

SANDISOLAR

# PRODUCT MANUAL



SANDISOLAR

Empower your energy to better benefit mankind

## ADDRESS & HOTLINE

### Product

① Sandisolar

② Sandisolar Inverter  
③ Sandisolar Controller  
④ Sandisolar Monitoring System

### Project

① Project Management

② Project Management I  
③ Project Management II  
④ Project Management III

⑤ Project Management A

⑥ Project Management B  
⑦ Project Management C

⑧ Project Management D

⑨ Project Management E  
⑩ Project Management F

⑪ Project Management G  
⑫ Project Management H

⑬ Project Management I  
⑭ Project Management J

# About SANDISOLAR

SANDISOLAR is one of the world's leading providers of energy management systems. Our products, solutions and services include energy management, forecasting, energy storage systems, energy cost management, demand management, building automation and energy management systems. SANDISOLAR has positioned its core energy systems (loadshaving and loadcur), other products, research and development, to support our integrated energy solutions (including the grid "utility of tomorrow" solution) to bring the energy of tomorrow to today.

 200<sup>+</sup>  
Residential customers

 500<sup>+</sup>  
Residential customers

 100<sup>+</sup>  
Commercial customers

 3000<sup>+</sup>  
Solar installations

 20000<sup>+</sup>m<sup>2</sup>  
Solar installations

We have built a large network of clients located throughout Asia and Europe, customers located in over 30 countries, which include the Netherlands, France, Spain, Portugal, Italy, UK, Norway, USA, Switzerland, Germany, Luxembourg, Australia and many more. We offer a range of services including energy research, production, management, store operation, customer service, consultancy, planning and design.

SANDISOLAR





## Solar Mall In Mandalay

Investment Opportunities Worldwide  
www.GlobeEnergyCorp.com

## Solar Mall In Yangon

Investment Opportunities Worldwide  
www.GlobeEnergyCorp.com

## New Energy Mall

Investment Opportunities Worldwide  
www.GlobeEnergyCorp.com

## EV Charging Station

Investment Opportunities Worldwide  
www.GlobeEnergyCorp.com



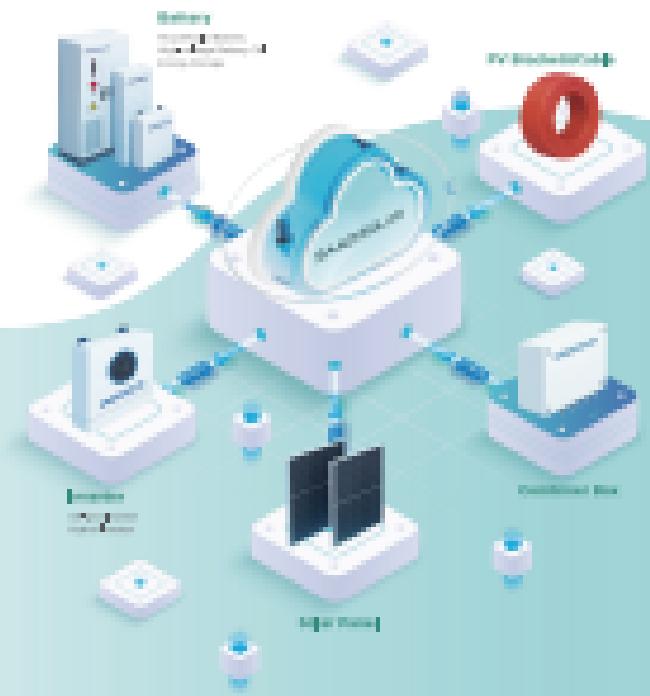
# SANDISOLAR

## CORE PRODUCT MATRIX

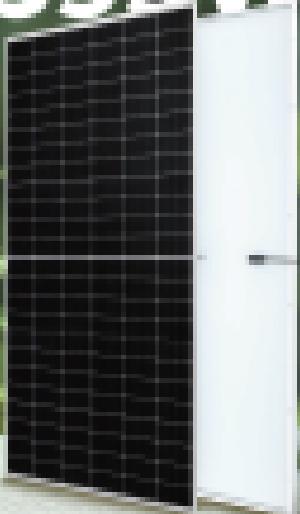
Integrated Solutions with PV Modules,  
Inverters (SS), Panels & Cells, and  
Smart Grid/Energy Storage.

# “3+2”

Solar Eco Chain



# 595W



SD-C10M595-72H-V

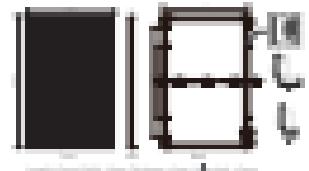
N-Type 580-595W

PERC Heterojunction Technology



## DATA SHEET, L&T

### 1. PRODUCT OVERVIEW



### 2. PRODUCT SPECIFICATIONS

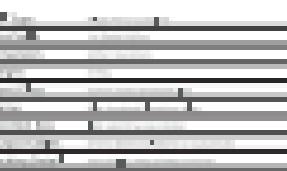
Parameter	Value	Unit	Description
Panel Type	Monocrystalline		
Cell Type	N-type		
Cell Structure	Heterojunction		
Cell Efficiency	23.5%	%	
Cell Count	72		
Panel Efficiency	20.5%	%	
Panel Power	595W	W	
Panel Weight	25kg	kg	
Panel Dimensions	1640x1000x35mm	mm	
Mounting Holes	Top & Bottom		

### 3. PRODUCT FEATURES

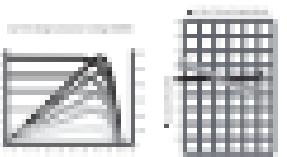
Feature	Description
PERC Heterojunction Technology	Advanced technology for high efficiency and reliability.
Monocrystalline Cells	High-quality monocrystalline silicon cells for optimal performance.
N-type Cells	Utilizes N-type silicon, providing better light absorption and higher efficiency.
Wide Operating Temperature Range	Operates effectively from -40°C to +85°C.
IP67 Rated	Weather-resistant and suitable for outdoor installation.
Low Irradiance Performance	Optimized for low-light conditions.
High Efficiency	Efficiency up to 23.5% per cell, 20.5% panel efficiency.
Reliable Durability	Designed for long-term reliability in various environments.

## DATA SHEET, P&T

### 1. PRODUCT OVERVIEW



### 2. PRODUCT SPECIFICATIONS



### 3. PRODUCT FEATURES



# 595W



SD-JMS595N-144M

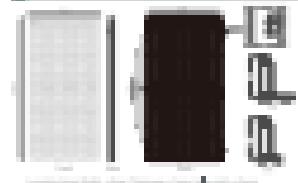
N-Type 580-595W

PERC Heterojunction Technology



## DATA SHEET

### 1. PRODUCT OVERVIEW



### 2. PRODUCT SPECIFICATIONS

Parameter	Value	Unit	Description
Panel Type	Monocrystalline		
Cell Type	N-type		
Cell Structure	Heterojunction		
Cell Count	144		
Cell Area (mm²)	144	mm²	
Panel Area (mm²)	~1000	mm²	
Panel Weight (kg)	~15	kg	
Panel Thickness (mm)	~3.2	mm	
Panel Efficiency (%)	~22.5	%	
Panel Tolerance (%)	±1	%	
Panel Color	Black		
Panel Frame	Aluminum		
Panel Backsheet	PET		
Panel Junction Box	IP67		
Panel Connector	IEC61730-2-1		
Panel Mounting	M12		
Panel Certification	TUV, CE, IEC61215, IEC61730-2-1		
Panel Warranty	25 years		
Panel Dimensions (mm)	~1000x~1000x~32	mm	
Panel Weight (kg)	~15	kg	
Panel Thickness (mm)	~3.2	mm	
Panel Color	Black		
Panel Frame	Aluminum		
Panel Backsheet	PET		
Panel Junction Box	IP67		
Panel Connector	IEC61730-2-1		
Panel Mounting	M12		
Panel Certification	TUV, CE, IEC61215, IEC61730-2-1		
Panel Warranty	25 years		

### 3. PRODUCT FEATURES

Feature	Description
PERC Heterojunction Technology	Advanced technology for high efficiency and reliability.
Monocrystalline Cells	High-quality monocrystalline cells for optimal performance.
144 Cells	144 high-efficiency cells per panel.
IP67 Junction Box	Weather-resistant junction box for reliable outdoor use.
IEC61730-2-1 Certified	Meets strict safety standards for PV modules.
25-Year Product Warranty	Reliable long-term performance guarantee.

## DATA SHEET

### 4. PRODUCT DETAILS

Detail	Value
Panel Type	Monocrystalline
Cell Type	N-type
Cell Structure	Heterojunction
Cell Count	144
Cell Area (mm²)	144
Panel Area (mm²)	~1000
Panel Weight (kg)	~15
Panel Thickness (mm)	~3.2
Panel Color	Black
Panel Frame	Aluminum
Panel Backsheet	PET
Panel Junction Box	IP67
Panel Connector	IEC61730-2-1
Panel Mounting	M12
Panel Certification	TUV, CE, IEC61215, IEC61730-2-1
Panel Warranty	25 years

### 5. PRODUCT BENEFITS

Benefit	Description
High Efficiency	Advanced PERC technology ensures high energy output.
Reliability	IEC61730-2-1 certified for safe outdoor use.
Long Lifespan	25-year product warranty for peace of mind.
Modular Design	Easy installation and maintenance.

### 6. PRODUCT APPLICATIONS

Application	Description
Residential Roof Mount	Power your home with clean energy.
Commercial Building	Large-scale installations for businesses.
Rooftop Systems	Efficient power generation for rooftops.
Ground Mount Systems	Stable and secure ground-based installations.

# 620W

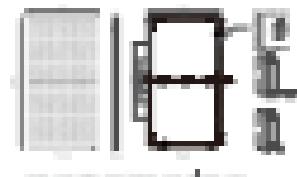


**QN-620HB**  
N-Type 605-620W  
PERC half-cell technology



## MANUFACTURER

### 1. PRODUCT OVERVIEW



### 2. PRODUCT FEATURES

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### 3. PRODUCT SPECIFICATIONS

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### 4. PRODUCT FEATURES

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### 5. PRODUCT BENEFITS

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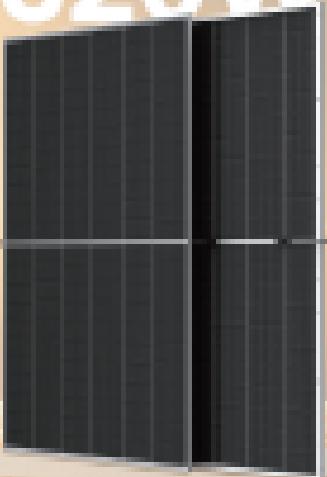
### 6. PRODUCT DETAILS

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## QUICK LINKS

# 620W



**QN-620HB**

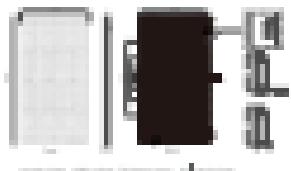
N-Type 60S-620W

PERC Heterojunction technology



## MANUFACTURER

### 1. MANUFACTURER INFORMATION



### 2. MANUFACTURER INFORMATION

Item	Value
Manufacturing capacity (GW)	10
Annual production volume (GW)	10
Annual sales volume (GW)	10
Annual export volume (GW)	10

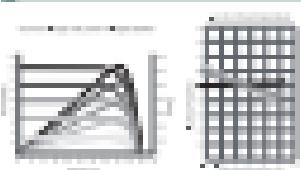
### 3. MANUFACTURER INFORMATION

Item	Value	Item	Value	Item	Value	Item	Value
Manufacturing capacity (GW)	10	Annual production volume (GW)	10	Annual sales volume (GW)	10	Annual export volume (GW)	10
Annual revenue (USD)	1000000000	Annual profit (USD)	1000000000	Annual investment (USD)	1000000000	Annual energy consumption (MWh)	1000000000
Annual water consumption (m³)	1000000000	Annual CO2 emissions (t)	1000000000	Annual waste generation (t)	1000000000	Annual energy efficiency (%)	1000000000
Annual water recycling rate (%)	1000000000	Annual CO2 reduction (t)	1000000000	Annual waste reduction (t)	1000000000	Annual energy savings (MWh)	1000000000

### 4. MANUFACTURER INFORMATION

Item	Value
Manufacturing capacity (GW)	10
Annual production volume (GW)	10
Annual sales volume (GW)	10
Annual export volume (GW)	10

### 5. MANUFACTURER INFORMATION



### 6. MANUFACTURER INFORMATION





# 720W



**QN-720NT-01**

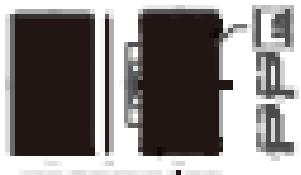
N-Type 30G-720W

MONO PERC Heterojunction



## MAIN FEATURES

### 1. PRODUCT OVERVIEW



### 2. PRODUCT SPECIFICATIONS

Parameter	Value
Panel Type	N-Type 30G
Cell Type	Heterojunction
Cell Structure	Monocrystalline PERC
Cell Efficiency	22.5%
Panel Efficiency	21.5%
Panel Power	720W
Panel Dimensions	1600x1000x35mm
Weight	25kg
Warranty	25 years

### 3. PRODUCT FEATURES

Feature	Description
High Efficiency	22.5% cell efficiency, 21.5% panel efficiency.
Long Lifespan	25-year product warranty.
Reliable Performance	Designed for high reliability in various weather conditions.
Easy Installation	Standard dimensions and weight facilitate easy installation.

### 4. PRODUCT DETAILS

Detail	Value
Panel Type	N-Type 30G
Cell Type	Heterojunction
Cell Structure	Monocrystalline PERC
Cell Efficiency	22.5%
Panel Efficiency	21.5%
Panel Power	720W
Panel Dimensions	1600x1000x35mm
Weight	25kg
Warranty	25 years

### 5. PRODUCT BENEFITS

Benefit	Detail
High Efficiency	22.5% cell efficiency, 21.5% panel efficiency.
Long Lifespan	25-year product warranty.
Reliable Performance	Designed for high reliability in various weather conditions.
Easy Installation	Standard dimensions and weight facilitate easy installation.

### 6. PRODUCT CERTIFICATIONS

Certification	Details
TUV	Tested and certified by TUV.
UL	Tested and certified by UL.
IEC	Tested and certified by IEC.
CE	Tested and certified by CE.



### 7. PRODUCT APPLICATIONS

Application	Detail
Residential	For residential homes and buildings.
Commercial	For commercial buildings and facilities.
Industrial	For industrial applications and manufacturing facilities.
Agricultural	For agricultural operations and farms.



## SD-12.8V100AH LiFePO4

Lithium Iron  
Phosphate Battery



### TECHNICAL DATA

#### General Information

Model	SD-12.8V100AH
Capacity	100Ah
Voltage	12.8V
Weight	15.5kg

#### Power & Energy Efficiency

Output Power	100W
Charging Power	100W
Efficiency	95%
Conversion Efficiency	98%
Depth of Discharge	80%

#### Performance & Safety

Temperature Range	-20°C to 50°C
Humidity Range	10% to 90%
Water Resistance	IP65
Shock Resistance	1000G
Vibration Resistance	1000G

#### Dimensions & Transportation Requirements

Dimensions	400x250x100mm
Weight	15.5kg
Transportation	1000G
Storage	1000G





SD-12.8V200AH

SD-12.8V200AH Specifications

Parameter	Value
Model	SD-12.8V200AH
Capacity	200Ah
Voltage	12.8V
Chemistry	LiFePO4

SD-12.8V200AH Features

Feature	Description
High Capacity	200Ah capacity for long runtime.
Fast Charging	Supports fast charging up to 80% in 1 hour.
Long Lifespan	Up to 5000+ cycles at 80% DOD.
Safe Operation	UL2580 certified for safety and reliability.
Modular Design	Easy installation and maintenance.

SD-12.8V200AH Technical Parameters

Parameter	Value
Nominal Voltage	12.8V
Nominal Capacity	200Ah
Charge Current	10A
Discharge Current	15A

SD-12.8V200AH Application Scenarios

Scenario	Usage Details
Home Energy Storage	Powering homes and buildings.
EV Charging	Charging electric vehicles.
Solar Power Systems	Storing solar energy for later use.
Industrial Applications	Powering industrial equipment.





## SD-12.8V300AH LiFePO4

Lithium Iron  
Phosphate Battery



SD-12.8V300AH

LiFePO4 Deep Cycle

12.8V

300AH

100%

100%

LiFePO4 Deep Cycle

12.8V

300AH

100%

100%

100%

100%

100%

LiFePO4 Deep Cycle

12.8V

300AH

100%

100%

100%

100%

LiFePO4 Deep Cycle

12.8V

300AH

100%

100%

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SD-12.8V300AH LiFePO4

LiFePO4 Deep Cycle

12.8V

300AH

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S



## SD-25.6V200AH LiFePO4

Lithium Iron  
Phosphate Battery



### TECHNICAL DATA

#### General Information

Product Name	SD-25.6V200AH LiFePO4
Product Type	LiFePO4
Standard Capacity	200Ah
Nominal Voltage	25.6V
Max Power	1000W

#### Dimensions & Weight

Product Dimensions	400x300x100mm
Product Weight	25kg
Net Weight	24kg
Gross Weight	26kg
Net Weight (kg)	24kg

#### Performance & Safety Features

Charging Method	Smart
Charging Time	8 hours
Discharge Current	100A
Overcharge Protection	Yes
Overdischarge Protection	Yes

#### Mounting Options and Temperature Range

Mounting	Horizontal
Temperature Range	-20°C to +45°C
Storage Temperature Range	-20°C to +45°C
Operating Temperature Range	-20°C to +45°C





## SD-25.6V300AH LiFePO4

Lithium Iron  
Phosphate Battery



### TECHNICAL DATA

#### General Information

Product Name	SD-25.6V300AH LiFePO4
Cell Type	LiFePO4
Nominal Voltage	25.6V
Nominal Capacity	300Ah
Max Power	1000W

#### Charging & Discharging Parameters

Charging Current	10A
Charging Voltage	27.2V
Discharging Current	10A
Discharging Voltage	24.0V
Depth of Discharge	80%

#### Performance Parameters

Temperature Range	-20°C to +60°C
Charge Efficiency	>95%
Discharge Efficiency	>95%
Self-discharge Rate	<1% per month
Number of Cycles	≥ 5000 cycles at 80% DOD

#### Protection Functions and Temperature Range

Overcharge Protection	-40°C to +60°C
Overdischarge Protection	-40°C to +60°C
Short-circuit Protection	-40°C to +60°C
Overtemperature Protection	-40°C to +60°C





## SD-51.2V200AH LiFePO4

Lithium Iron  
Phosphate Battery



### TECHNICAL DATA

#### ① GENERAL INFORMATION

① Model	SD-51.2V200AH
② Capacity	200Ah
③ Nominal Voltage	51.2V
④ Nominal Current	10A
⑤ Charge Current	10A

#### ② ENERGY INFORMATION

① Nominal Capacity	200Ah
② Nominal Voltage	51.2V
③ Nominal Current	10A
④ Charge Current	10A
⑤ Discharge Current	10A

#### ③ MAXIMUM INFORMATION

① Maximum Capacity	200Ah
② Maximum Voltage	54.4V
③ Maximum Current	10A
④ Maximum Charge Current	10A
⑤ Maximum Discharge Current	10A

#### ④ PHYSICAL INFORMATION

① Dimensions	1000x400x150mm
② Weight	100kg
③ Color	White
④ Material	Stainless steel
⑤ Protection	IP65

#### ⑤ ENVIRONMENTAL INFORMATION

① Working Temperature	-20°C~60°C
② Storage Temperature	-20°C~60°C
③ Working Humidity	0%~95%
④ Storage Humidity	0%~95%
⑤ Working Altitude	0~4000m

#### ⑥ LIFE SPAN AND RELATED FEATURES

① Life Span	10 years
② Depth of Discharge	0.5~1.0
③ Charge Efficiency	98%
④ Discharge Efficiency	98%
⑤ Self-discharge Rate	0.5% per month



## SD-51.2V300AH LiFePO4

Lithium Iron  
Phosphate Battery

- 51.2V 300AH
- 100% Depth of Discharge
- 1000+ Cycles
- 100% DOD
- 100% Depth of Charge
- 1000+ Cycles

### SHOSOLR LFP

#### SHOSOLR LFP

SHOSOLR LFP	SHOSOLR LFP
• 51.2V 300AH	• 51.2V 300AH
• 100% Depth of Discharge	• 100% Depth of Discharge
• 1000+ Cycles	• 1000+ Cycles
• 100% DOD	• 100% DOD
• 100% Depth of Charge	• 100% Depth of Charge
• 1000+ Cycles	• 1000+ Cycles
SHOSOLR LFP	SHOSOLR LFP
• 51.2V 300AH	• 51.2V 300AH
• 100% Depth of Discharge	• 100% Depth of Discharge
• 1000+ Cycles	• 1000+ Cycles
• 100% DOD	• 100% DOD
• 100% Depth of Charge	• 100% Depth of Charge
• 1000+ Cycles	• 1000+ Cycles
SHOSOLR LFP	SHOSOLR LFP
• 51.2V 300AH	• 51.2V 300AH
• 100% Depth of Discharge	• 100% Depth of Discharge
• 1000+ Cycles	• 1000+ Cycles
• 100% DOD	• 100% DOD
• 100% Depth of Charge	• 100% Depth of Charge
• 1000+ Cycles	• 1000+ Cycles
SHOSOLR LFP	SHOSOLR LFP
• 51.2V 300AH	• 51.2V 300AH
• 100% Depth of Discharge	• 100% Depth of Discharge
• 1000+ Cycles	• 1000+ Cycles
• 100% DOD	• 100% DOD
• 100% Depth of Charge	• 100% Depth of Charge
• 1000+ Cycles	• 1000+ Cycles



SANDSOLAR

## SD-51.2V 320AH

Sensorless Free  
stand Lithium Ion Battery



51.2V  
320Ah



Li-Ion  
Battery



Smart  
Battery

### TECHNICAL DATA

#### 1. GENERAL INFORMATION

Product Name	SANDSOLAR
Product Type	Li-Ion
Product Model	SD-51.2V 320AH
Product Dimensions	400x300x100 mm
Product Weight	15 kg

#### 2. ENERGY CAPACITY

Nominal Capacity	320 Ah
Max. Charge Current	10 A
Max. Discharge Current	10 A
Max. Pulse Discharge Current	20 A
Max. Pulse Duration	10 sec.

#### 3. INTERNAL RESISTANCE

Initial Internal Resistance	0.005 mΩ
Internal Resistance Change	0.005 mΩ
Internal Resistance Change (%)	0.005 %
Internal Resistance Change (ppm)	5 ppm
Internal Resistance Change (mΩ)	0.005 mΩ

#### 4. ELECTRICAL PERFORMANCE

Initial Capacity	320 Ah
Max. Charge Current	10 A
Max. Discharge Current	10 A
Max. Pulse Discharge Current	20 A
Max. Pulse Duration	10 sec.

#### 5. Dimensions and Weight

Dimensions (WxDxH)	400x300x100 mm
Weight	15 kg
Color	White
Material	PCB
Mounting	Front

#### 6. LIFE CYCLE AND RELIABILITY

Number of Cycles	1000
Depth of Discharge	50%
Temperature Range	-20°C to +50°C
Operating Temperature	-20°C to +50°C
Storage Temperature	-20°C to +50°C



## High-voltage, stackable battery system

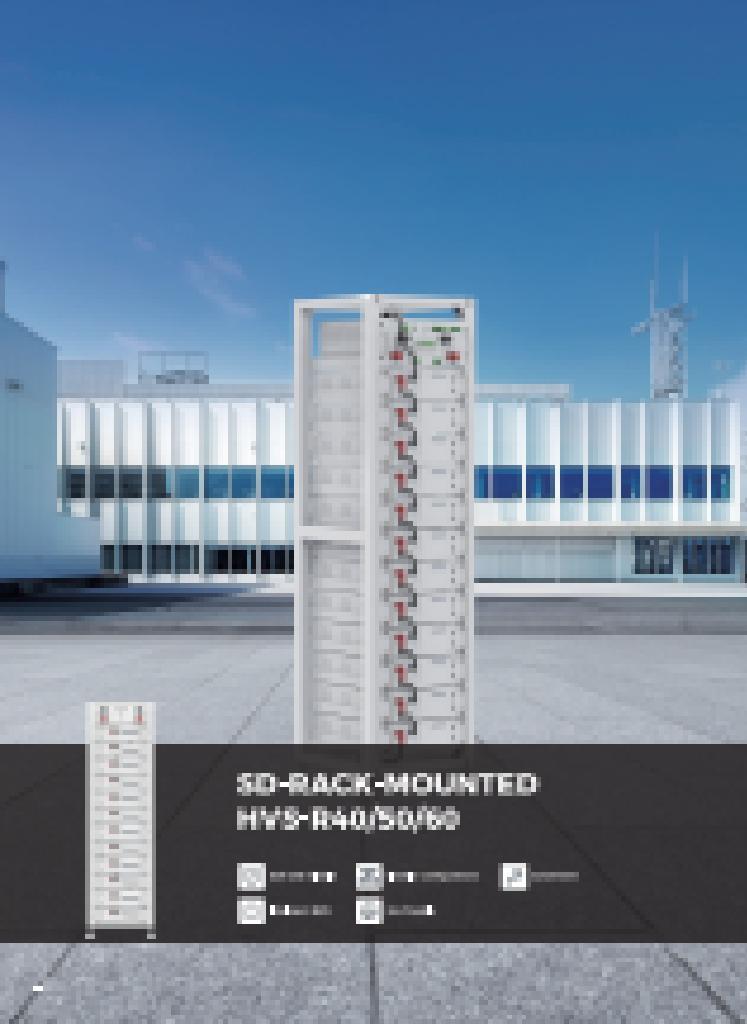
- [Modular design](#)
- [Scalable capacity](#)
- [Fast deployment](#)
- [High efficiency](#)
- [Low total cost of ownership](#)

MANUFACTURED IN:

U.S. / U.K. / Germany

High-voltage, stackable battery system





40U RACK-MOUNTED  
HYS-R40/30/80



TECHNICAL DATA

40U RACK-MOUNTED HYS-R40/30/80

**1. BASIC INFORMATION**

Model	HYS-R40/30/80
Dimensions (W x H x D)	1000 x 1000 x 350 mm
Weight	~100 kg
Power supply	110-230V AC
Control	Local keypad and remote control via RS485
Communication	RS485, Modbus RTU, BACnet, IP
Sensors	Up to 80 sensors per system
Outputs	Up to 80 outputs per system
Storage	Up to 80 storage locations per system
Display	Local keypad with LCD display
Network	Up to 80 network nodes per system
Software	Customized software for specific applications
Operating System	Embedded Linux
Processor	High-performance processor
Memory	Large memory capacity
Storage	Large storage capacity
Power Consumption	Low power consumption
Reliability	High reliability and availability
Serviceability	Easy maintenance and service
Customization	Customizable for specific requirements
Integration	Easy integration with existing systems
Scalability	Scalable to accommodate growing needs
Modularity	Modular design for easy expansion
Flexibility	Flexible configuration options
Efficiency	High efficiency and performance
Accuracy	High accuracy and precision
Reliability	High reliability and availability
Serviceability	Easy maintenance and service
Customization	Customizable for specific requirements
Integration	Easy integration with existing systems
Scalability	Scalable to accommodate growing needs
Modularity	Modular design for easy expansion
Flexibility	Flexible configuration options
Efficiency	High efficiency and performance
Accuracy	High accuracy and precision

**2. SYSTEM REQUIREMENTS**

Requirement	Description
Processor	High-performance processor
Memory	Large memory capacity
Storage	Large storage capacity
Power Consumption	Low power consumption
Reliability	High reliability and availability
Serviceability	Easy maintenance and service
Customization	Customizable for specific requirements
Integration	Easy integration with existing systems
Scalability	Scalable to accommodate growing needs
Modularity	Modular design for easy expansion
Flexibility	Flexible configuration options
Efficiency	High efficiency and performance
Accuracy	High accuracy and precision



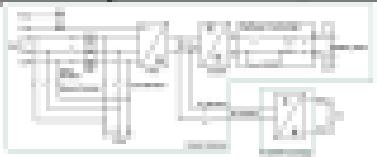


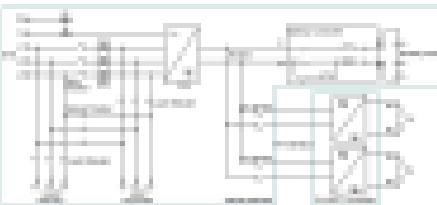
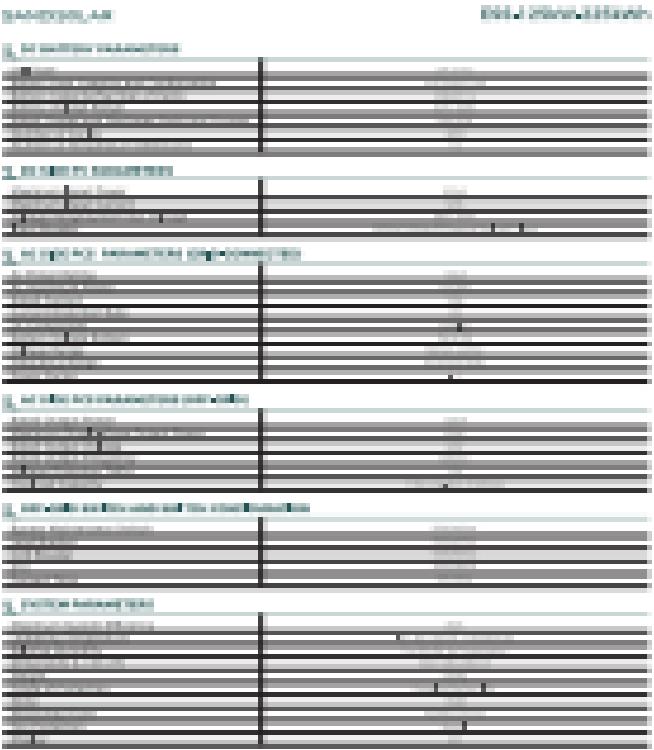
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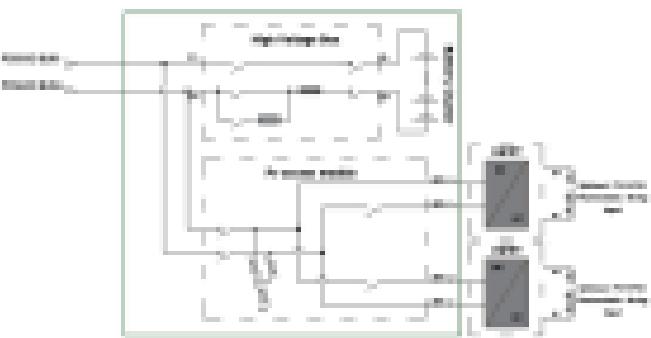
UNITED STATES OF AMERICA

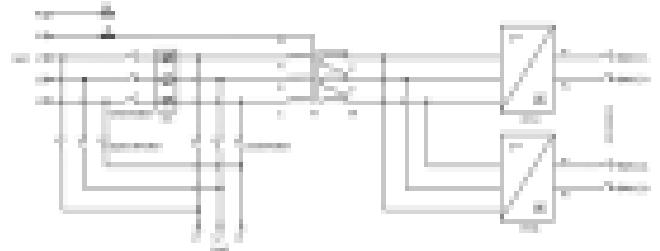
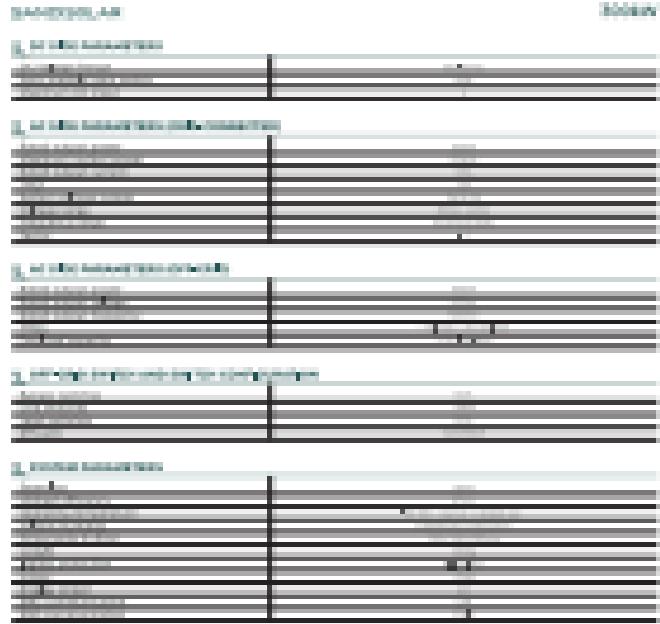
UL 1973 CERTIFIED

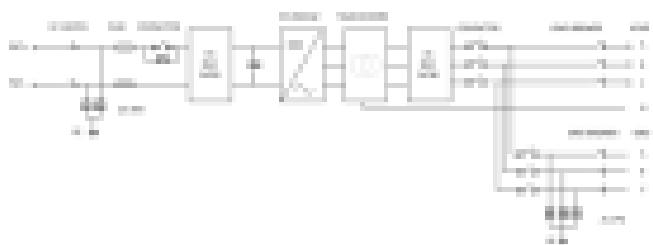
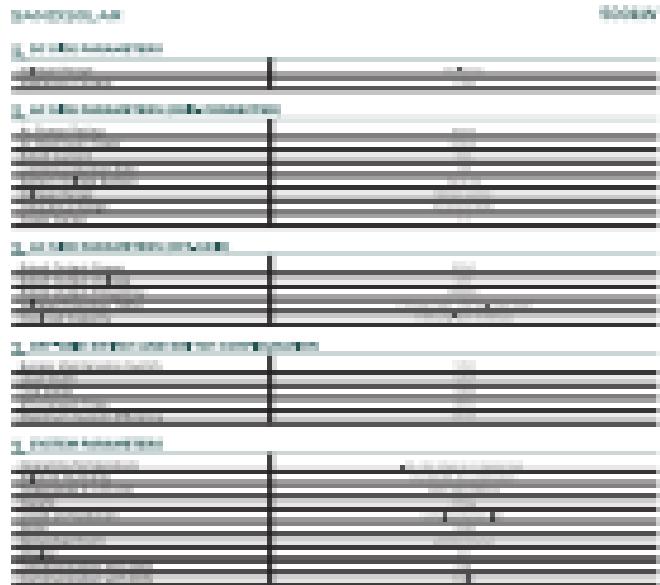
UL 1973 Standard	Tested	Passed
1.1 General Requirements		
1.2 Material Safety Data Sheets		
1.3 Fire Protection		
1.4 Electrical Safety		
1.5 Environmental Protection		
1.6 Quality Assurance		
1.7 Labeling		
1.8 Packaging		
1.9 Transportation		
1.10 Product Safety		
1.11 Product Safety		
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**8kW**

Renew Energy MMW Controller  
for 5 Years Warranty



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## MANAGEMENT

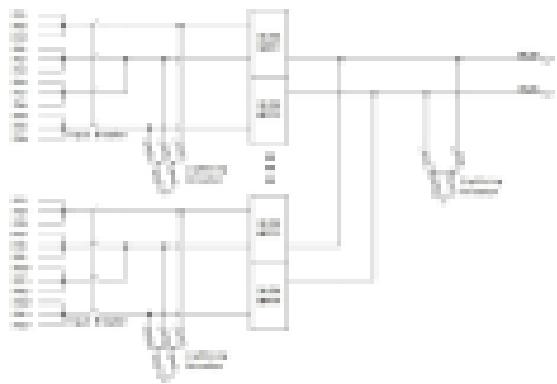
### 1.1 Basic Management



### 1.2 System Monitoring



### 1.3 System Control





SD-HYM-1215H

SD-HYM-1215H

TYPE

SD-HYM-1215H

SD-HYM-1215H

SD-HYM-1215H

SD-HYM-1215H

SD-HYM-1215H

SD-HYM-1215H

SD-HYM-1215H

SD-HYM-1215H



SD-HYM-2435HW	SD-HYM-2435HW
TYPE	COOLING & HEATING
POWER	5.5kW
COOLING CAPACITY	19000 BTU/h
HEATING CAPACITY	19000 BTU/h
COOLING & HEATING	19000 BTU/h
HUMIDITY CONTROL	19000 BTU/h
AIR PURIFICATION	19000 BTU/h
COOLING & HEATING	19000 BTU/h
HUMIDITY CONTROL	19000 BTU/h
AIR PURIFICATION	19000 BTU/h
COOLING & HEATING	19000 BTU/h
HUMIDITY CONTROL	19000 BTU/h
AIR PURIFICATION	19000 BTU/h



**SD-HYM-486SP**

8.8W

CO2 Monitoring Function



SMARTPHONE APP

SMARTPHONE APP

TYPE

SMARTPHONE APP

①. SMARTPHONE APP

②. CO2 Monitoring

③. Air Quality Monitoring

④. Air Quality Prediction

⑤. Air Quality Alert

⑥. Air Quality History

⑦. Air Quality Trend

⑧. Air Quality Forecast

⑨. Air Quality Prediction

⑩. Air Quality Alert

⑪. Air Quality History

⑫. Air Quality Trend

⑬. Air Quality Forecast

⑭. Air Quality Prediction

⑮. Air Quality Alert

⑯. Air Quality History

⑰. Air Quality Trend

⑱. Air Quality Forecast

⑲. Air Quality Prediction

⑳. Air Quality Alert

⑳. Air Quality History

⑳. Air Quality Trend

⑳. Air Quality Forecast

⑳. Air Quality Prediction

⑳. Air Quality Alert

⑳. Air Quality History

⑳. Air Quality Trend

⑳. Air Quality Forecast

⑳. Air Quality Prediction

⑳. Air Quality Alert

⑳. Air Quality History

⑳. Air Quality Trend

⑳. Air Quality Forecast

⑳. Air Quality Prediction

⑳. Air Quality Alert

⑳. Air Quality History

⑳. Air Quality Trend

⑳. Air Quality Forecast

⑳. Air Quality Prediction

⑳. Air Quality Alert

⑳. Air Quality History

⑳. Air Quality Trend

⑳. Air Quality Forecast

⑳. Air Quality Prediction

⑳. Air Quality Alert

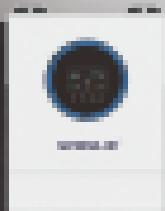
⑳. Air Quality History

⑳. Air Quality Trend

⑳. Air Quality Forecast

⑳. Air Quality Prediction

⑳. Air Quality Alert



**SD-HYM-48110P**

11kw

centralized control system



SD-HYM-48110P

SD-HYM-48110P

TYPE

SD-HYM

SD-HYM

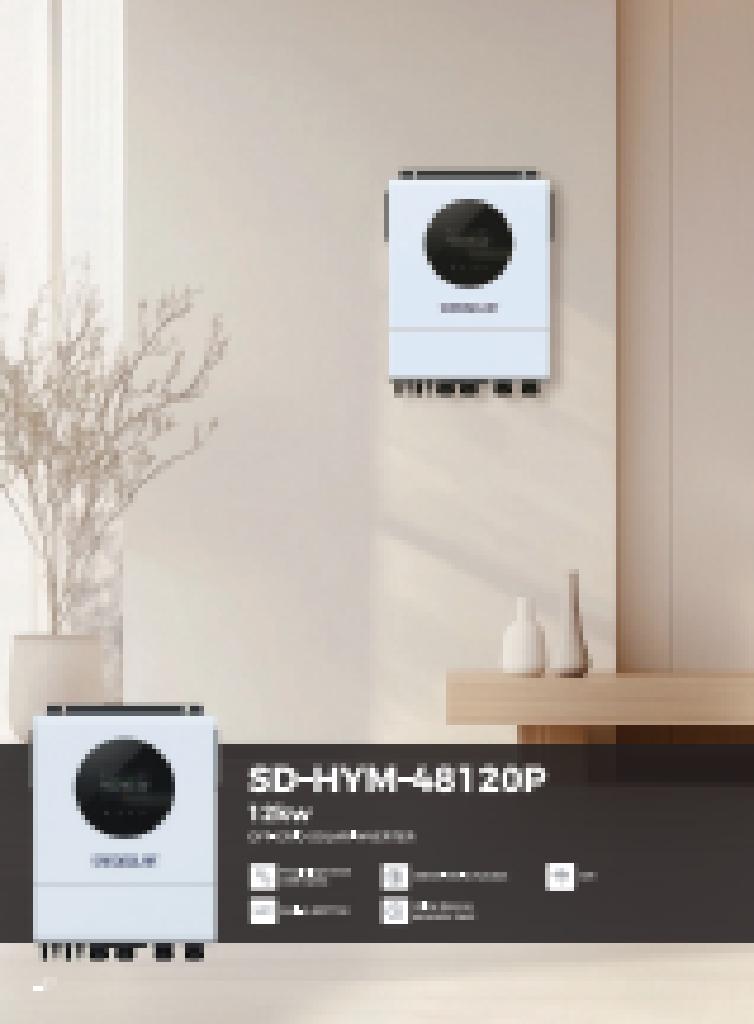
SD-HYM

SD-HYM

SD-HYM-48110P

SD-HYM

SD-HYM-48110P



## SD-HYM-48120P

120W

CLASS D COMPACT SPEAKER



Speaker

120W



Microphone

120W



Bluetooth

120W

SD-HYM-48120P

SD-HYM-48120P

TYPE

Speaker

SD

SD

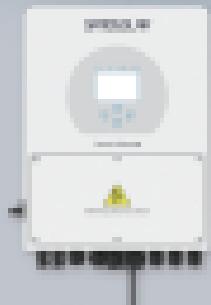
SD

SD-HYM-48120P

SD

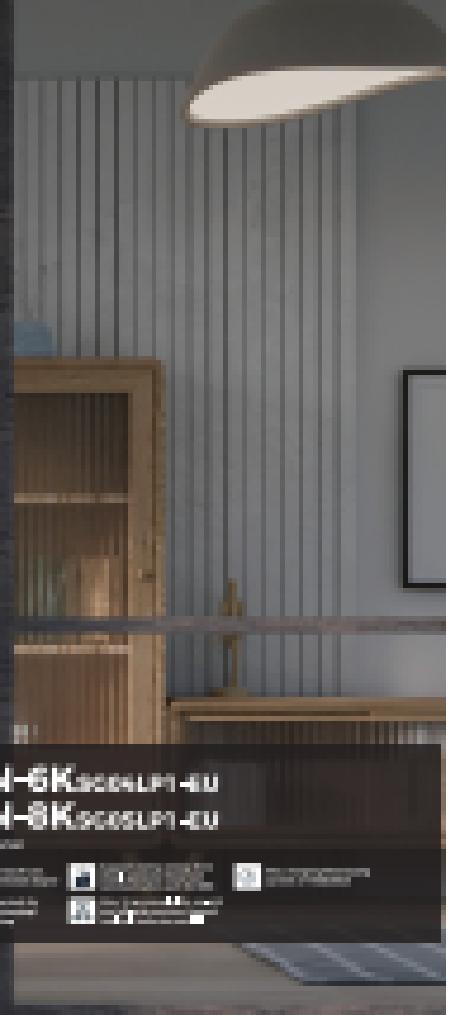
SD-HYM-48120P

SD



SUN-6 Keessupi-6U  
SUN-8 Keessupi-8U

Keessupi



KEESUPI-6U		KEESUPI-8U	
Type	Dimensions	Type	Dimensions
<u>KEESUPI-6U</u>			
Module	100x60x20 mm	Module	100x60x20 mm
Power supply	DC 12V 0.5A	Power supply	DC 12V 0.5A
Working temperature	-10~50°C	Working temperature	-10~50°C
Storage temperature	-40~70°C	Storage temperature	-40~70°C
Humidity	0~95%	Humidity	0~95%
Protection class	IP20	Protection class	IP20
Wiring	Standard	Wiring	Standard
Protocols	Modbus, TCP, CAN, RS485, RS232, WiFi, Zigbee	Protocols	Modbus, TCP, CAN, RS485, RS232, WiFi, Zigbee
Accessories	None	Accessories	None
<u>KEESUPI-8U</u>			
Module	100x80x20 mm	Module	100x80x20 mm
Power supply	DC 12V 0.5A	Power supply	DC 12V 0.5A
Working temperature	-10~50°C	Working temperature	-10~50°C
Storage temperature	-40~70°C	Storage temperature	-40~70°C
Humidity	0~95%	Humidity	0~95%
Protection class	IP20	Protection class	IP20
Wiring	Standard	Wiring	Standard
Protocols	Modbus, TCP, CAN, RS485, RS232, WiFi, Zigbee	Protocols	Modbus, TCP, CAN, RS485, RS232, WiFi, Zigbee
Accessories	None	Accessories	None



**SUN-12K** [SUN12P3-EU](#)  
**SUN-15K/20K** [SUN15P3-EU-SP42](#)  
• [Product Information](#) • [Downloads](#) • [Warranty](#)  
• [Technical Support](#) • [Customer Support](#)



THERMOTEC TANKLESS WATER HEATERS		THERMOTEC TANKLESS WATER HEATERS			
TYPE	WATER FLOW	TEMP. RISE	WATER FLOW	TEMP. RISE	WATER FLOW
<b>THERMOTEC TANKLESS WATER HEATERS</b>		<b>THERMOTEC TANKLESS WATER HEATERS</b>			
SUN-12K	1.2 GPM	55°F	1.2 GPM	55°F	1.2 GPM
SUN-15K	1.5 GPM	55°F	1.5 GPM	55°F	1.5 GPM
SUN-20K	2.0 GPM	55°F	2.0 GPM	55°F	2.0 GPM
<b>THERMOTEC TANKLESS WATER HEATERS</b>		<b>THERMOTEC TANKLESS WATER HEATERS</b>			
SUN-12P3	1.2 GPM	55°F	1.2 GPM	55°F	1.2 GPM
SUN-15P3	1.5 GPM	55°F	1.5 GPM	55°F	1.5 GPM
SUN-20P3	2.0 GPM	55°F	2.0 GPM	55°F	2.0 GPM
<b>THERMOTEC TANKLESS WATER HEATERS</b>		<b>THERMOTEC TANKLESS WATER HEATERS</b>			
SUN-12P3-EU	1.2 GPM	55°F	1.2 GPM	55°F	1.2 GPM
SUN-15P3-EU	1.5 GPM	55°F	1.5 GPM	55°F	1.5 GPM
SUN-20P3-EU	2.0 GPM	55°F	2.0 GPM	55°F	2.0 GPM
<b>THERMOTEC TANKLESS WATER HEATERS</b>		<b>THERMOTEC TANKLESS WATER HEATERS</b>			
SUN-12P3-SP42	1.2 GPM	55°F	1.2 GPM	55°F	1.2 GPM
SUN-15P3-SP42	1.5 GPM	55°F	1.5 GPM	55°F	1.5 GPM
SUN-20P3-SP42	2.0 GPM	55°F	2.0 GPM	55°F	2.0 GPM



NAME/TYPE, L1	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
NAME, L1	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
NAME, L2	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
NAME, L3	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
NAME, L4	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
NAME, L5	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
NAME, L6	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
NAME, L7	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
NAME, L8	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
NAME, L9	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
NAME, L10	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
NAME, L11	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
NAME, L12	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
NAME, L13	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
NAME, L14	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
NAME, L15	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
NAME, L16	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
NAME, L17	NAME, L1/L2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17



**3.5kW/1P/UPS**

AC/DC Conversion Unit



Input:  
Voltage: 380V  
Frequency: 50Hz  
Protection: IP20

Output:  
Voltage: 220V  
Frequency: 50Hz  
Protection: IP20

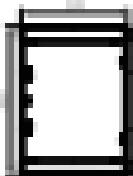
Protection:  
IP20  
IEC60068-2-27  
IEC60068-2-32  
IEC60068-2-64

## Technical Parameters

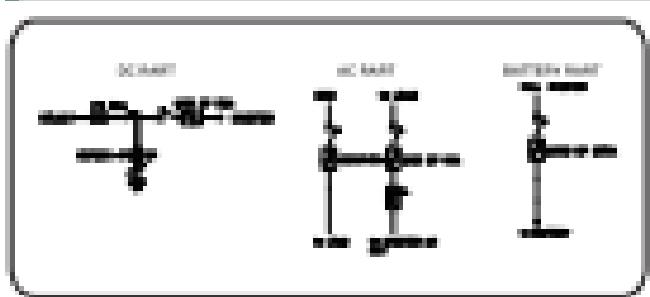
### Technical Parameters of UPS

Parameter	Value	Unit	Parameter	Value	Unit
Input Voltage	380V	V	Output Voltage	220V	V
Input Frequency	50Hz	Hz	Output Frequency	50Hz	Hz
Protection Level	IP20		Protection Level	IP20	
Power Factor	0.9		Efficiency	90%	
Response Time	<1ms		Standby Power	10W	W
Surge Protection	IEC60068-2-27		Overvoltage Protection	IEC60068-2-32	
Overcurrent Protection	IEC60068-2-64		Overtemperature Protection	IEC60068-2-64	

### Product Dimensions



### Product Structure





## SKW-1P/PV

AC/DC Conditioner Box



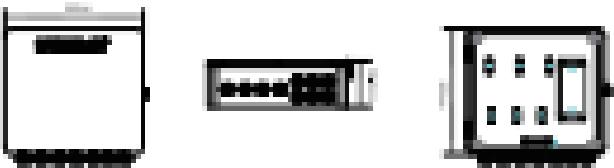
SKW-1P/PV, A

DATA SHEET

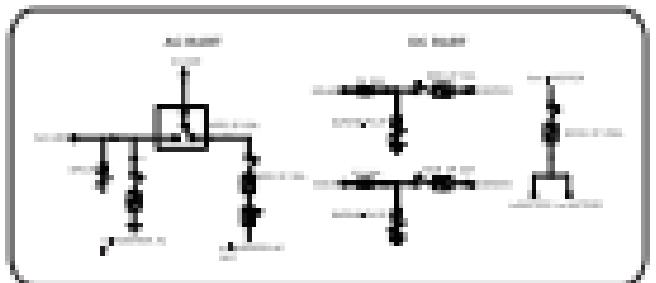
### SKW-1P/PV, A - Product Overview

Product	AC/DC	DC/DC	AC/DC + DC/DC	DC/DC + AC/DC	Other
SKW-1P/PV, A	✓	✓	✓	✓	✓
SKW-1P/PV, B	✓	✓	✓	✓	✓
SKW-1P/PV, C	✓	✓	✓	✓	✓
SKW-1P/PV, D	✓	✓	✓	✓	✓
SKW-1P/PV, E	✓	✓	✓	✓	✓
SKW-1P/PV, F	✓	✓	✓	✓	✓
SKW-1P/PV, G	✓	✓	✓	✓	✓
SKW-1P/PV, H	✓	✓	✓	✓	✓
SKW-1P/PV, I	✓	✓	✓	✓	✓
SKW-1P/PV, J	✓	✓	✓	✓	✓
SKW-1P/PV, K	✓	✓	✓	✓	✓
SKW-1P/PV, L	✓	✓	✓	✓	✓
SKW-1P/PV, M	✓	✓	✓	✓	✓
SKW-1P/PV, N	✓	✓	✓	✓	✓
SKW-1P/PV, O	✓	✓	✓	✓	✓
SKW-1P/PV, P	✓	✓	✓	✓	✓
SKW-1P/PV, Q	✓	✓	✓	✓	✓
SKW-1P/PV, R	✓	✓	✓	✓	✓
SKW-1P/PV, S	✓	✓	✓	✓	✓
SKW-1P/PV, T	✓	✓	✓	✓	✓
SKW-1P/PV, U	✓	✓	✓	✓	✓
SKW-1P/PV, V	✓	✓	✓	✓	✓
SKW-1P/PV, W	✓	✓	✓	✓	✓
SKW-1P/PV, X	✓	✓	✓	✓	✓
SKW-1P/PV, Y	✓	✓	✓	✓	✓
SKW-1P/PV, Z	✓	✓	✓	✓	✓

### SKW-1P/PV, A - Components



### SKW-1P/PV, A - Technical Data





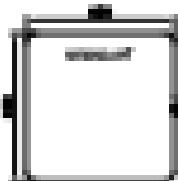
MANUFACTURER, INC.

0000000000000000

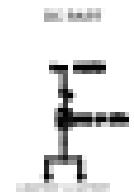
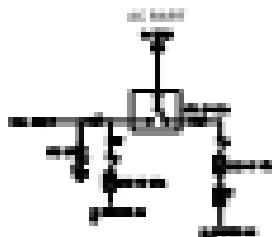
1. Product Information

Product	Model Number	Color	Dimensions (WxHxD)	Weight (kg)	Unit Price
Generator	G12000	White	600x800x200	150	\$1200
UPS	U10000	Black	500x700x150	100	\$1000
AC/DC Conditioner	C15000	Grey	400x600x100	80	\$1500
Control Panel	P10000	White	300x500x100	60	\$1000

2. Product Description



3. Product Components





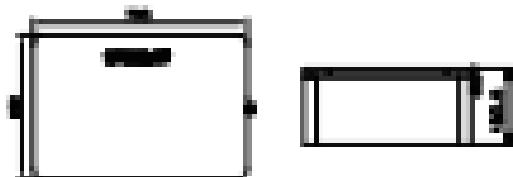
8KW/3P/PV

AC/DC Conditioner

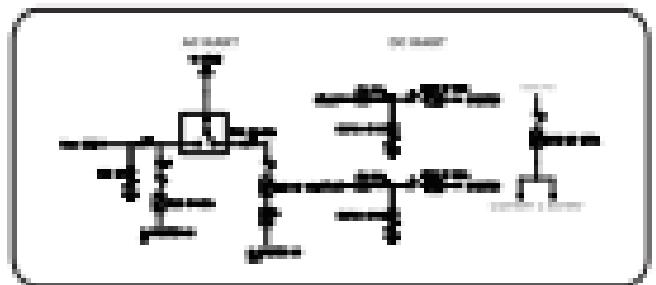
AC/DC Conditioner Unit

Parameter	Current Value	Unit	Setpoint	Min	Max	Unit
Voltage	220V	V	220V	180V	260V	V
Current	10A	A	10A	5A	15A	A
Power	8KW	W	8KW	6KW	10KW	W
Temperature	30°C	°C	30°C	20°C	40°C	°C
Humidity	60%	%	60%	40%	80%	%
Pressure	100kPa	kPa	100kPa	80kPa	120kPa	kPa
Flow	10m³/h	m³/h	10m³/h	5m³/h	15m³/h	m³/h

AC/DC Conditioner Unit



AC/DC Conditioner





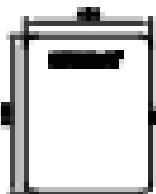
12KW/1P/UPS

AC/DC Condition Box

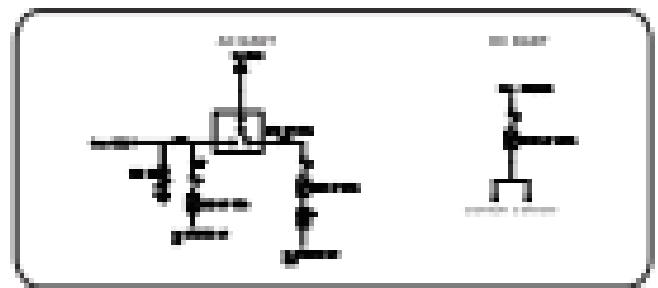
1. Basic information of equipment

Project	Model	Power	Control	Communication	Accessories
12KW/1P/UPS	12KW/1P/UPS	12KW	PLC	RS485	None
12KW/1P/UPS	12KW/1P/UPS	12KW	PLC	RS485	None
12KW/1P/UPS	12KW/1P/UPS	12KW	PLC	RS485	None
12KW/1P/UPS	12KW/1P/UPS	12KW	PLC	RS485	None

2. Protection function of equipment



3. Main connection



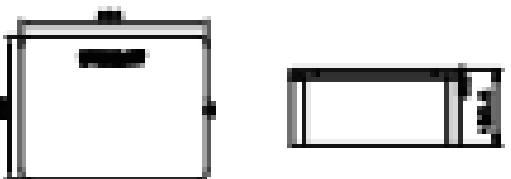


MANUFACTURER: ABB  
TYPE: PV INVERTER

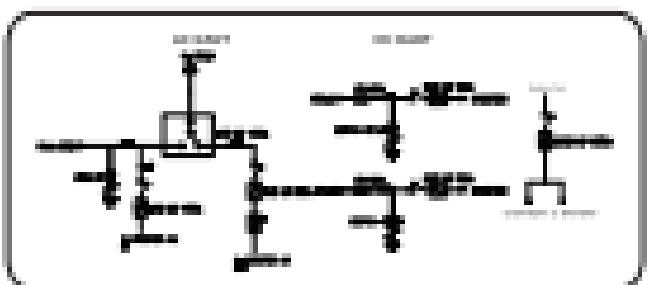
1. GENERAL INFORMATION

ITEM	UNIT	MIN	MAX	DEF	NOTES
AC INPUT	V	~180	~260	~230	
AC INPUT	A	~10	~15	~12	
AC INPUT	Hz	~50	~60	~50	
AC INPUT	PF	0.9	1.0	0.95	
AC OUTPUT	V	~180	~260	~230	
AC OUTPUT	A	~10	~15	~12	
AC OUTPUT	Hz	~50	~60	~50	
AC OUTPUT	PF	0.9	1.0	0.95	
DC INPUT	V	~300	~500	~400	
DC INPUT	A	~10	~15	~12	
DC INPUT	Hz	~50	~60	~50	
DC INPUT	PF	0.9	1.0	0.95	
DC OUTPUT	V	~180	~260	~230	
DC OUTPUT	A	~10	~15	~12	
DC OUTPUT	Hz	~50	~60	~50	
DC OUTPUT	PF	0.9	1.0	0.95	

2. EQUIPMENT SPECIFICATIONS



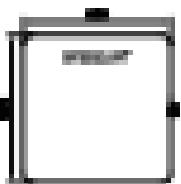
3. EQUIPMENT CONNECTIONS



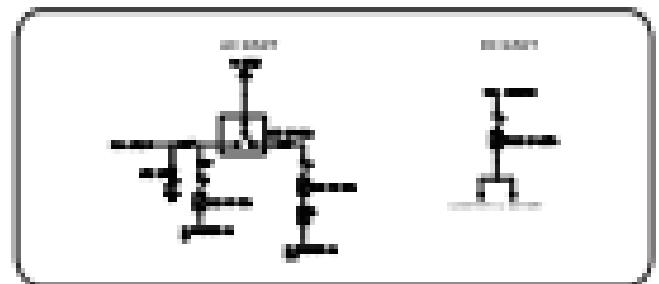


NAME	TYPE	UNIT	UNIT	UNIT	UNIT
MAIN	MAIN	MAIN	MAIN	MAIN	MAIN
MAIN	MAIN	MAIN	MAIN	MAIN	MAIN
MAIN	MAIN	MAIN	MAIN	MAIN	MAIN
MAIN	MAIN	MAIN	MAIN	MAIN	MAIN
MAIN	MAIN	MAIN	MAIN	MAIN	MAIN

MAIN



MAIN





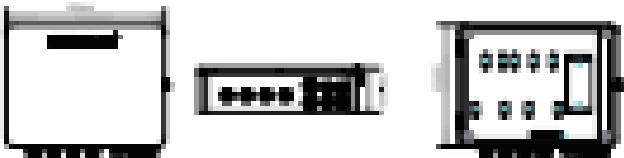
12kW/3P/PV

AC/DC Combiner Box

#### Technical Data Sheet

Parameter	Min.	Max.	Unit	Value
AC Input Power	~	~	kW	12
AC Input Frequency	~	~	Hz	50
AC Input Voltage Range	~	~	V	380 - 480
AC Input Current Range	~	~	A	10 - 20
AC Output Power	~	~	kW	12
AC Output Frequency	~	~	Hz	50
AC Output Voltage Range	~	~	V	380 - 480
AC Output Current Range	~	~	A	10 - 20
DC Input Power	~	~	kW	12
DC Input Frequency	~	~	Hz	50
DC Input Voltage Range	~	~	V	380 - 480
DC Input Current Range	~	~	A	10 - 20
DC Output Power	~	~	kW	12
DC Output Frequency	~	~	Hz	50
DC Output Voltage Range	~	~	V	380 - 480
DC Output Current Range	~	~	A	10 - 20

#### Product Components



#### Control System





## DC1.5KV Solar PV Cable

Single conductor, solid, copper  
with polyvinyl chloride insulation  
and jacket

Length: 250m



## DC1.5KV Solar PV Cable

### MANUFACTURER

#### Product Information

Product Name:	DC1.5KV Solar PV Cable
Product Description:	Solar PV cable with polyvinyl chloride insulation and jacket
Product Type:	Solar PV cable
Product Category:	Solar PV cable
Product Model:	DC1.5KV

#### Product Features

Color:	Red
Material:	PVC
Insulation:	UV resistant

### Product

Product Name:	DC1.5KV Solar PV Cable
Product Description:	Solar PV cable with polyvinyl chloride insulation and jacket
Product Type:	Solar PV cable
Product Category:	Solar PV cable
Product Model:	DC1.5KV

### Product Description

Product Name:	DC1.5KV Solar PV Cable
Product Description:	Solar PV cable with polyvinyl chloride insulation and jacket
Product Type:	Solar PV cable
Product Category:	Solar PV cable
Product Model:	DC1.5KV

### Product

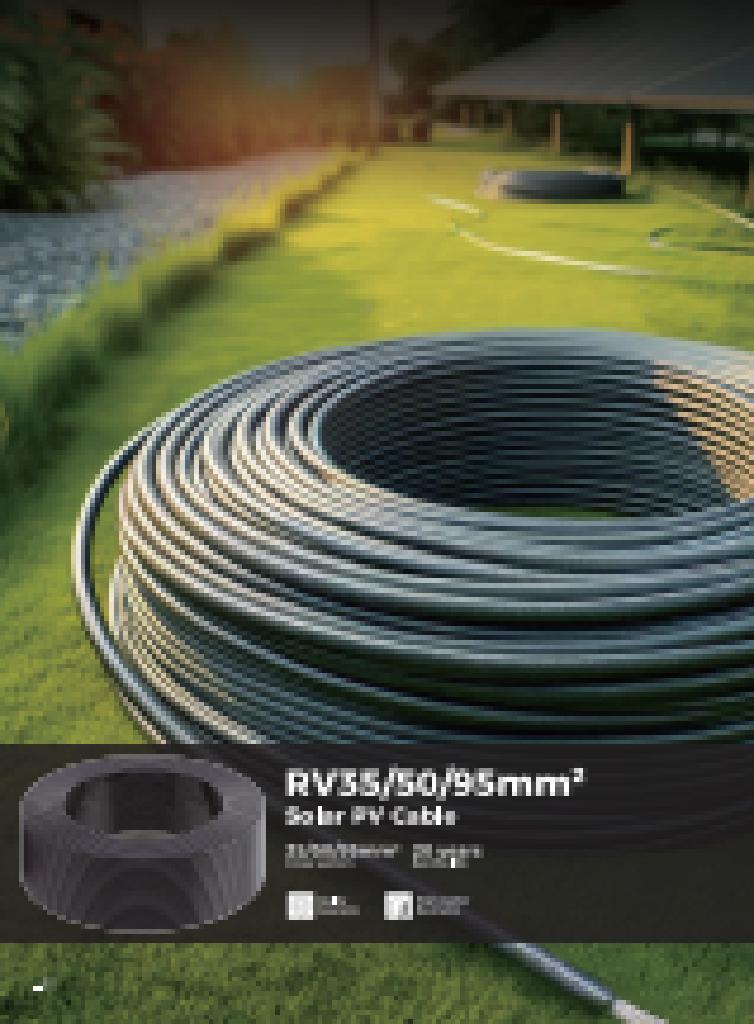
Product	Specification	Physical Dimension	Unit Measure
Product Name:	DC1.5KV Solar PV Cable	1000VDC	Meter
Product Description:	Solar PV cable with polyvinyl chloride insulation and jacket	1000VDC	Meter
Product Type:	Solar PV cable	1000VDC	Meter
Product Category:	Solar PV cable	1000VDC	Meter
Product Model:	DC1.5KV	1000VDC	Meter

### Product

Product Name: DC1.5KV Solar PV Cable

### Product

Product Name: DC1.5KV Solar PV Cable



**RVSS/50/95mm<sup>2</sup>**  
Solar PV Cable

UL Listed  
CSA Certified



SHAWMONT, LLC

TYPE	UL Listed	CSA Certified	CEC Approved
<b>UL Listed Products</b>			
1. Ground wire			
<b>CSA Certified Products</b>			
2. Neutral wire			
3. Phase wire			
<b>CEC Approved Products</b>			
4. Ground wire			
5. Neutral wire			
6. Phase wire			
<b>UL Listed Products in Some Areas</b>			
7. Neutral wire			
8. Phase wire			
<b>CSA Certified Products</b>			
9. Neutral wire			
10. Phase wire			

S

# PROJECT CASE

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## GATE 4 IN NATURE, CHONGMING PROJECT

- ① LOCATION: SHANGHAI
- ② OWNER: SOCHIM/SHCCM
- ③ TOTAL AREA: 100000m<sup>2</sup>



## LIC 2# IN INDUSTRIAL, HUAIDAO PROJECT

- ① LOCATION: SHANGHAI
- ② OWNER: SOCHIM/SHCCM
- ③ TOTAL AREA: 100000m<sup>2</sup>



## WFC 2# IN BEIJING

- ① LOCATION: BEIJING
- ② OWNER: SOCHIM/SHCCM
- ③ TOTAL AREA: 100000m<sup>2</sup>



## WFC 3# IN BEIJING

- ① LOCATION: BEIJING
- ② OWNER: SOCHIM/SHCCM
- ③ TOTAL AREA: 100000m<sup>2</sup>

11

12