parallel function	up to 6 units				
Communication	Standard:RS232,CAN&RS485;Optional:WiFi,Bluetooth				
Display	5"colorful LCD				
ENVIRONMENT					
Humidity	5~90%RH (No Condensing)				
Operating Temperature	-10°C to 50°C				
Net Weight(KG)	9.3	10.6	18	19.6	19.9
Dimensions D x W x H(mm)	466*316*127			603*440*160	

REVO HMT PRO/G2

Hybrid On & Off Grid Energy Storage Inverter

series 4/6/6/8/11kW



On-Grid and Off-Grid

REVO HMT series is suitable for on-grid and off-grid applications.



Remote Monitoring

Control and monitor your smart system on the move via our monitoring App and website



BMS

BMS Communication for lithium battery



Easy access

Accessible through a LCD touch screen and through the web. Two outputs for smart load management



Safe

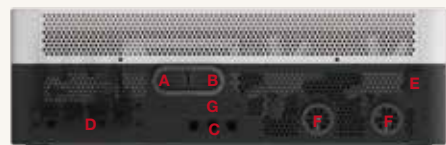
Built-in anti-dust kit for harsh environment
AC overcurrent, AC overvoltage, over temperature protection



Flexible Rate Tariff

Charge from the grid at off-peak time when energy is cheaper and discharge at peak time when energy is more expensive.

Product characteristics



A:AC OUTPUT

B:AC INPUT

C:COM

D:PV INPUT

E:ON/OFF

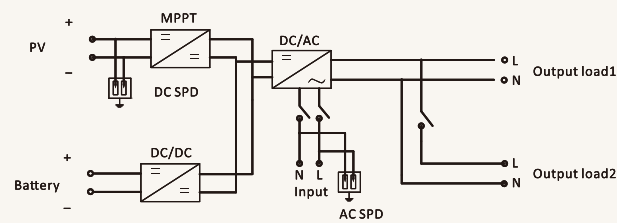
F:DC INPUT

G:PARALLEL CONNECTION

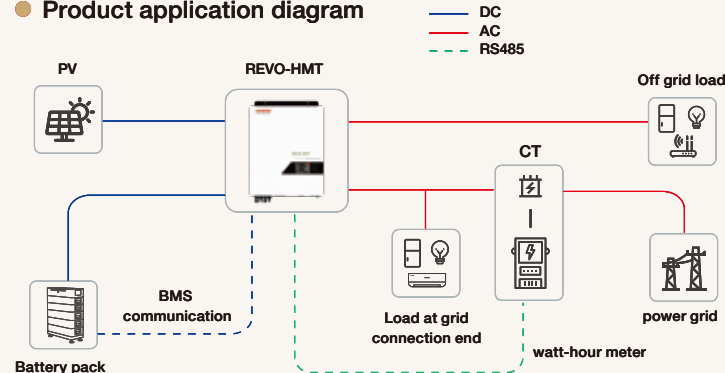


LCD touch screen

Circuit block diagram



Product application diagram



Technical Specification	REVO HMT PRO series		REVO HMT G2 series		
Rated Power	4000VA/4000W	6000VA/6000W	6000VA/6000W	8000VA/8000W	11000VA/11000W
AC INPUT					
AC Voltage	220/230/240VAC				
Voltage Range	170–280VAC (For Personal Computers) ; 90–280 VAC (For Home Appliances)				
Frequency Range	50/60Hz (Auto sensing)				
AC OUTPUT					
Surge Power	8000VA	12000VA	12000VA	16000VA	22000VA
Voltage Regulation (Battery Mode)	220VAC/230VAC/240VAC ± 5%				
Rated frequency	50/60Hz				
Efficiency (Peak)	93%				
Transfer Time	10ms (For Personal Computers) ; 20ms (For Home Appliances)				
BATTERY					
Battery Voltage	48VDC				
Floating Charge Voltage	54VDC				
Overcharge Protection	63VDC				
Battery type	Lithium/Lead-acid				
SOLAR CHARGER & AC CHARGER					
Maximum PV Array Open Circuit Voltage	500VDC				
Maximum PV Array Power	5000W	7000W	8000W (4000*2)	11000W(5500W*2)	13000W(6500*2)
MPPT voltage range(V)	60~450VDC		60~450VDC		
Maximum input current	27A		27A*2(MAX 40A)		
MPPT tracker/strings	1		2		
Maximum solar charge current	120A			120A	150A
Maximum AC charge current	100A			120A	150A
Maximum charge current	120A			120A	150A
PROTECTION & FEATURE					
AC overcurrent	Yes				
AC overvoltage	Yes				
Over temperature protection	Yes				
Smart load management	Yes				
Generator port	NO			Yes	
On Grid	Yes				
Parallel function	Yes,6 units				
CT Anti-backflow function	Yes (Optional)				
GENERAL PARAMETERS					
Operation temperature	-10°C ~ 50°C				
Relative humidity	5% ~ 95% (Non-condensing)				
Altitude	(>2000m Derating)				
Dimensions D x W x H(mm)	515*315*134		500*440*130	603*440*141	
Net Weight(KG)	11.4	11.5	16.5	18.5	19
DISPLAY AND COMMUNICATION					
Display	Touch screen				
Interface	Standard:RS232,CAN&RS485; Optional: WiFi,Bluetooth				
Safety standard	EN/IEC 62109-1,EN/IEC 62109-2				

REVO HES

Hybrid On & Off Grid Energy Storage Inverter

series **6/8/10kW**



5 years warranty

IP66



Easy access

Accessible through a LCD touch screen and through the web



ON-Grid and OFF-Grid

REVO HES series is suitable for on-grid and off-grid applications.



Remote Monitoring

Control and monitor your smart system on the move via our monitoring App and website



BMS

Battery Communication for lithium battery



Safe

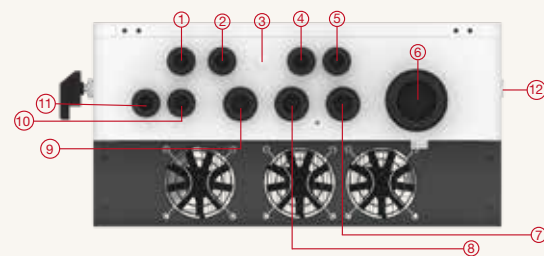
Physical and electrical dual isolation,Earth Leakage Current Monitoring,Anti-island protection,Insulation detection and so on



Flexible Rate Tariff

Charge from the grid at off-peak time when energy is cheaper,and discharge at peak time when energy is more expensive.

Product characteristics



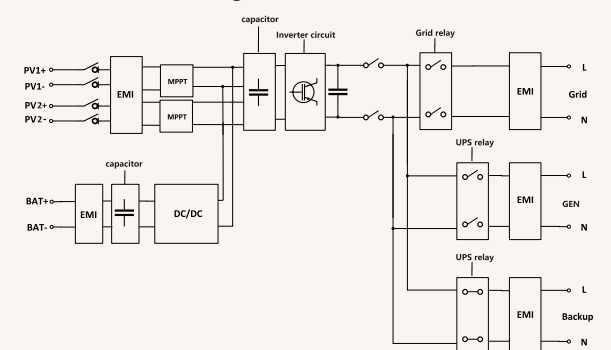
1. PARALLEL
2. CT
3. WIFI
4. BMS
5. RS232/Dry
6. BAT

7. GEN
8. AC OUTPUT
9. AC INPUT
10. PV1
11. PV2
12. Battery switch

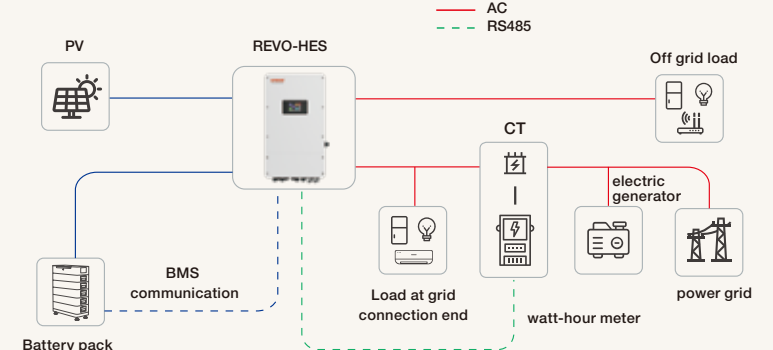


LCD touch screen

Circuit block diagram



Product application diagram



Technical Specification	REVO HES series			REVO HES-G2 series
Rated Power	6000VA/6000W	8000VA/8000W	10000VA/10000W	6000VA/6000W
PV INPUT				
Max.power(kW)	7	11	13	9.6
Max.DC voltage(V)	500			
MPPT voltage range(V)	90~450			
Max.input current(A)	30	20+20		16+16
MPPT number/Max.input strings number	1/2	2/2		2/2
AC OUTPUT(GRID-TIED)				
Grid voltage(range(V)	230/90~280(For Personal Computers);170~280(For Home Appliances)			
Frequency(Hz)	50/60			
PF	0.8lagging~0.8leading			
THDi	<3%			
AC output topology	L+N+PE			
BATTERY				
Battery voltage range(V)	40~63			
Max.charging voltage(V)	63			
Max.charge/discharge current(A)	120/140	150/190	150/220	120/140
Battery type	Lithium /Lead-acid			
UPS OUTPUT				
Rated power (kw)	6	8	10	6
Rated output voltage(V)	220/230/240			
Rated output current(A)	27.2/27/25	36.3/34.7/33.3	45.4/43.5/41.7	27.2/27/25
Rated frequency (Hz)	50/60			
Transfer Time(ms)	<10			
THDu	<10%			
Overload capacity	5s≥110%load;10s≥101%~110%load			
PROTECTION & FEATURE				
Anti-island protection	Yes			
Insulation monitoring	Yes			
Residual current monitoring	Yes			
Parallel function	Yes,6 units			
Other protection	AC overcurrent,AC overvoltage,Over temperature protection			
GENERAL PARAMETER				
Degree of protection	IP66			
Operation temperature	-25°C~50°C,>45°C derating			
Cooling	smart cooling			
Relative humidity	5~95% (non-condensing)			
Altitude	(>2000m Derating)			
Dimensions W x D x H(mm)	700*396*192	630*440*215		700*396*192
Net Weight(KG)	27	38	38.2	27
Isolation transformer	No			
Self-consumption(W)	<5			
DISPLAY AND COMMUNICATION				
Display	Touch screen			
Interface	Standard:RS232,CAN&RS485; Optional:WiFi,CT			
Safety standard	EN/IEC62109-1,EN/IEC62109-2			

iHESS 1P

Hybrid On & Off Grid Energy Storage Inverter

series 3.6/4.6/5/6kW

5 years warranty

IP65



Easy access

Accessible through a LCD touch screen and through the web



Quick backup

Provides backup load with a transfer time less than 10ms.



Remote Monitoring

Control and monitor your smart system on the move via our monitoring App and website



Multiple working modes

iHESS series supports four working modes
1.Self Use 2.Time of Use 3.Backup Power
4.Grid Priority



Safe

Physical and electrical dual isolation AFCI
function integration AC overcurrent,AC overvoltage,
Over temperature protection

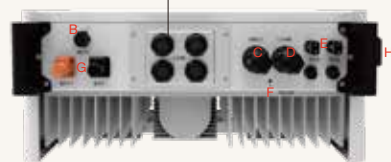


Flexible Rate Tariff

Charge from the grid at off-peak time when energy
is cheaper,and discharge at peak time when
energy is more expensive.

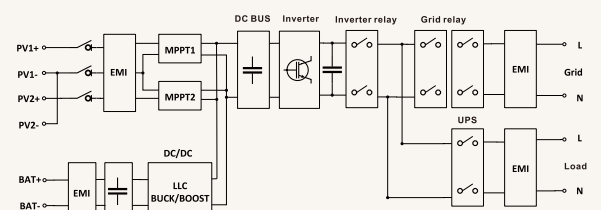
Product characteristics

A1: EPO/AFCI port
A2: BMS port
A3: Meter/CT port
A4: Dry contact
A5: DRM port
A6: Parallel port
A7: Parallel port
A8: USB port

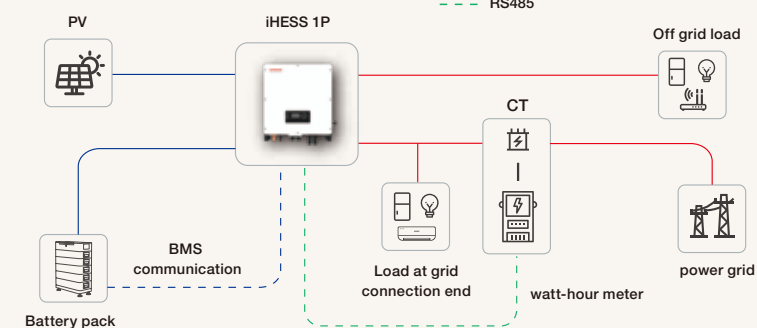


B: WIFI port
C: GRID port
D: LOAD port
E: PV port
F: Breather valve
G: Battery port
H: PV Switch(optional)

Circuit block diagram



Product application diagram



Technical Specification	iHESS 1P series			
Rated power (kW)	3.6	4.6	5	6
EFFICIENCY				
DC Max.efficiency	97.50%			
Europe efficiency	97%			
PV INPUT				
Max.power(kW)	5.4	6.9	7.5	9
Max.DC voltage(V)	500			
MPPT voltage range(V)	120~500			
Max.input current of single MPPT(A)	15/15			
MPPT tracker/strings	2/1			
AC OUTPUT(GRID-TIED)				
Grid voltage/range(V)	230/176~270			
Frequency(Hz)	50/60			
PF	0.8lagging-0.8leading			
THDi	<3%			
AC output topology	L+N+PE			
BATTERY				
Battery voltage range(V)	40~58			
Max.charging voltage(V)	58			
Max.charge/discharge current(A)	100/110			
Battery type	Lithium /Lead-acid			
UPS OUTPUT				
Rated output voltage(V)	220/230/240			
Rated output current(A)	16.3/16/15	20.9/20/19.1	22.7/21.7/20.8	27.2/26/25
Rated frequency (Hz)	50/60			
Transfer Time(ms)	<10			
THDu	<2%			
Overload capacity	5s≥110%load;10s≥101%~110%load			
PROTECTION & FEATURE				
Anti-Island protection	Yes			
Insulation monitoring	Yes			
Residual current monitoring	Yes			
Arc fault protection	Yes (Optional)			
Other protection	AC overcurrent,AC overvoltage,Over temperature protection			
GENERAL PARAMETER				
Degree of protection	IP65			
Operation temperature	-25°C~60°C			
Cooling	Natural			
Relative humidity	0~95% (non-condensing)			
Altitude	(>2,000m Derating)			
Dimensions W x D x H(mm)	480*210*495			
Net Weight(KG)	25		25	
Isolation transformer	No			
Self-consumption(W)	<5			
DISPLAY AND COMMUNICATION				
Display	LCD			
Interface	Standard:RS485,CAN,DRM; Optional:WiFi,Bluetooth			
Safety standard	CE-EMC/ENIEC61000-6-3:2021,EN1IEC61000-6-1:2019;CEV0C/1EC62109-1:2010,IEC62109-2:2011,IEC62477-1:2022 COCVDE4105:2018,VDE0124:2020;COC/CE10-21:2022;COC/TORTypeA/B:2022,OVER25:2020;G98:2022,G99:2022			

MPPT SCC

Solar Controller

series 40A/60A/80A/100A



MPPT
Advanced MPPT technology,fast and stable track the Maximum Power Point, tracking accuracy 99.00%.



Voltage identification
12/24/48VDC system voltage automatic recognition.



Temperature compensation
Temperature Compensation Function.

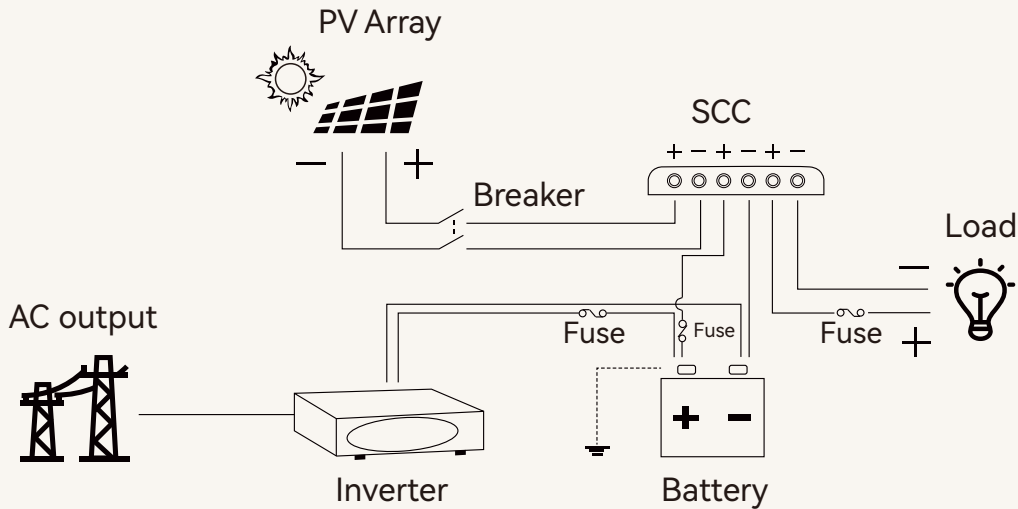


Synchronous
Adopt Synchronous Rectifier Technology,significantly improve the transfer efficiency of circuit,maximum 97.00%.



LCD displaying
Humanized LCD displaying,dynamic display operation data and working state.

Solar Energy System Wiring Diagram



MODELS	SCC40A 100V	SCC60A 150V	SCC80A 200V	SCC100A 200V
Battery Type	GEL(default),FLD,LIO and USE			
Battery Input Voltage Range	9~15VDC/18~30VDC	9~15VDC/18~30VDC/36~60VDC		
Reted Charge Current	40A	60A	80A	100A
Reted Output Current	20A	20A	40A	40A
Display	LCD			
Max PV VOC	<100V	<150V	<200V	
Nominal System Voltage	12V/24V(auto)	12V/24V/48V(auto)		
Max efficiency	97.00%			
MPPT Efficiency	99.00%			
Cooling	Natural (without Fan)			
Self-consumption	≤200mA(12v) ≤100mA(24v)	≤300mA(12v); ≤150mA(24v); ≤100mA (48V)		
Temperature compensation	-3mv/°C/2v (Default)		-4mv/°C/2v (Default)	
Rlative Humidity	≤90%, N.C			
Enclosure	IP20			
Communication Interface	RS232			
Grounding	Positive			
Operating Temperature	-20~55°C (environment 50°C Max current 2 hours no derating)			
Dimension	230*78*128	250*228*83	251*83*228	
Net weight	1.7Kg	4.1Kg	5.5Kg	
Warranty	3 Years			
Optional accessories	Wi-Fi/Bluetooth			
VOLTAGE				
MPPT Voltage Range	15~80VDC/30~80VDC	15~130;30~130;60~130/VDC	15~170VDC/30~170VDC/60~170VDC	
Equalization Voltage	15V/30V	15V/30V/60V		
Boost Voltage	14.4V/28.8V	14.4V/28.8V/57.6V		
Float Voltage	13.9V,/27.8V	13.9V,/27.8V/55.6V		
Reconnect voltage	12.5V,/25.0V	12.5V,/25.0V./50.0V		
Disconnect voltage	11.5V,/23.0V	11.5V,/23.0V/46.0V		

iHESS-3P

Hybrid On & Off Grid Energy Storage Inverter

series **5-12kW**

5 years warranty

IP65



Easy access

Accessible through a LCD touch screen and through the web



Quick backup

Provides backup load with a transfer time less than 10ms.



Remote Monitoring

Control and monitor your smart system on the move via our monitoring App and website



Multiple working modes

iHESS series supports four working modes
1.Self Use 2.Time of Use 3.Backup Power
4.Grid Priority



Safe

Physical and electrical dual isolation AFCI function integration AC overcurrent,AC overvoltage, Over temperature protection



Flexible Rate Tariff

Charge from the grid at off-peak times when energy is cheaper,and discharge at peak time when energy is more expensive.

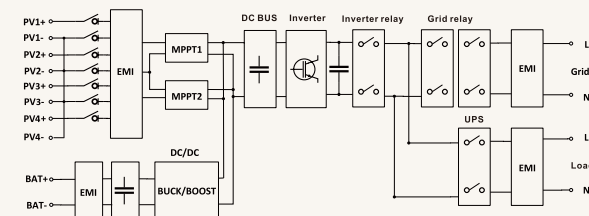
Product characteristics

A1: EPO/AFCI port
A2: BMS port
A3: Meter/CT port
A4: Dry contact
A5: DRM port
A6: Parallel port
A7: Parallel port
A8: USB port

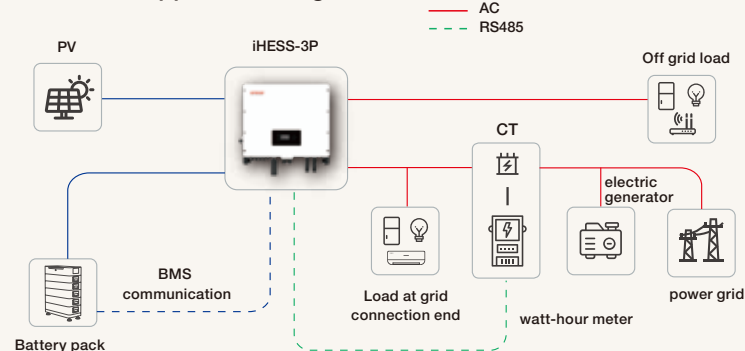


B: WIFI port
C: GRID port
D: LOAD port
E: PV port
F: Battery port
G: PV Switch(optional)

Circuit block diagram



Product application diagram



Technical Specification	iHESS 3P series				
Rated power (kW)	5	6	8	10	12
EFFICIENCY					
DC Max.efficiency	98.00%				
Europe efficiency	98%				
PV INPUT					
Max.power(kW)	7.5	9	12	15	18
Max.DC voltage(V)	1000				
MPPT voltage range(V)	120~900				
Max.input current of single MPPT(A)	16/16				
MPPT tracker/strings	2/1				
AC OUTPUT(GRID-TIED)					
Rated output power(kW)	5	6	8	10	12
Max.output current(A)	8	6.8	12.7	15.9	19.1
Grid voltage/range(V)	400/360~400				
Frequency(Hz)	50/60				
PF	0.8lagging~0.8leading				
THDi	<3%				
AC output topology	3W+N+PE				
BATTERY					
Battery voltage range(V)	125~600				
Max.charging voltage(V)	600				
Rated battery voltage(V)	300				
Max.charge/discharge current(A)	40				
Battery type	Lithium /Lead-acid				
UPS OUTPUT					
Rated output voltage(V)	380/400/415				
Rated output current(A)	13.1/12.5/12	15.8/15/14.4	21/20/19.2	26.3/25/24	31.5/30/28.9
Rated frequency (Hz)	50/60				
Transfer Time(ms)	<10				
THDu	<2%				
Overload capacity	110%,30s / 120%,10s / 150%,0.02s				
PROTECTION & FEATURE					
Anti-Island protection	Yes				
DC Over curent protection	Yes				
Insulation monitoring	Yes				
Residual current monitoring	Yes				
Arc fault protection	Yes				
Other protection	AC overcurrent,AC overvoltage,Over temperature protection				
GENERAL PARAMETER					
Degree of protection	IP65				
Operation temperature	-25°C~60°C				
Cooling	Natural				
Relative humidity	0~95% (non-condensing)				
Altitude	(>2,000m Derating)				
Dimensions W x D x H(mm)	570*210*475				
Net Weight(KG)	28.5				
Isolation transformer	No				
Self-consumption(W)	<5				
DISPLAY AND COMMUNICATION					
Display	LCD				
Interface	Standard:RS485,CAN,DRM; Optional:WiFi,Bluetooth				
Safety standard	CE-EMC/ENIEC61000-6-3:2021,EN1EC61000-6-1:2019;CEV0C/1EC62109-1:2010,IEC62109-2:2011,IEC62477-1:2022 COCVDE4105:2018,VDE0124:2020;COC/CE10-21:2022;COC/TORTypeA/B:2022,OVER25:2020,G98:2022,G99:2022				

REVO HESS

Hybrid ALL-IN-ONE

series 6/8kWh



Simple
All-in-one design modular installation
Quick plug connector battery module removable



On-Grid and Off-Grid
REVO HESS series is suitable for
on-grid and off-grid applications



Safe
Physical and electrical dual isolation
BMS communication for lithium battery
With short circuit protection, over-voltage
protection, over load protection



Remote Monitoring
Control and monitor your smart system on the
move via our monitoring App and website

● Product characteristics

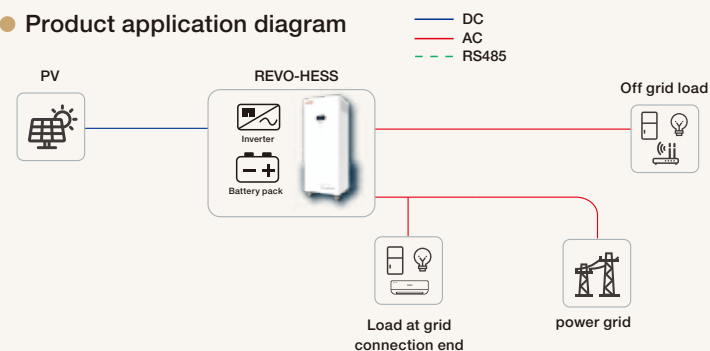


● Circuit block diagram



- 1.PV Input
- 2.AC Input
- 3.AC Output
- 4.Battery Switch
- 5.Communication
- 6.Battery connection terminal
- 7.Battery Room

● Product application diagram



Technical Specification	REVO HESS series	
Rated Power	6000VA/6000W	8000VA/8000W
AC INPUT		
AC Voltage	230VAC	
Selectable Voltage Range	170-280VAC (For Personal Computers) ; 90-280VAC (For Home Appliances)	
Frequency Range	50/60Hz (Auto sensing)	
AC OUTPUT		
Surge Power	12000VA	16000VA
Voltage Regulation (Battery Mode)	230VAC ± 5%	
Efficiency (Peak)	93%	
Transfer Time	10ms (For Personal Computers) ; 20ms (For Home Appliances)	
Wave Form	Purs Sine Wave	
No Load Power Consumption	>75W	
BATTERY		
Capacity	5000Wh x 2	
Nominal Voltage	51.2VDC	
Full Charge Voltage(FC)	56V	
Full Discharge Voltage(FD)	42V	
Typical Capacity	100Ah x 2	
Max Continuous Discharging Current	100A x 2	
Max Discharging Current	192A at 1 min	
Protection	BMS,breaker	
Charge Voltage	56V	
Charge Current	20A (0.2C)	
Maximum Charge Current	50A (0.5C)	
Standard Charge Method	0.2C CC(Constant current)charge to FC,CV(Constant voltage FC) charge till charge current decline to,0.05C	
Inner Resistance	>20m ohm	
SOLAR CHARGER & AC CHARGER		
Solar Charger type	MPPT	
Maximum PV Array Power	6000W	8000W (4000W x 2)
MPPT Range Operating Voltage	90~450VDC	
Maximum PV Array Open Circuit Voltage	500VDC	
Maximum Solar Charge Current	120A	120A
Maximum AC Charge Current	100A	120A
Maximum Charge Current	120A	120A
GENERAL PARAMETER		
Dimensions W x D x H(mm)	552*452*1420	
Net Weight(KG)	55	

iHESS-M 1P

Residential Energy Storage System

ALL-IN ONE

5 years warranty
IP65



Easy access
Accessible through a LCD touch screen and through the web



Simple
All-in-one design
Modular installation & Quick plug connector



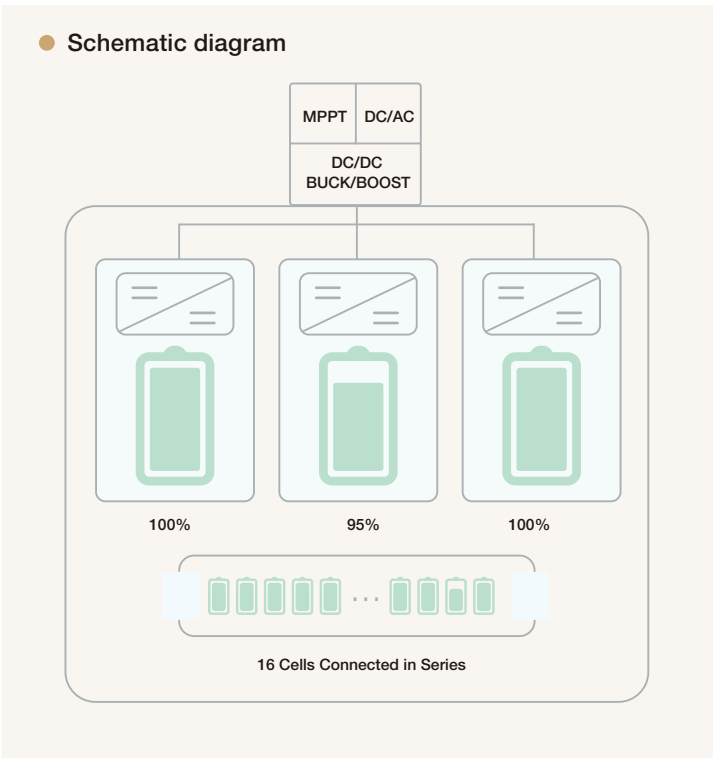
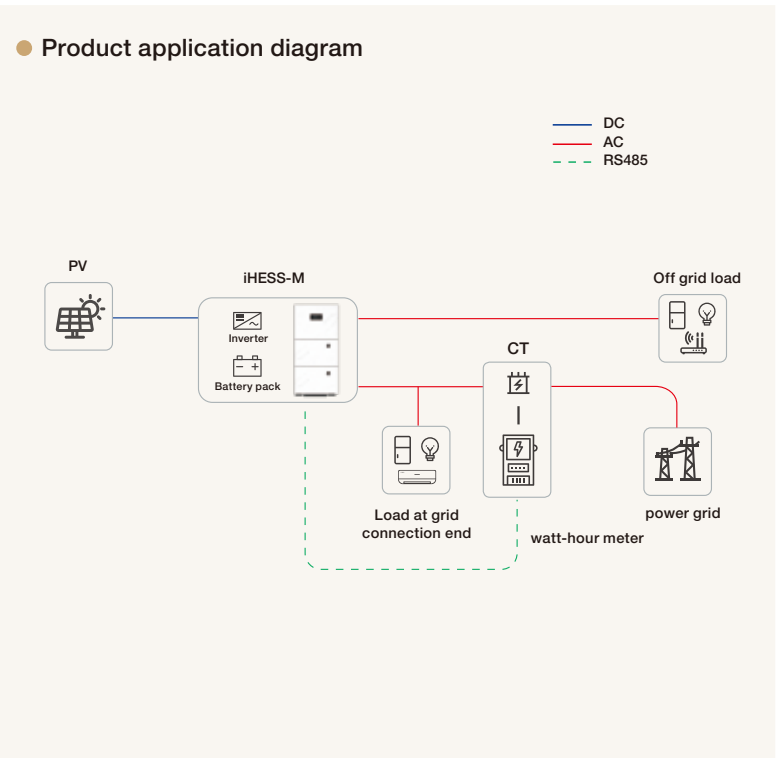
BMS
More available battery energy with pack optimization Batteries flexible expansion in stages



Safe
Sleep-class silence
Long battery life



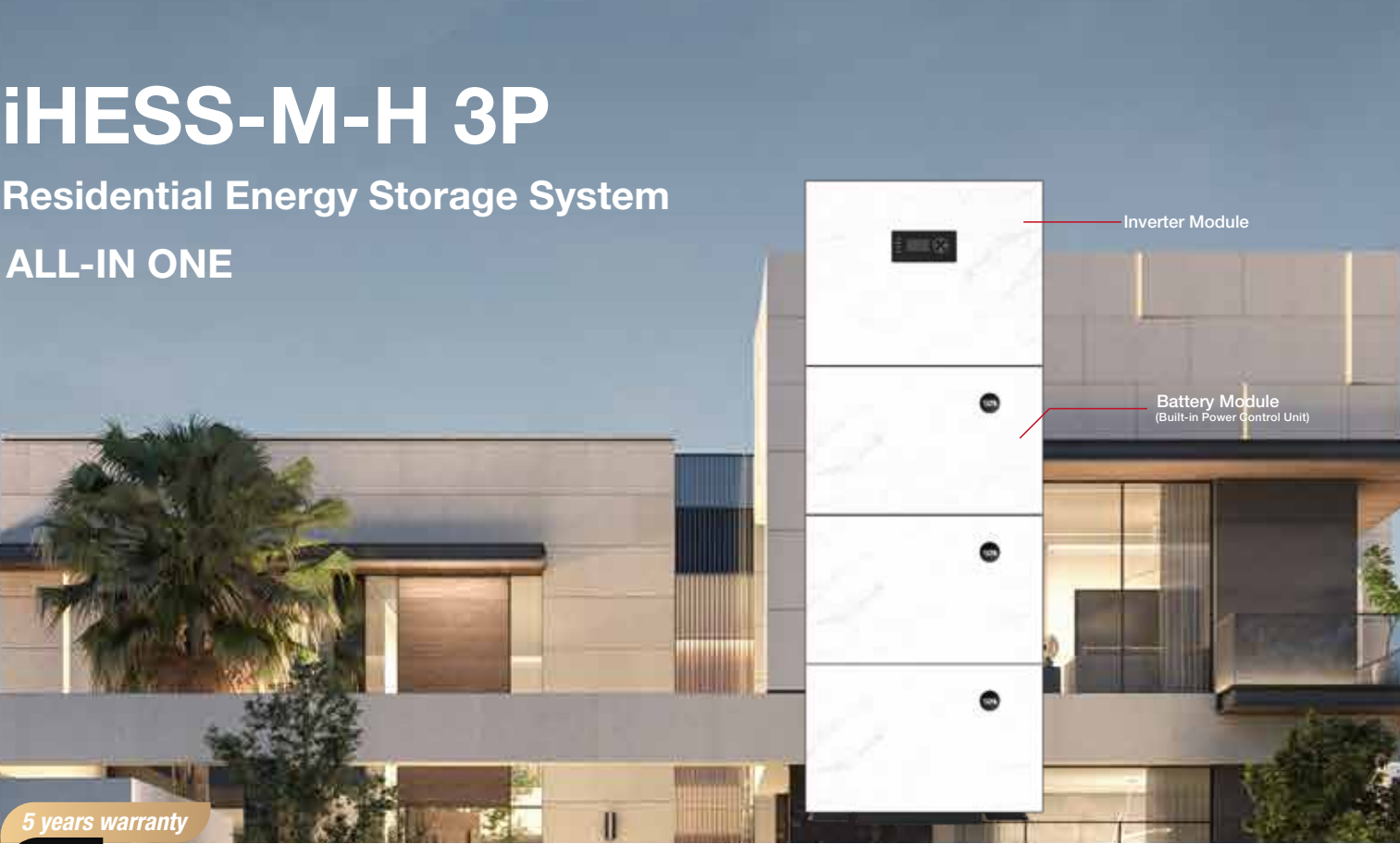
Modular
Modular and integrated design for easy transportation and installation



Technical Specification	iHESS-M 1P
EFFICIENCY	
DC Max.efficiency	97.50%
Europe efficiency	97%
INPUT(PV)	
Max.power(kW)	9.6
Max.DC voltage(V)	550
MPPT voltage range(V)	90~500
Max.input current of single MPPT(A)	16/16
MPPT tracker/strings	2/1
AC OUTPUT	
Rated output power(kW)	6
Max.output current(A)	26
Grid voltage/range(V)	230/176270
Frequency(Hz)	50/60
PF	0.8lagging-0.8leading
THDi	<3%
AC output topology	L+N+PE
BATTERY	
Battery voltage range(V)	40~58
Max.charging voltage(V)	58
Max.charge/discharge current(A)	100/110
Battery type	Lithium /Lead-acid
EPS OUTPUT	
Rated power(kW)	6
Rated output voltage(V)	230
Rated output current(A)	26
Rated frequency(Hz)	50/60
Transfer Time(ms)	<10
THDi	<2%
Overload capacity	110%,30S / 120%,10S / 150%,0.02S
PROTECTION & FEATURE	
Anti-Island protection	Yes
DC overcurrent protection	Yes
Insulation monitoring	Yes
Residual current monitoring	Yes
Arc fault protection	Optional
Battery reverse polarity protection	Yes
Other protection	AC overcurrent,AC overvoltage,Over temperature protection
BATTERY MODULE	
Model	SL-M48100
Battery type	LiFePo4
Battery module energy	5.12KWh
Max charge current&discharge current	100A
Dimensions W*D*H(mm)	640*243*400
Net Weight(KG)	54
GENERAL PARAMETER	
Degree of protection	IP65
Operation temperature	-25°C~60°C
Cooling	Natural
Relative humidity	0~95% (non-condensing)
Altitude	(>2,000m Derating)
Dimensions W*D*H(mm)	640*243*497
Net Weight(KG)	25
Isolation transformer	No
Self-consumption(W)	<5
DISPLAY AND COMMUNICATION	
Display	LCD
Interface	Standard:RS485,CAN,DRM Optional:Wifi,Bluetooth
Safety standard	CE-EMC/ENIEC61000-6-3:2021,ENIEC61000-6-1:2019,CEV0C/IEC62109-1:2010,IEC62109-2:2011,IEC62477-1:2022 COCVDE4105:2018,VDE0124:2020,COC/CE10-21:2022,COC/TORTVpeA/B:2022,OVER25:2020,G99:2022

5 years warranty

IP65





Easy access
Accessible through a LCD touch screen and through the web



Simple
All-in-one design
Modular installation &Quick plug connector



Modular
Modular and integrated design for easy transportation and installation



BMS
More available battery energy with pack optimization
Batteries flexible expansion in stages

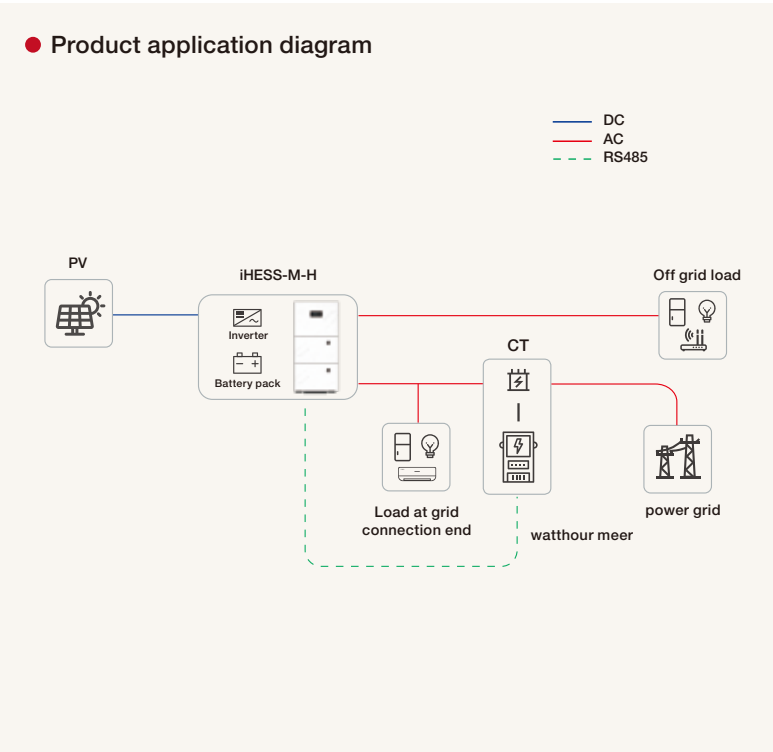


Safe
Support connection with BMS an EMS systems



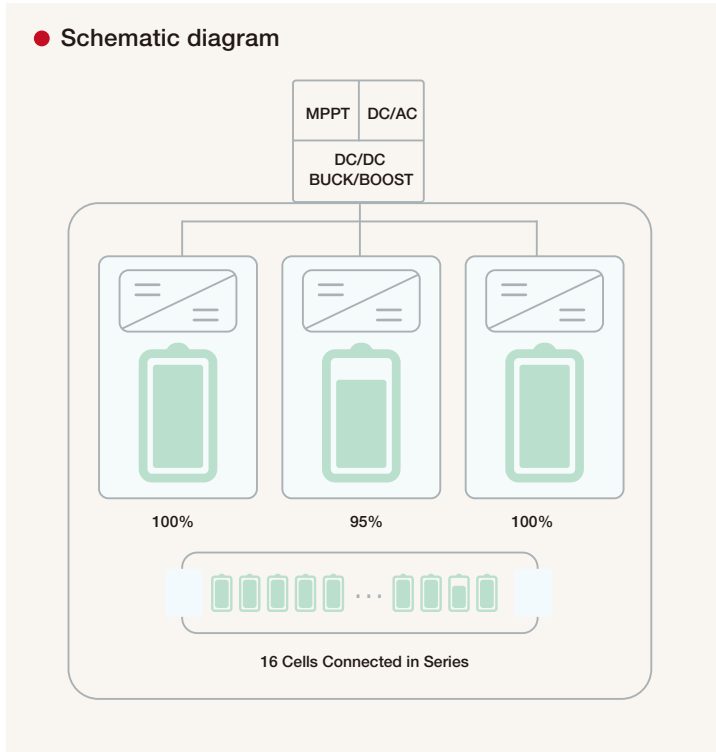
Independent
Real uninterruptible power supply,transfer time<10ms

● Product application diagram



Legend: DC (blue solid line), AC (red solid line), RS485 (green dashed line)

● Schematic diagram



16 Cells Connected in Series

Technical Specification	iHESS-M-H 3P							
Rated output power	5/6/8/10/12kW							
Quantity of batteries	1-6							
Battery total energy	5.12kWh~30.72kWh							
Usable Energy	4.75kWh~28.5kWh							
Degree of protection	IP65							
Ambient temperature range	-10℃+45℃							
Allowable relative humidity range	5%~95%							
Max.operating altitude	4000m							
Cooling type	Natural cooling							
Installation method	Floor or Wall-mounted (optional)							
Display	LCD APP+Bluetooth							
Noise	<25dB							
Communication	RS485/Bluetooth/Ethernet,Optional:WiFi/4G/GPRS							
INVERTER MODULE								
Model	5kW	6kW	8kw	10kW	12kW			
Battery voltage range	300-435VDC							
Rated battery voltage	384V							
Max.charge/discharge current	40A							
Recommended Max.PV input power	8000wp	9600wp	12800wp	16000wp	19200wp			
Max.input voltage	1000V							
MPPT operating voltage range	180~900V							
Number of MPPT trackers	2							
Max.input current per MPPT	13A/13A							
Rated grid voltage	400V 3W/N/PE,50Hz/60Hz							
Grid voltage range	360-440V							
Rated AC power	5kW	6kW	8kW	10kW	12kW			
Max.AC power output to utility grid	5kW	6kW	8kW	10kW	12kW			
Rated voltage,Frequency(Off-grid)	400V 3W/N/PE,50Hz/60Hz							
Max.apparent power(Off-grid)	5000VA	6000VA	8000VA	6000VA	12000VA			
Transfer time	<10ms							
Max efficiency of solar inverter	98.00%							
European efficiency of solar inverter	98.00%							
Topology	Transformerless							
Dimensions Wx Dx H(mm)	640*200*595							
Net Weight(KG)	28.5							
BATTERY MODULE								
Model	SL-HM 100							
Voltage range	300~435VDC							
Battery Type	LiFePO ₄							
Battery module energy	5.12kWh							
Depth of discharge(DOD)	0~90% adjustable							
Rated Power	3000W							
Topology	Transformer isolation							
Dimensions W x Dx H(mm)	640*200*400							
Net Weight(KG)	55							
STANDARD								
EMC	EN61000-6-2,EN61000-6-3,EN61000-3-2,EN61000-3-3,EN61000-3-11,EN61000-3-12							
Safety standards	CE-EMC/ENIEC61000-6-3:2021,ENIEC61000-6-1:2019,CEVOC/IEC62109-1:2010,IEC62109-2:2011,IEC62477-1:2022 COCVDE4105:2018,VDE0124:2020,COC/CE10-21:2022,COC/TORTvpeA/B:2022,OVER25:2020,G98:2022,G99:2022							
Grid standards	VDE-AR-N4105,VDEV0126-1-1,CEI 0-21,G98/G99,EN 50438/EN50549							

ENERGY STORAGE INVERTER IP65 | 31/32

MPG-M

Energy Storage Converter

series 30~125KVA



Flexible configuration
Compact size, standard cabinet width design
Support ACDC、DCDC、STS、ATS device access



Efficient and stable
No fragile parts, modular N+1 redundancy
System online rate 99%

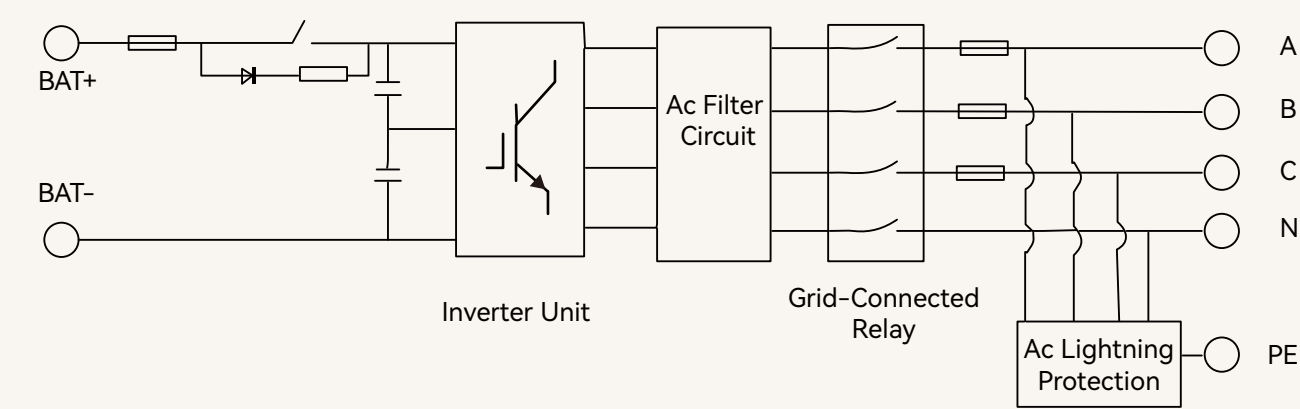


Perfect compatibility
670~1000V Extra Wide Voltage Range Supports
lead acid/lithium/sodium ion batteries



Safe
Support linking with BMS, EMS systems
System has multiple protection

● Product application diagram



Technical Specification	MPG-M series			
AC PARAMETERS				
Rated AC Power	30KW	60KW	100KW	125KW
Allowable Voltage	380/400 (±15%)VAC			
Allowable Frequency	50/60 (±2.5)Hz			
THDi	≤3%			
Power factor	0.99/-1~1			
Overload capacity	30KVA	60KVA	110KVA	137.5KVA (110%)
Wiring method	three-phase four-wire			
Isolation transformer	NO			
DC PARAMETERS(BATTERY)				
Battery voltage range	600~900VDC			680~1000VDC
Max.DC current	44A	88A	165A	202A
PROTECTION &FEATURES				
DC input switch	support			
Anti-Islanding protection	support			
Output overcurrent protection	support			
DC surge protection	Type II			
AC surge protection	Type II			
Insulation resistance testing	support			
Leakage current protection	support			
SYSTEM PARAMETER				
Maximum efficiency	98%			
Dimensions W x D x H(mm)	440*550*173			600*800*285
Net Weight(KG)	25	30	50	85
Noise	<75dB			
Protection grade	IP20			IP66
Allowable ambient temperature	-30°C ~ 60°C			-30°C ~ 60°C (Derating above 50°C)
Humidity	0 to 95% (non condensing)			
Altitude	≤3000m			
Cooling mode	Forced air cooling & liquid cooling			
COMMUNICATION PARAMETERS				
Display	LED display			
Communication interface	RS485、CAN、LAN、REPO			
Communication protocol	Modbus TCP/RTU			
BMS access	support			
EMS	support			

MPGS

On & Off Grid Energy Storage Inverter Integrated Machine



Solar
Built in MPPT,which can be directly connected to photovoltaic panels Input range of PV up to 900V



Easy access
Easy to operate by touching the LCD screen



Quick Switcher
UPS uninterruptible power supply function
Off network transfer time <10ms



On-Grid and Off-Grid
It has its own optical storage operation strategy, which is deployed on demand and supports self use

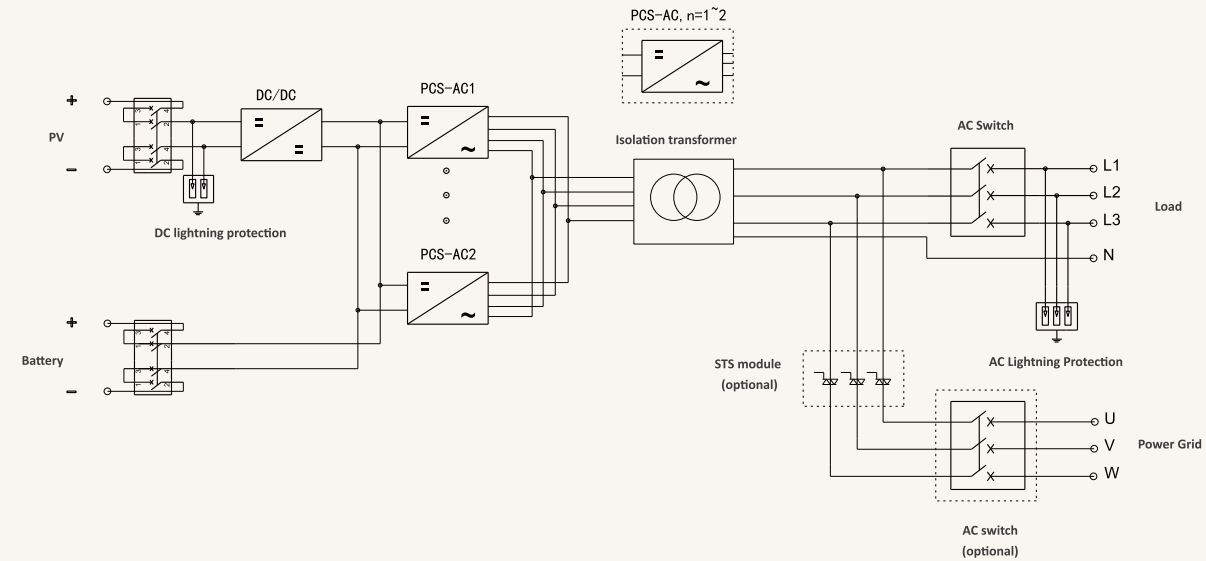


Safe
Support connction with BMS and EMS systems



Flexible Rate Tariff
With peak and valley energy management
With PV+mains load mode
PV+battery load mode

Product application diagram



Technical Specification	MPGS series						
AC PARAMETERS							
Rated AC Power	60KVA	120KVA	180KVA	240KVA	300KVA	480KVA	600KVA
Allowable Grid Voltage	380/400(±15%)VAC						
Allowable Grid Frequency	50/60(±2.5)Hz						
THDi	≤3%						
Power factor	0.99/-1~1						
Overload capacity	60KVA	120KVA	180KVA	240KVA	300KVA	480KVA	600KVA
Wiring method	three-phase four-wire						
Isolation transformer	Optional						
DC PARAMETERS(BATTERY)							
Battery voltage range	620~1000VDC						
Maximum Charging Current	176A	352A	528A	704A	880A	1408A	1760A
DC PARAMETERS(PHOTOVOLTAIC)							
Maximum Photovoltaic Input Voltage	1000VDC						
Maximum Photovoltaic Power	60KW	120KW	180KW	240KW	300KW	480KW	600KW
MPPT Voltage Range	200~850VDC						
PROTECTION & FEATURES							
DC Input Switch	YES						
Anti-island Protection	YES						
Output Overcurrent Protection	YES						
DC Surge Protection	Type II						
AC Surge Protection	Type II						
Insulation Impedance Test	YES						
Leakage Current Protection	YES						
SYSTEM PARAMETER							
Maximum Efficiency	98%						
Dimensions Wx Dx H(mm)	800*800*2160			1600*800*2160			
Net Weight(KG)	465	680	910	1280	1350	1600	1800
Noise	<75dB						
Degree Of Protection	IP20						
Allowable Ambient temperature	-20℃						
Humidity	0 to 95%(non condensing)						
Altitude	≤3000m						
Cooling Mode	Air cooling						
COMMUNICATION PARAMETERS							
Display	Touch LCD Display						
Communication Interface	RS485/LAN						
BMS Access	YES						

SES

Energy Storage converter

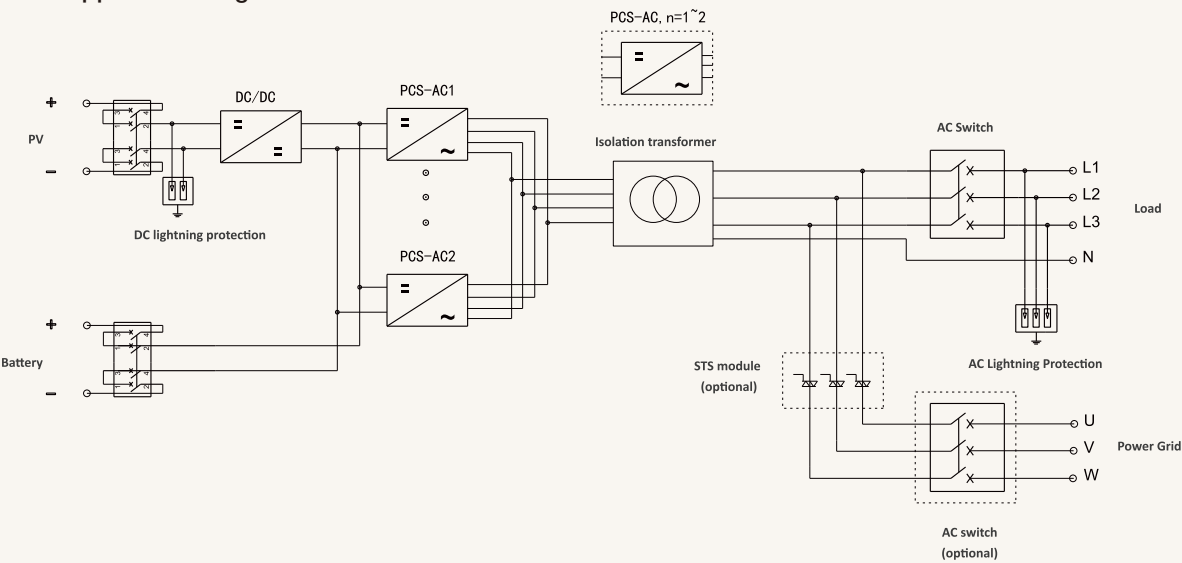
series 100-215KWh



Technical Specification	SES series
All-in-one cabinet	
Dimensions (H*W*D)	2320mm*1800mm*1200mm
Weight	About 3000kg
Layout	1 unit 2 cabinets (battery compartment + electrical compartment)
Installation method	Floor installation
Cabinet door	Front double door, rear single door
Material	Cold rolled steel plate
The whole frame	Welding+Assembly
Protection level	IP55 (outdoor)
PCS	
Rated power	100/120/180kW
Input voltage	380/400VAC
The output voltage	380/400VAC
Battery voltage range	670-1000VDC
MPPT voltage range	200-850VDC
Fire Fighting System	
Cabinet air conditioner	AC air conditioner (battery compartment)
Auxiliary ventilation	Intelligent air cooling (power compartment)
Temperature control device	Perfluorohexanone fire extinguishing device
Temperature	
Operating temperature	Working temperature range -40℃~ +55℃
Transport temperature	Transport temperature range -50℃~ +70℃
Humidity	
Relative humidity	5%-95%
Pressure	
Environmental pressure	62kpa ~ 101kpa (approximately altitude 0m ~ 5000m)
Radiation	
Radiation intensity	1120×(1±5%)W/m2
Communication parameters	
Monitor	Touch LCD display
Communication Interface	RS485/LAN
Letter of agreement	Modbus TCP/RTU, IEC104, IEC61850
Battery	
Battery cell type	lithium iron phosphate battery (LFP)
Single battery voltage	51.2VDC
Single battery capacity	280Ah
Battery pack	15 pcs
Battery capacity	215KWh
Battery high-voltage box	1PCS

- Optical and storage integration**
Wind/solar/oil integrated power generation realizes on-grid and off-grid two-way energy storage.
- Profit model**
Peak and valley arbitrage, peak shaving and valley filling, emergency power supply and other modes.
- Dynamic expansion**
Multiple units can be paralleled for incremental capacity expansion and room for upgrade is reserved.
- Demand management**
Unlimited charging and discharging periods can be set, as well as peak and off-peak periods to maximize profits.
- Remote control**
The all-in-one machine has EMS remote control and local display, and can monitor and query data remotely
- Modular design**
Energy storage + PCS are integrated into an integrated cabinet.

● Product application diagram



SHW48500series

Solar Power System for Telecom Station

50A-1000A



Rectifier Module



MPPT Solar Controller Module



Monitor





Flexible configuration

Compact size,standard cabinet width design
Support DCDC(PV),ATS device access



Intelligent collaboration

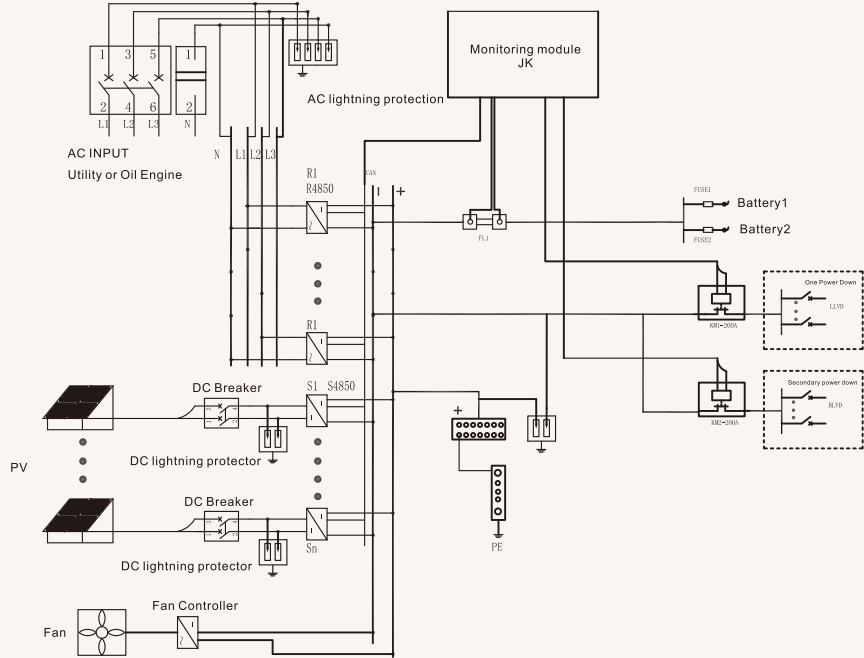
Detect machine operation parameters
and control parameters
Adjust battery undervoltage,overload,
overcharge



Efficient and stable

DC/DC Conversion,MPPT,
Battery Constant Current,Equal Charge,
Temperature Compensation Function

Product application diagram



Technical Specification	SHW48100	SHW48200	SHW48300	SHW48400	SHW48500
Capacity	100A	200A	300A	400A	500A
AC INPUT					
Input System	Three-phase,five-wire system/compatible single-phase				
Rated input voltage	Line voltage 380Vac/single phase 220VAC				
Input Voltage Range	85VAC~290VAC				
Input AC Voltage Frequency	45Hz~65Hz				
Maximum input current	≤63A(Single-phase)				
Power factor	≥0.99				
SOLAR ENERGY INPUT					
Rated input voltage	68VDC				
Input Voltage Range	60VDC~150VDC				
Maximum input current	≤63A(One way)				
DC OUTPUT					
Output DC Voltage Range	42VDC~58VDC				
Output DC Voltage	54.0V				
Output DC Current	0~61A(Single module)				
Conversion efficiency	More than or equal to 95% in only power mode;96% in only PV mode				
COMMUNICATION MANAGEMENT					
Rs232 Interface/RS485 Interface	Configurable wireless monitoring module(for remote monitoring)				
LOAD MANAGEMENT					
LLVD	46.6V(40V~50V Settable)				
BLVD	45.6V(40V~52V Settable)				
ENVIRONMENT CONDITION					
Working temperature	-20℃ ~ +55℃				
Storage temperature	-40℃ ~ +70℃				
Relative humidity	5%RH ~ 90%RH				
Altitude	(>3000m Derating)				
Other	No conductive dust,no corrosive gas,no explosion risk				
ENVIRONMENT CONDITION					
Cabinet (wide x deep x high)	600*600*1200, 600*600*1600, 600*600*2000				
User Device Space(mm)	User space 3~15U				
Solar module(mm)	42 (1U wide)*285(deep,without handle)*135(3U high)				
Rectifier module(mm)	85.3 (2U wide)*287(deep,without LOGO)*132.3(3U high)				
Cabinet(kg)	82 (excluding rectifier module,monitoring unit)				
Solar module(kg)	3				
Rectifier module(kg)	3.5				

SOLAR POWER SYSTEM FOR TELECOM STATION | 39/40

SHWB48300

Communication base station stacking solar controller





Convenient maintenance:
Modular design supports
online hot swap



DC output voltage range:
42~58VDC (adjustable)



DC output current range:
0 ~ 300A

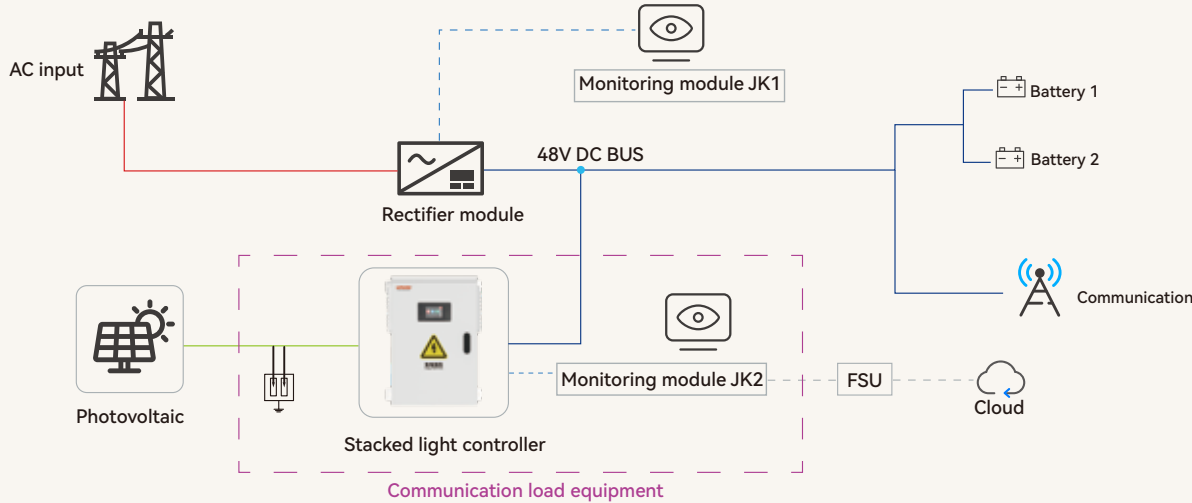


Monitoring and management:
Touch display for easy operation, supports meter data
collection,supports base station FSU communication,
and supports remote .

● Controller Working Principle

The current generated by the photovoltaic module is connected to the DC busbar of the switching power supply after being stepped down by the DC-DC photovoltaic module of the stacked solar controller. The operating voltage range of the base station equipment is 42V-58V,and the rated operating voltage is 54V. In the case of sufficient sunlight, the DC voltage of the stacked solar controller is 0.5-2.0V higher than the DC voltage of the original power cabinet of the base station (it can be adjusted according to maintenance requirements), ensuring the safe operation of the equipment and giving priority to the consumption of photovoltaic power. The current switching process is a dual-channel online switching.

- ★ When the conversion voltage of the stacked solar controller is greater than the DC voltage of the original power cabinet of the base station, it automatically switches to give priority to photovoltaic power;
- ★ When the conversion voltage of the stacked solar controller is less than the DC voltage of the original power cabinet of the base station, it seamlessly switches to the original power supply;
- ★ When the power grid has electricity, photovoltaic power generation and the power grid jointly supply power to the load, giving priority to photovoltaic power generation, and the power grid supplements the power supply.



Model	SHWB4875	SHWB48150	SHWB48225	SHWB48300
Power	4000W	8000W	12000W	16000W
Photovoltaic input				
MPPT efficiency	>99%			
Rated voltage	68VDC			
voltage range	60 ~ 150VDC(voltage range can be customized)			
Protection voltage	152VDC			
Recovery voltage	148VDC			
DC output				
Voltage range	-42~ 58VDC (adjustable)			
Rated voltage	54VDC			
Current range	0~300A (system) ; 0~75A (single module)			
Conversion efficiency	≥98%			
Communication mode				
RS485	Standard modbus protocol			
RS232				
RTU 4G	Can be used for remote monitoring (optional)			
Panel display				
LCD touch screen	Module information, voltage, current, power			
DC energy meter	Voltage, current, power generation			
Working environment				
Cooling method	Air cooling			
Working temperature	-20℃~ 55℃			
Storage humidity	0 ~ 95%non-condensing			
Storage temperature	-30℃~ 80℃			
Protection level	Outdoor IP55, indoor IP21			
Altitude	>3000m non-condensing			
Physical characteristics				
Weight (Kg)	11.6	14.6	18.5	21
Width × depth × height (mm)	390X380X133mm		390X580X180mm	



SL-W/SL-R series

LiFePO₄ Battery

100AH-300AH



Technical Specification	SL 25.6100	SL 25.6200	SL 48100	SL 48200	SL 48300	SL 51.2100	SL 51.2200	SL 51.2300
Case design	Stand by the wall&Hang on the wall							
Battery Type	LiFePO ₄							
Nominal Battery Model	25.6V 100AH	25.6V 200AH	48V 100AH	48V 200AH	48V 300AH	51.2V 100AH	51.2V 200AH	51.2V 300AH
Nominal Capacity(25°C,0.2C)	2560Wh	5120Wh	4800Wh	9600Wh	14400Wh	5120Wh	10240Wh	15360Wh
Voltage range(VDC)	20~29.4V		40~58.4V					
Float Charge Voltage(VDC)	27.6V		55.2V		58.4V	55.2V		58.4V
Max Continuous Discharge Current(A)	100A				200A	100A		200A
Max Continuous charge Current(A)	100A							
Cycle life,+25°C,0.2C 100%DOD	>6000Cycles							
Storage temperature	-10~45°C							
Storage duration	3 months at 25°C							
Degree of protection	IP20							
Communication	CAN/RS485/RS232,standard BMS with SOROTEC Inverters Communication protocol							
PROTECTION								
Protection	Overcurrent protection,overdischarge protection,short circuit protection, overcharge protection							
AMBIENT								
Working Temperature	Discharge: -20°C ~ +65°C Charge: 0°C ~ +45°C							
Humidity	0~80%(no condensation)							
Dimensions W x D x H (mm)	640*462*225			925*460*185	973.6*460*273.2	640*462*225	925*460*185	973.6*460*273.2

Product Snapshot



Suitable for photovoltaic energy storage
High charge and discharge currents of up to 100A/200A, suitable for solar energy storage systems.



Ultra-long cycling life
6000 battery cycles, with 5-year warranty and designed lifespan of over 10 years.



LCD display
Equipped with a display screen with communication ports (CAN/RS485/RS232).



Wall-mountable design
Compact design of the energy wall, small size, space-saving.



Multiple protection design
Built-in protections against overcharge, over-discharge, over-temperature, over-current, short-circuit, etc.



Communication friendly
Can communicate with different brands of hybrid energy storage inverters.

SL-W-02

LiFePO₄ Battery

100AH-300AH



Technical Specification	SL 25.6300	SL 51.2300
Case design	Stand by the wall&Hang on the wall	
Battery Type	LiFePO ₄	
Nominal Battery Model	25.6V 300AH	51.2V 300AH
Nominal Capacity(25°C,0.2C)	7500Wh	15360Wh
Voltage range(VDC)	20~29.4V	40~58.4V
Float Charge Voltage(VDC)	27.6V	58.4V
Max Continuous Discharge Current(A)	200A	
Max Continuous charge Current(A)	150A	
Cycle life,+25°C,0.2C 100%DOD	>6000Cycles	
Storage temperature	-10~45°C	
Storage duration	3 months at 25°C	
Degree of protection	IP20	
Communication	CAN/RS485/RS232,standard BMS with SOROTEC Inverters Communication protocol	
PROTECTION		
Protection	Overcurrent protection,overdischarge protection,short circuit protection, overcharge protection	
AMBIENT		
Working Temperature	Discharge: -20°C ~ +65°C Charge: 0°C ~ +45°C	
Humidity	0~80%(no condensation)	
Dimensions W x D x H (mm)	640*462*225	973.6*460*273.2

Product Snapshot



Suitable for photovoltaic energy storage
High charge and discharge currents of up to 100A/200A, suitable for solar energy storage systems.



Ultra-long cycling life
6000 battery cycles, with 5-year warranty and designed lifespan of over 10 years.



LCD display
Equipped with a display screen with communication ports (CAN/RS485/RS232).



Wall-mountable design
Compact design of the energy wall, small size, space-saving.



Multiple protection design
Built-in protections against overcharge, over-discharge, over-temperature, over-current, short-circuit, etc.



Communication friendly
Can communicate with different brands of hybrid energy storage inverters.

SL-S-EC

LiFePO₄ Battery

20kWh



• Product Snapshot

- Quality assurance

Brand batteries with high density and lightweight for excellent performance.
- Modular design

High-voltage lithium battery system with modular stacking design.
- Intelligent BMS

Optimizes performance and includes multiple protection designs.
- Communication friendly

Compatible with RS485/CAN protocols of different brands of solar inverters.
- Cycle protection

6000 cycles with built-in protections around the battery.
- 5-year warranty

Long lifespan, 5-year warranty, designed for a lifespan of 10+ years.

Technical Specification	SL-S-EC
Rated electricity (kWh)	20.48
Rated capacity (Ah)	50
Rated voltage (V)	409.6
Maximum continuous discharge power (W)	20480
Maximum continuous charging power (W)	20480
Standard charge and discharge current (C)	0.5
Charging voltage temperature range	-10°C~50°C
Discharge voltage temperature range	0°C~50°C
Communication mode	CAN
Quality guarantee	5 years
Class of protection	IP20
Installation mode	ground
Colour	Rock material shell
Module connection mode	Plug and remove
Dimensions W x D x H(mm)	640*215*1390
Net Weight (KG)	226
Single PACK	
Battery type	LiFePO ₄
Standard charge and discharge current (A)	25A
Operating temperature discharge/charge	-10°C~50°C / 0°C~50°C
High voltage control box	
Communication mode	CAN/RS485
Maximum charge and discharge current (A)	50
Maximum voltage	650V

SL-S-EUseries

LiFePO₄ Battery

7kWh-25kWh



• Product Snapshot

- Quality assurance

Brand batteries with high density and light weight for excellent performance.
- Modular design

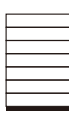
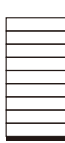
High-voltage lithium battery system with modular stacking design.
- Intelligent BMS

Optimizes performance and includes multiple protection designs.
- Communication friendly

Compatible with RS485/CAN protocols of different brands of solar inverters.
- Cycle protection

6000 cycles with built-in protections around the battery.
- 5-year warranty

Long lifespan, 5-year warranty, designed for a lifespan of 10+ years.

Technical Specification	SL-S-EU-3	SL-S-EU-4	SL-S-EU-5	SL-S-EU-6	SL-S-EU-7	SL-S-EU-8	SL-S-EU-9	SL-S-EU-10
System Demo								
Number of modules	3	4	5	6	7	8	9	10
Rated electricity (kWh)	7.68	10.24	12.8	15.36	17.92	20.48	23.04	25.64
Rated capacity (Ah)	50							
Rated voltage (V)	153.6	204.8	256	307.2	358.4	409.6	460.8	512
Maximum continuous discharge power (W)	7680	10240	12800	15360	17920	20480	23040	25600
Maximum continuous charging power (W)	7680	10240	12800	15360	17920	20480	23040	25600
Standard charge and discharge current (C)	0.5							
Charging voltage temperature range	-10°C~50°C							
Discharge voltage temperature range	0°C~50°C							
Communication mode	CAN							
Quality guarantee	5 years							
Class of protection	IP65							
Installation mode	ground							
Colour	Rock material shell							
Module connection mode	Plug and remove							
Dimensions W x D x H(mm)	640*215*690	640*215*830	640*215*970	640*215*1110	640*215*1250	640*215*1390	640*215*1530	640*215*1670
Net Weight (KG)	91	118	145	172	199	226	253	280
Single PACK								
Model number	S-2.5H							
Battery type	LiFePO ₄							
Rated voltage (V)	51.2V							
Standard charge and discharge current (A)	25A							
Class of protection	IP65							
Installation mode	ground							
Operating temperature discharge/charge	-10°C~50°C / 0°C~50°C							
Number of cells	string of 16							
Communication mode	CAN							
Dimension	640*215*140							
Weight	26							
Module connection mode	Plug and remove							
High voltage control box								
Model number	HVC60050							
Communication mode	CAN							
Maximum charge and discharge current (A)	50							
Maximum voltage	650V							
Dimensions W x D x H(mm)	650*260*225							
Net Weight(KG)	12							



SL-RH series

LiFePO₄ Battery

• Product Snapshot



Easy installation

Embedded standard modules for quick and convenient installation and maintenance.



Safety and reliability

Use of lithium iron phosphate material ensures good safety performance, long cycling life, low self-discharge, and excellent performance.



Intelligent BMS

System automatically manages the charging and discharging status of each battery, balancing the current and voltage of each battery.



Multiple protections

Equipped with overcharge, over-discharge, over-temperature, over-current, short-circuit protections, etc.



Flexible configuration

Multiple battery modules can be connected in parallel to expand capacity and power.



Wide temperature operation

Works within the temperature range of -20~55°C, with excellent discharge performance and cycling life.

Technical Specification		SL-RH series		
Chemical battery		LiFePO ₄		
Module energy (kWh)		5.12		
Module rated voltage (V)		51.2		
Module capacity (Ah)		100		
Number of battery modules in series (optional)		3 (Min)	8 (Standard US Cluster)	12 (Standard EU Cluster)
System rated voltage (V)		153.6	409.6	614.4
System operating voltage (V)		124.8~175.2	332.8~467.2	499.2~700
System energy (kWh)		15.36	40.96	61.44
System available energy (kWh)		13.8	36.86	55.29
Charge/discharge current(A)	Recommend	50		
	Max	100		
	Peak Discharge	125		
Working temperature (°C)		Charge:0~55/Discharge:-20~55		
Status Indicator		Yellow: Battery high voltage is powered on / Red: Battery system alarm		
Communication port		CAN2.0/RS485		
Humidity		5~85%RH		
Altitude		≤2000m		
Protection of Degree		IP20		
Dimensions W x D x H(mm)		600x600x1660	600x600x2260	
Net Weight(KG)		258	434	628
Installation location		rack mount		
Storage temperature(°C)		0~35		
Recommended discharge depth		90%		
Cycle life		25±2°C, 0.5C/0.5C, EOL70%≥6000		
Warranty		10 years		
Certification		CE, IEC62619, UL1973, UL9540A, UN38.3		