

Human · Technology · Natural



## CHINA SUNTREE ELECTRIC CO.,LTD

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If you need more information, welcome to contact our technical team. As products keep on improving, please refer to physical or user manual. If any change in this file, without notice separately.

**suntree**  
human technology nature



Suntree Xinchi Electric Co.,Ltd, an outstanding company in China intelligent electrical industry, a legendary growing company.

Suntree, have leading R&D and manufacture capacity. With power grid, new energy, intelligent electric, and middle & high voltage four sales business units. With production plants in Shanghai, Zhejiang, Shenzhen.

Suntree New enery business unit concentrate on new energy (Solar power generation , wind power, new energy application etc.), distribution system research and development, manufacture, sales and service. Suntree has great independent innovation ability, with many core technology, gain many patents, with ISO9001:2008, 14000, OHSAS18000 etc.

Suntree brand DC products used in Photovoltaic systems with leading technology in this area, passed CE,CB, IEC, Nemko, SAA, TUV, CCC, Gold-sun etc. Litto breand PV inverter authorized with TUV, CE, CQC, ETLCQC, AS4777, VDE-AR-4105, VDE0126-1-1, G59/2, G83/2, MEA, PEA, EN50438, EN60116, EN61727 etc. certificates.

Suntree new energy products including: Solar Photovoltaic distribution system (DC MCCB, DC MCB, Intelligent DC ACB, DC SPD, DC Fuse, Intelligent PV Combiner box. And Litto Brand on-grid and off-grid inverter, high frequency isolated inverter and energy storage inverter etc.

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Wind power distribution system: Intelligent wind power frame circuit breaker(plateau type, salt-fog resistance type, low temperature resistance type), Moulded case circuit breaker.

New energy application: Litto brand Charging pile module.

First class products, it from advanced design concept, precise production equipment, strict testing, perfect quality assurance system, quick feedback and excellent after sales service

To provide customer with our first class products and service is our persistent goal.

Suntree company spirit" Innoviation, Communication, Service, Dream", insist on "Human, technology, nature" harmonious development, according to "Win-win, win future" cooperation concept. Sincerely hope to cooperate with you to win future.

TECHNOLOGY, FOR BETTER LIFE.

SUNTREE ELECTRIC CONCENTRATES ON

INTELLIGENT TECHNOLOGY

FOCUS ON GREEN TECHNOLOGY

TO WORK OUT HARMONIOUS

LIFE WITH NATURE



报告编号: 1300340003

计量认证  
 METROLOGICAL CERTIFICATION

太阳能光伏产品金太阳认证测试报告  
 Golden Sun Certification Test Report for  
 PV Products

产品名称: 光伏汇流箱  
 Product: PV combiner box

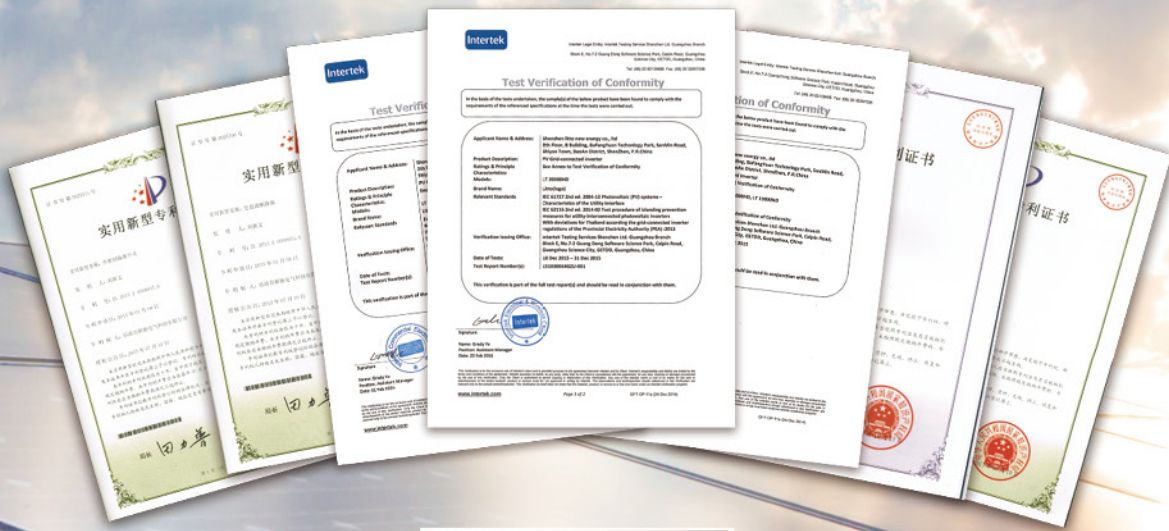
申请单位: 浙江新驰电气有限公司  
 Applicant: Zhejiang Xinchi Electric Co., Ltd.

生产单位: 浙江新驰电气有限公司  
 Applicant: Zhejiang Xinchi Electric Co., Ltd.

测试单位: 浙江省量检测科学研究院  
 浙江方圆电气设备有限公司  
 Test Lab: Zhejiang Institute Of Quality Inspection Science  
 Zhejiang Fang Yuan Electric Equipment Test Co., Ltd.

二〇一三年零六月二十一日

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CB

CE

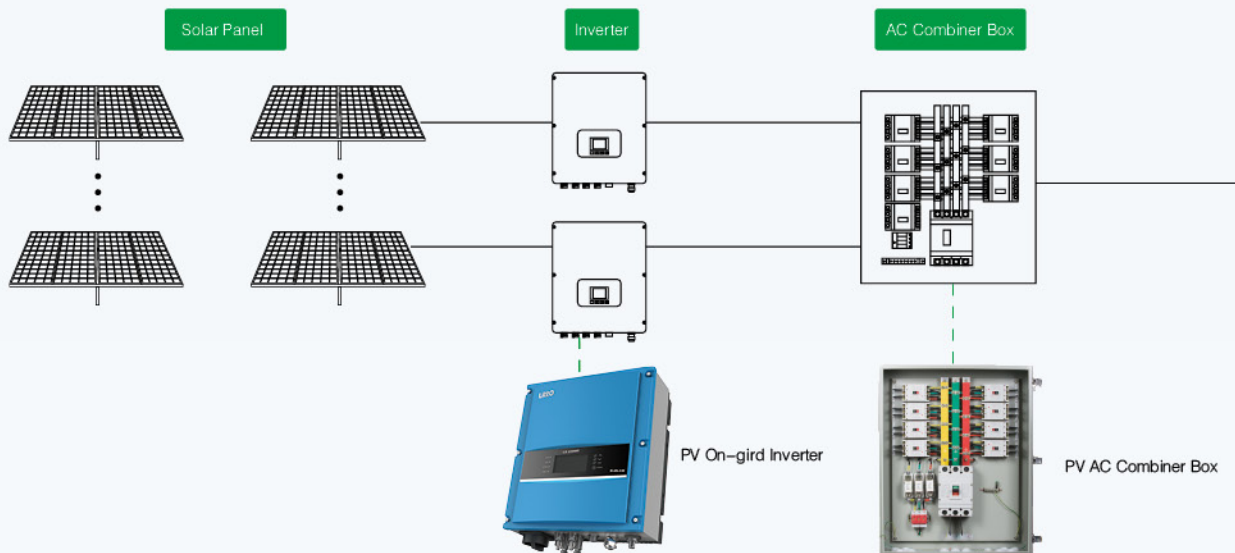


ROHS



IEC

Nemko



PV Set of String Type Grid Inverter : LS/LT (CE, CQC, AS4777.2015, PEA, MEA, IEC62109, G83/G59, EN50438)

PV DC MCB : SL7-PV (CCC, TUV, SAA, IEC)

PV DC Rotate Isolator Switch : SISO-Z (CCC, TUV, SAA, IEC)

PV DC SPD : SUP4-PV (1500V TUV)

PV Inverter Ethernet Connector : SMA4 (CE, ROHS, TUV)

PV Inverter USB Connector : SME4 (CE, ROHS)

PV Inverter USB Connector : SMU4 (CE, ROHS)

PV Waterproof Connector : SMC4 (CE, ROHS, TUV)

PV AC Combiner Box : SHLX-AC (CGC)

PV AC Frame-Type Circuit Breaker : SW8 (CCC, CE)

PV AC MCCB : SM8 (CCC, TUV, CE, IEC)

PV AC MCB : SCB8 (CCC, TUV, IEC)

PV AC Load-Disconnector Switch: SGL (CCC, IEC)

PV AC SPD : SUP1/SUP2 (CE)

High Voltage Earth Switch: SV8



SISO-Z



SL7-PV



SUP4-PV



SMA4



SMC4



SME4



SMU4



SM8



SGL



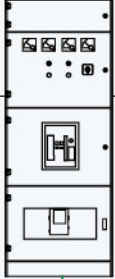
SUP1



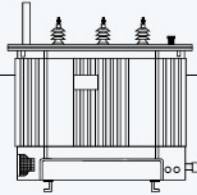
SUP2

# GROUND STRING TYPE PV GRID POWER PLANT SPECIFIC PRODUCTS

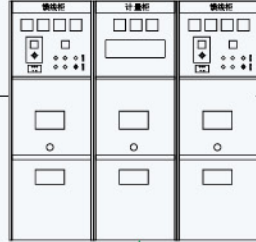
AC Cabinet



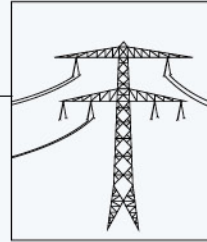
Boosting Transformer



High-Voltage Distribution Cabinet and Measuring System



High-Voltage Power Grid



SW8  
Resistant Low Temperature Type  
Resistance Salt Fog Type  
Plateau Type



SM8



SGL



SCB8



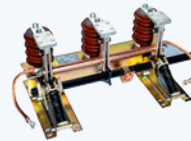
SUP1



SUP2



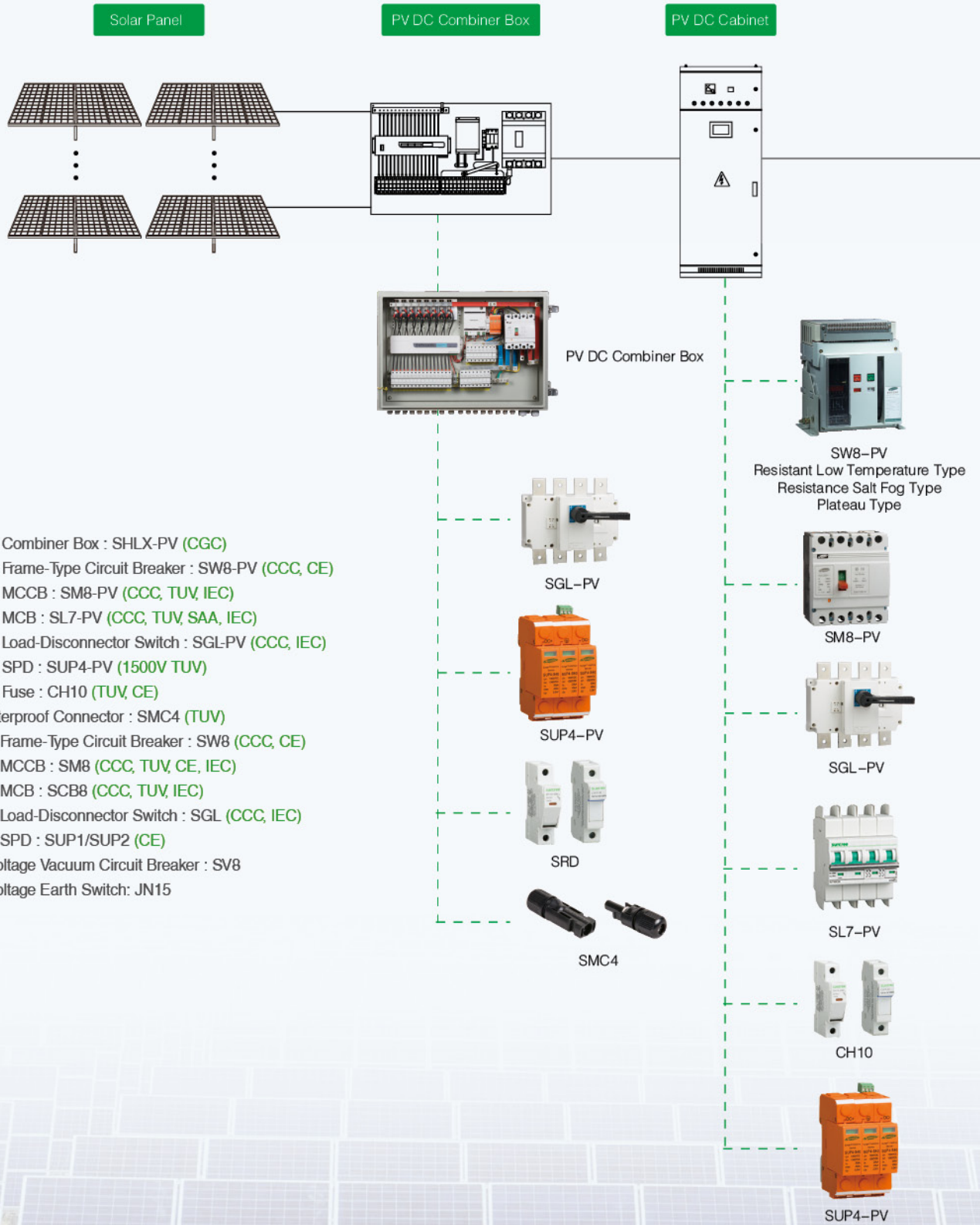
SV8



JN15

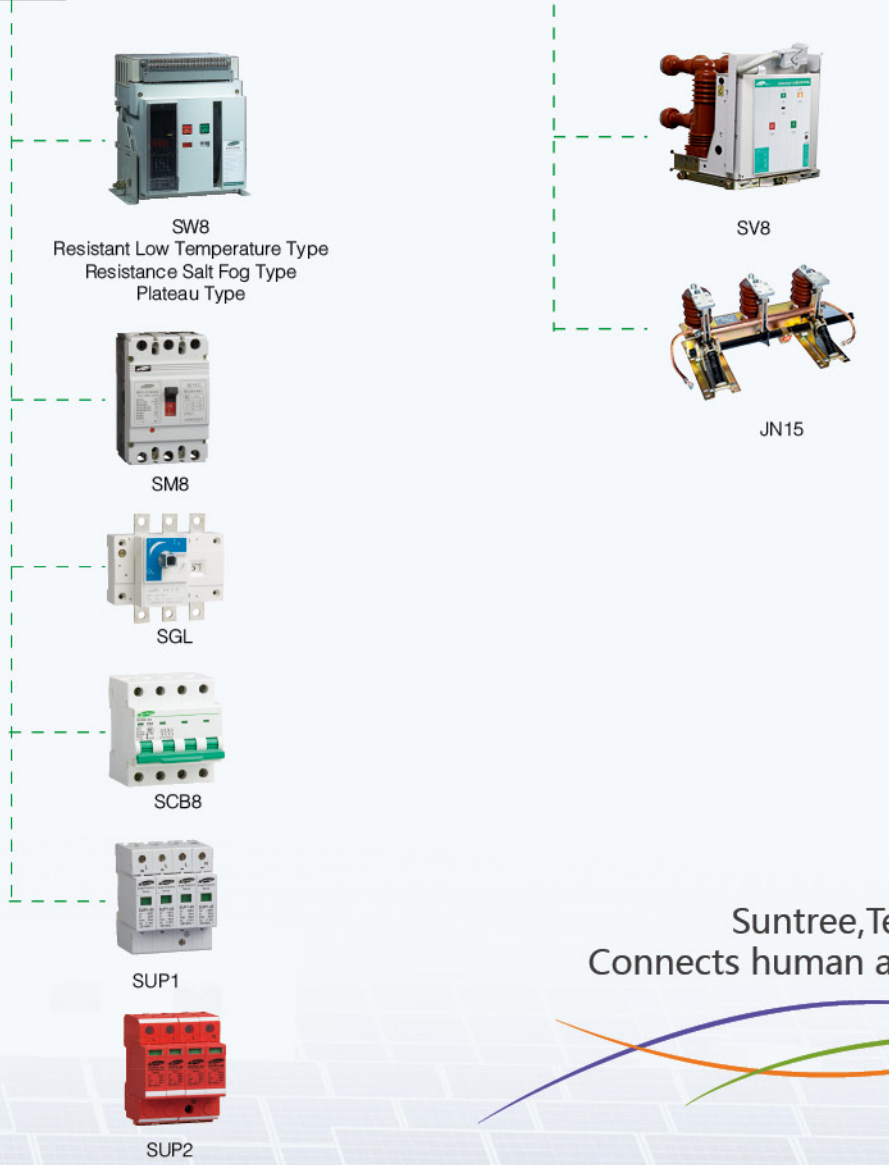
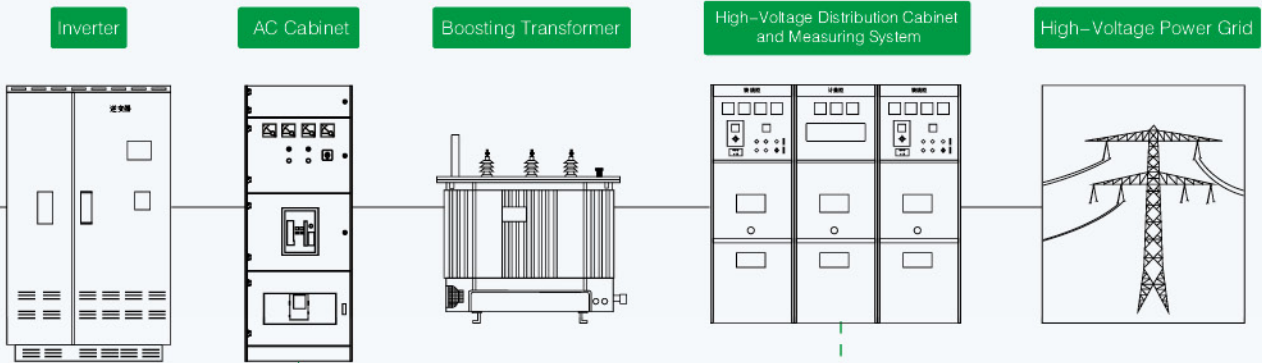
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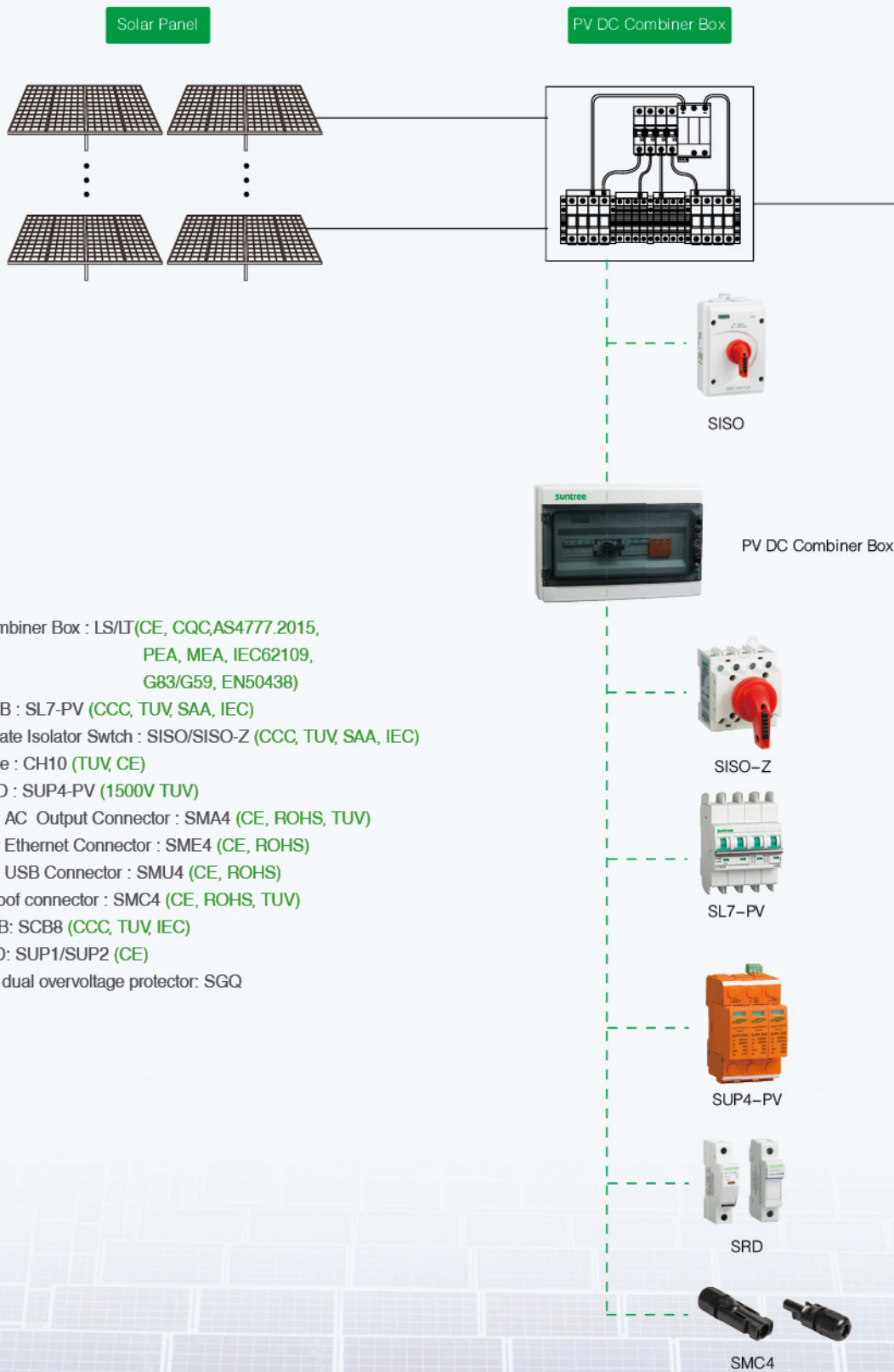


# GROUND CONCENTRATING PV GRID POWER PLANT SPECIFIC PRODUCTS



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PV DC Combiner Box : LS/LT(CE, CQC, AS4777.2015, PEA, MEA, IEC62109, G83/G59, EN50438)

PV DC MCB : SL7-PV (CCC, TUV, SAA, IEC)

PV DC Rotate Isolator Switch : SISO/SISO-Z (CCC, TUV, SAA, IEC)

PV DC Fuse : CH10 (TUV, CE)

PV DC SPD : SUP4-PV (1500V TUV)

PV Inverter AC Output Connector : SMA4 (CE, ROHS, TUV)

PV Inverter Ethernet Connector : SME4 (CE, ROHS)

PV Inverter USB Connector : SMU4 (CE, ROHS)

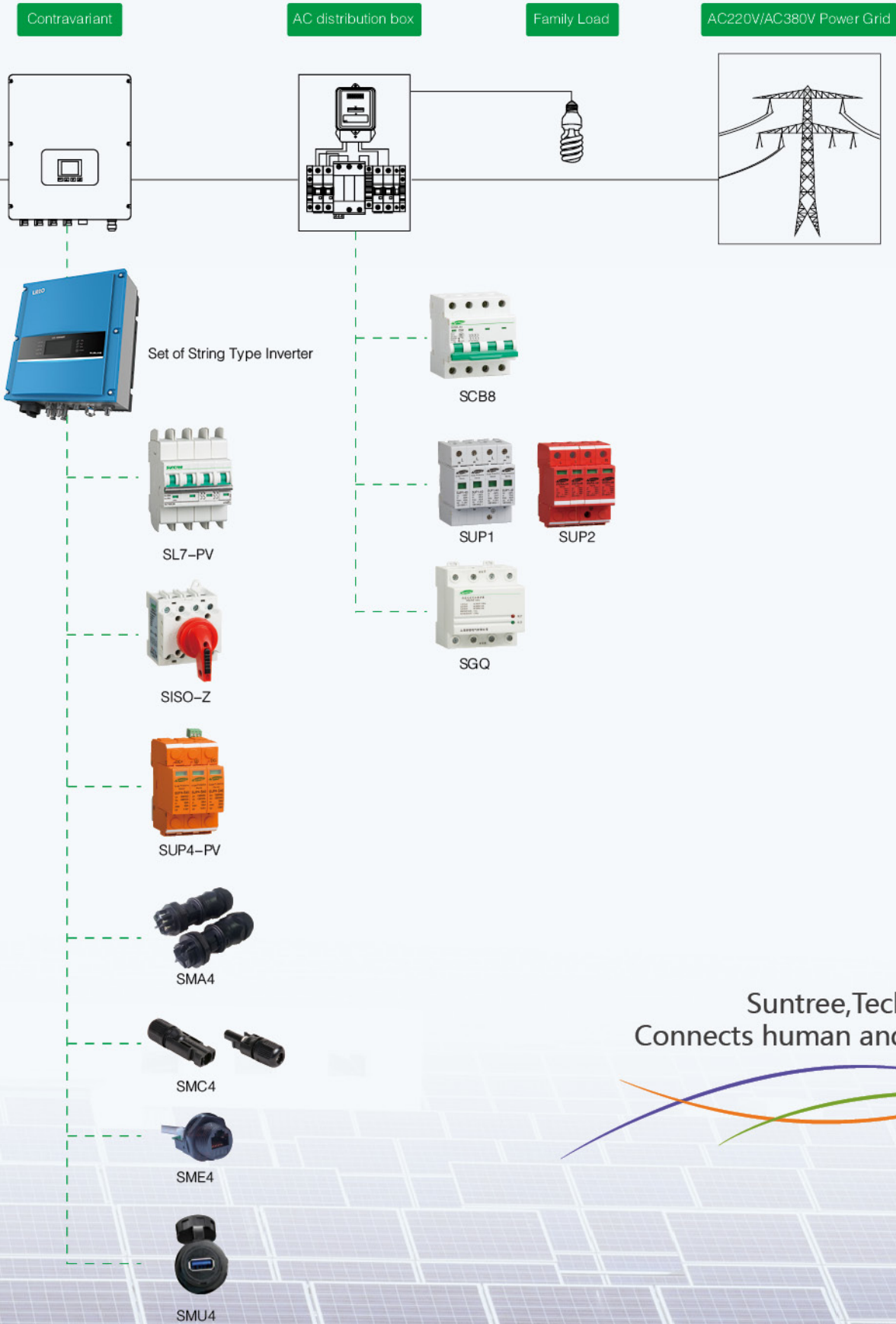
PV Waterproof connector : SMC4 (CE, ROHS, TUV)

PV AC MCB: SCB8 (CCC, TUV, IEC)

PV AC SPD: SUP1/SUP2 (CE)

PV AC self dual overvoltage protector: SGQ

# DISTRIBUTED IN PV GRID POWER PLANT SPECIFIC PRODUCTS



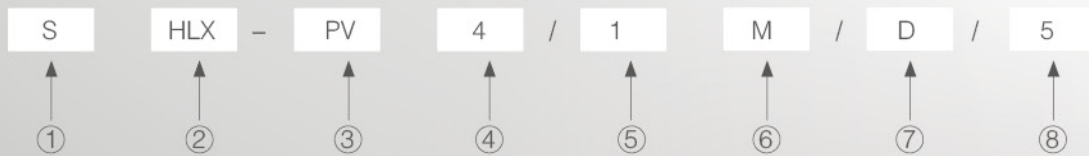
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## DC COMBINER BOX TYPE

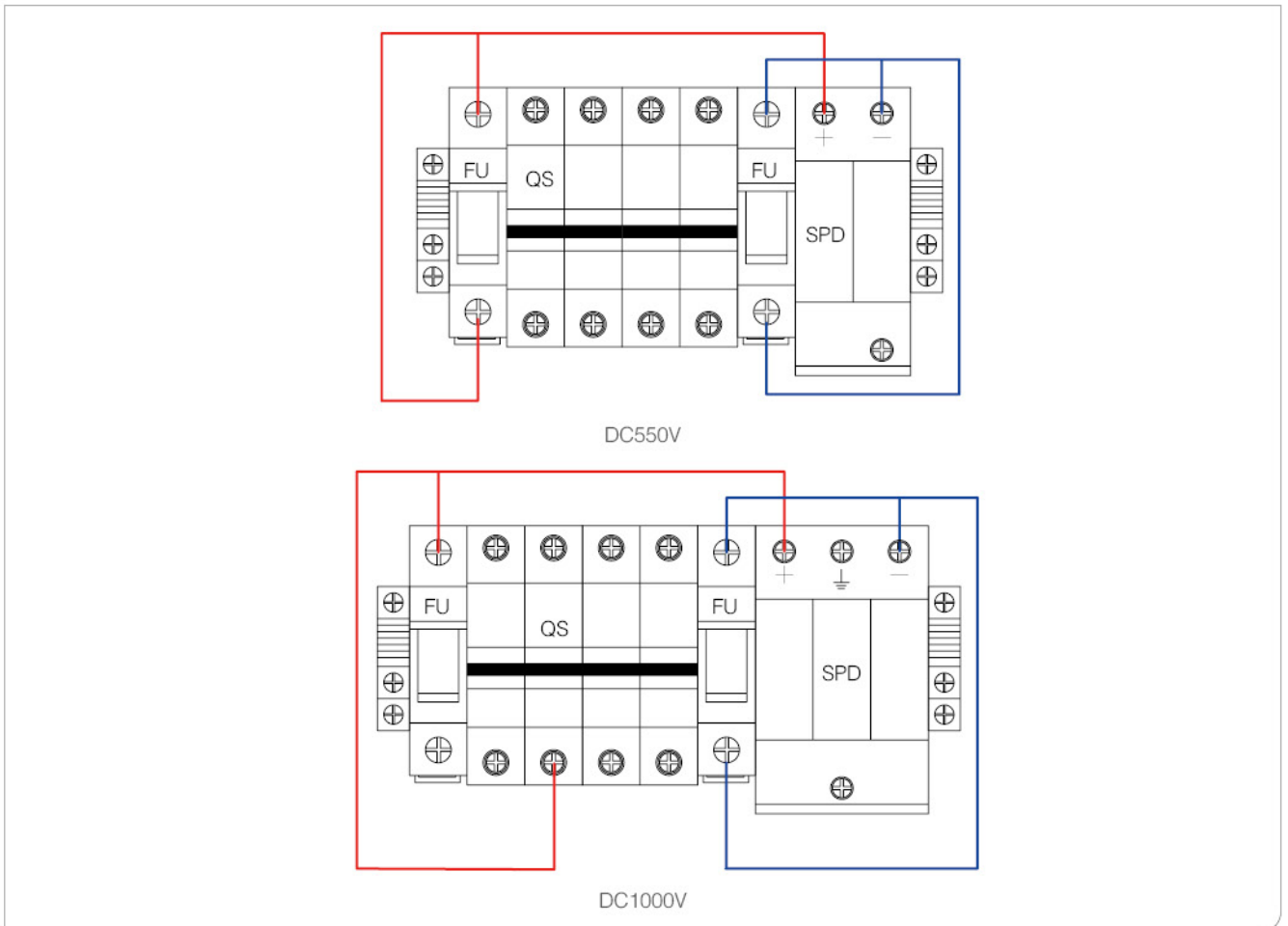


- ① Suntree electric
- ② Product model (combiner box)
- ③ PV
- ④ Input channel (1-24)
- ⑤ No. of output channel of MPPT
- ⑥ Monitoring unit
- ⑦ Diode
- ⑧ DC550V/DC1000V



## SHLX-PV1/1 DC COMBINER BOX

- High reliability
  - With DC FUSE
  - With DC Surge Protection Device
  - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
  - IP65 design, waterproof, anti dust and anti ultraviolet.
  - Strict test for high and low temperature, used widely.
  - The simple installation, the simplified system wiring, the convenient wiring .
  - The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
  - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.



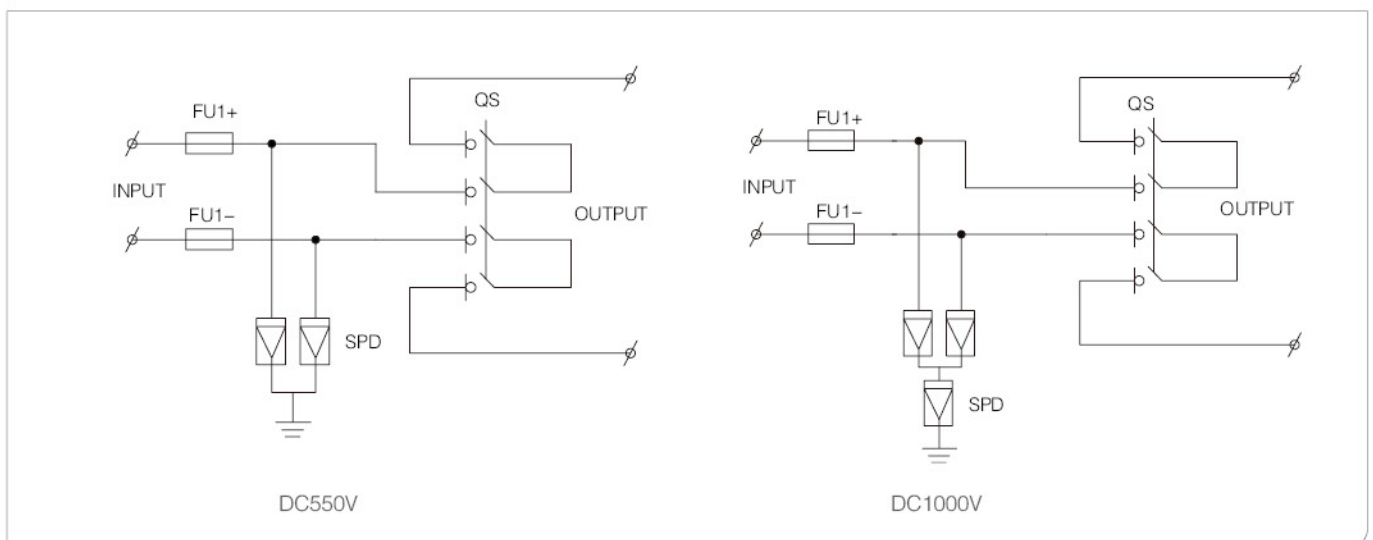
### DESCRIPTION

SHLX-PV1/1 combiner box is suitable for inverter (MAX input voltage DC550V/DC1000V, 1 PV input channel, 1 output channel, single MPPT inverter). Box body is made of PVC engineering materials, with test for fire retardant, temperature rise, anti impact, anti ultraviolet, and other testing. IP65 protection grade.

## TECHNICAL PARAMETERS

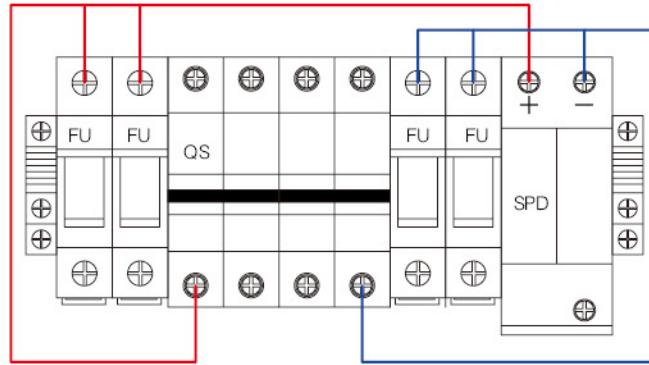
Name	SHLX-PV1/1	
	Electric parameter	
System maximum dc voltage	550	1000
Maximum input current for each string	15A	
Maximum input strings	1	
Maximum output switch current	16A/20A	
Number of inverter MPPT	1	
Number of Output strings	1	
	Lightning protection	
Category of test	II grade protection	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	2.8kV	3.8kV
Maximum continuous operating voltage U <sub>c</sub>	630V	1050V
Poles	2P	3P
Structure characteristic	Plug-push module	
	System	
Protection grade	IP65	
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)	
SMC4 Waterproof Connectors	Standard	
PV dc fuse	Standard	
PV surge protector	Standard	
Monitoring module	Optional	
Preventing diode	Optional	
Box material	PVC	
Installation method	Wall mounting type	
Operating Temperature	-25°C~ +55°C	
Elevation of temperature	2000M	
Permissible relative humidity	0-95% , no condensation	
	Mechanical parameter	
Width×High×Depth	300×260×140	

## SCHEMATIC DIAGRAM

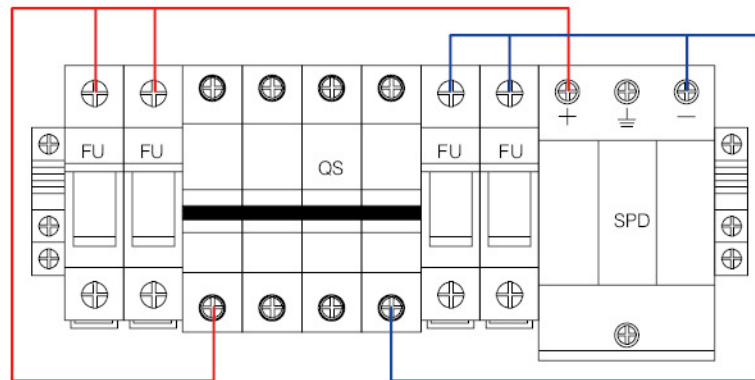


## SHLX-PV2/1 DC COMBINER BOX

- High reliability
  - With DC FUSE
  - With DC Surge Protection Device
  - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
  - IP65 design, waterproof, anti dust and anti ultraviolet.
  - Strict test for high and low temperature, used widely.
  - The simple installation, the simplified system wiring, the convenient wiring .
  - The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
  - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.



DC550V



DC1000V

### DESCRIPTION

SHLX-PV2/1 combiner box is suitable for inverter (MAX input voltage DC550V/DC1000V, 2 PV input channel, 1 output channel, single MPPT inverter). Box body is made of PVC engineering materials, with test for fire retardant, temperature rise, anti impact, anti ultraviolet, and other testing. IP65 protection grade.

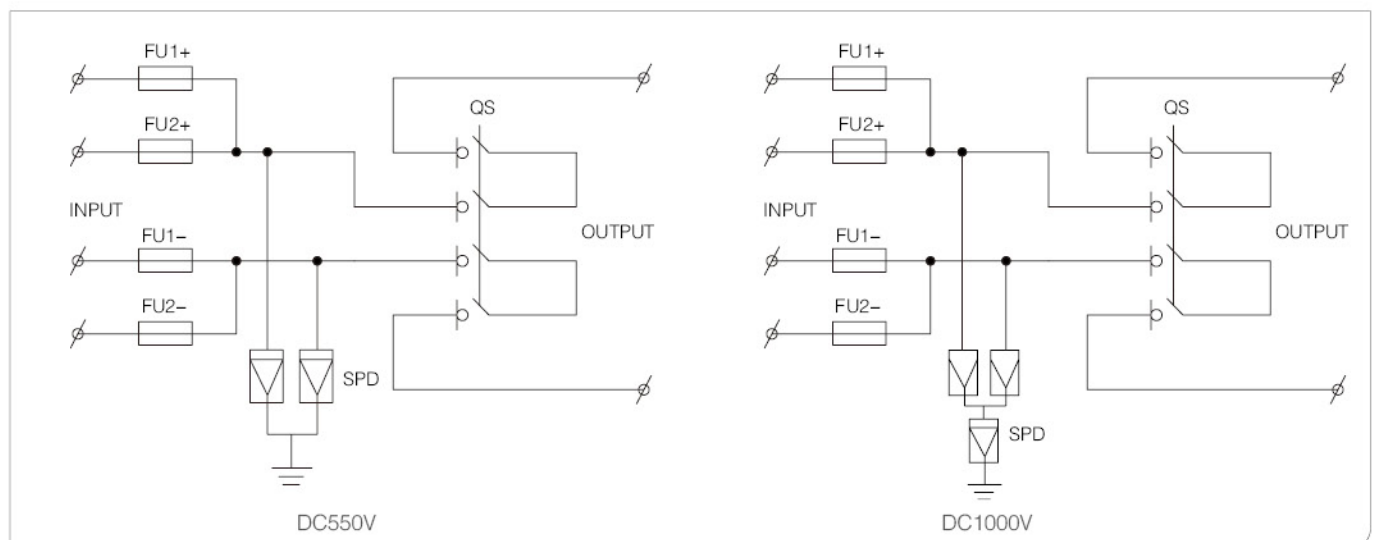
Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment " CGC/GF 037:2014.



## TECHNICAL PARAMETERS

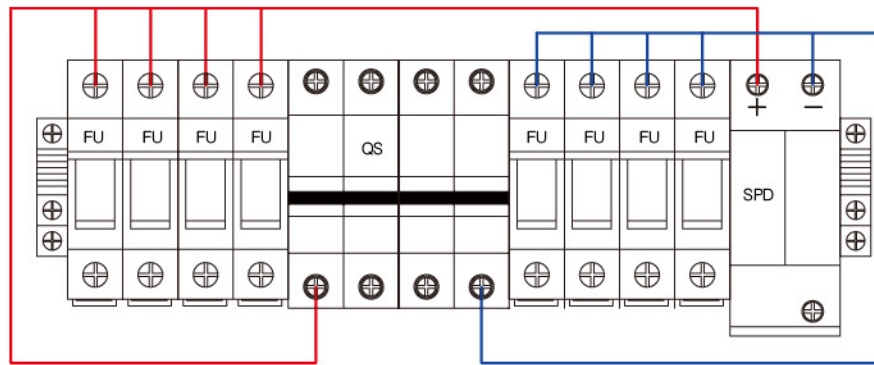
Name	SHLX-PV2/1	
	Electric parameter	
System maximum dc voltage	550	1000
Maximum input current for each string	15A	
Maximum input strings	1	
Maximum output switch current	20A/32A	
Number of inverter MPPT	1	
Number of Output strings	1	
	Lightning protection	
Category of test	II grade protection	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	2.8kV	3.8kV
Maximum continuous operating voltage U <sub>c</sub>	630V	1050V
Poles	2P	3P
Structure characteristic	Plug-push module	
	System	
Protection grade	IP65	
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)	
SMC4 Waterproof Connectors	Standard	
PV dc fuse	Standard	
PV surge protector	Standard	
Monitoring module	Optional	
Preventing diode	Optional	
Box material	PVC	
Installation method	Wall mounting type	
Operating Temperature	-25°C~ +55°C	
Elevation of temperature	2000M	
Permissible relative humidity	0-95% , no condensation	
	Mechanical parameter	
Width×High×Depth	300×260×140	

## SCHEMATIC DIAGRAM

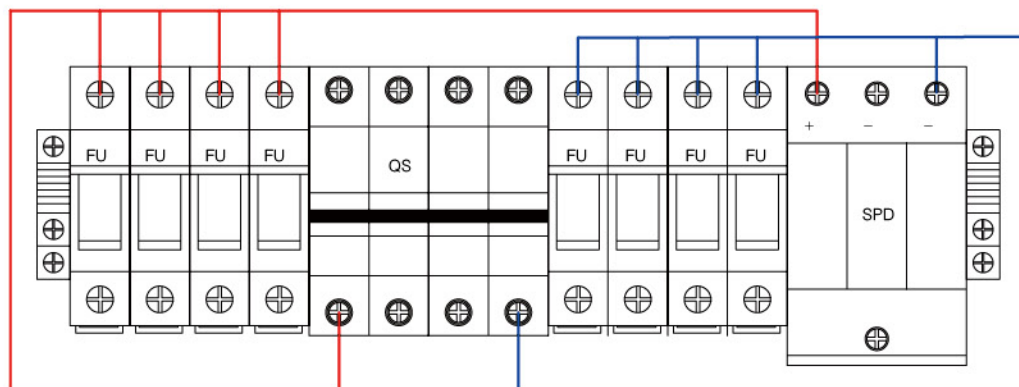


## SHLX-PV4/1 DC COMBINER BOX

- High reliability
  - With DC FUSE
  - With DC Surge Protection Device
  - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
  - IP65 design, waterproof, anti dust and anti ultraviolet.
  - Strict test for high and low temperature, used widely.
  - The simple installation, the simplified system wiring, the convenient wiring .
  - The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
  - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.



DC550V



DC1000V

### DESCRIPTION

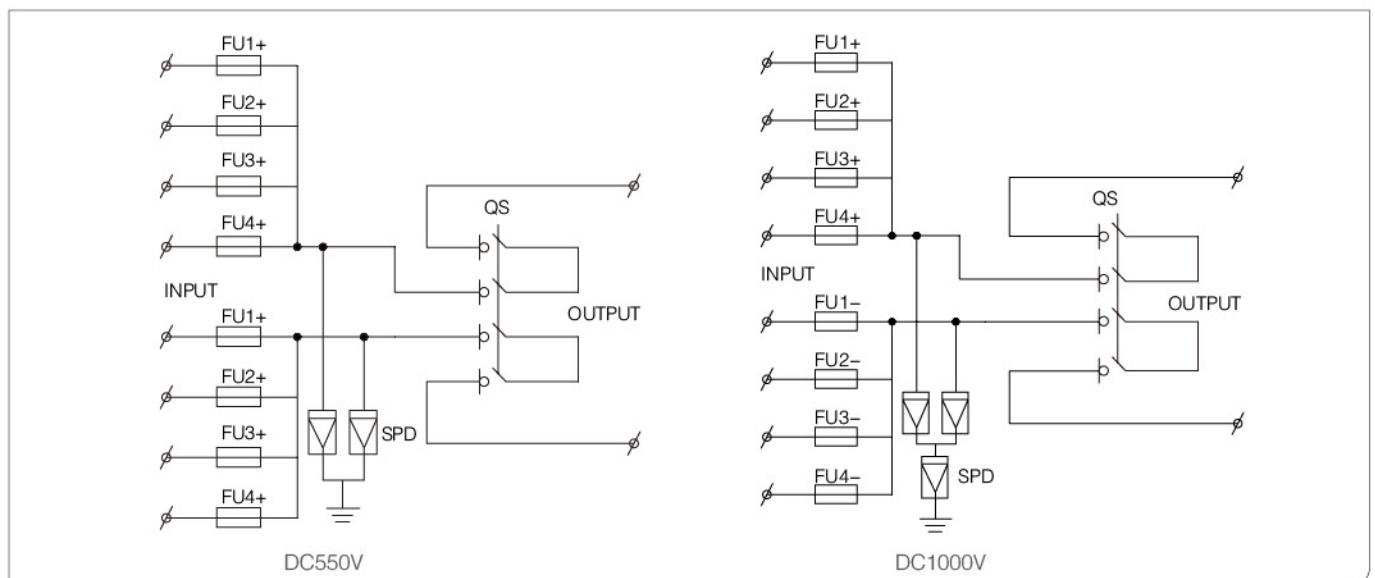
SHLX-PV4/1 combiner box is suitable for inverter (MAX input voltage DC550V/DC1000V, 4 PV input channel, 1 output channel, single MPPT inverter). Box body is made of PVC engineering materials, with test for fire retardant, temperature rise, anti impact, anti ultraviolet, and other testing. IP65 protection grade.

Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment " CGC/GF 037:2014.

## TECHNICAL PARAMETERS

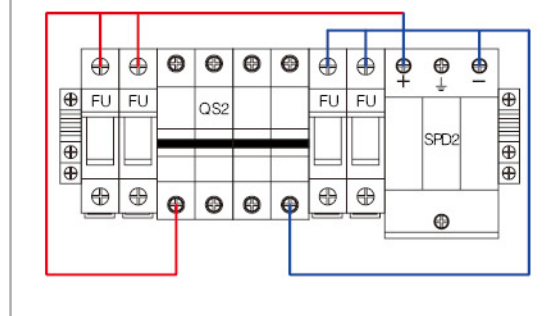
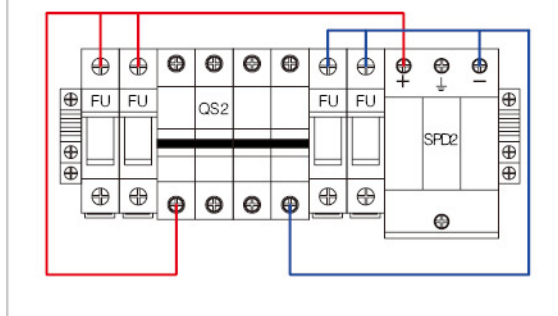
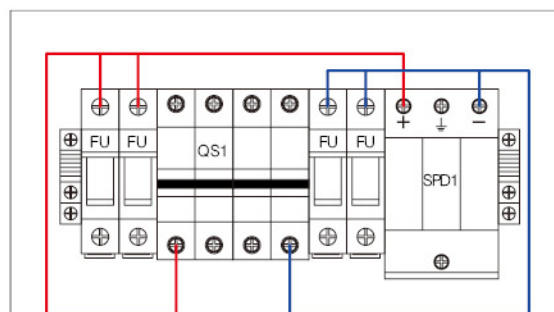
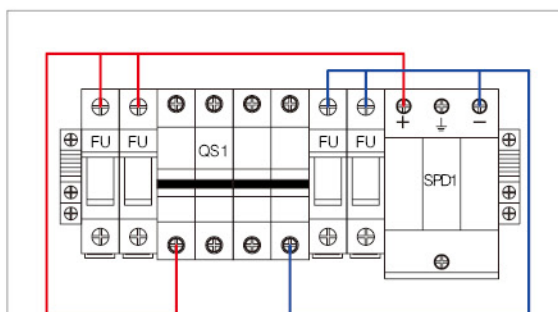
Name		SHLX-PV4/1	
Electric parameter			
System maximum dc voltage	550		1000
Maximum input current for each string		15A	
Maximum input strings		1	
Maximum output switch current		50A/63A	
Number of inverter MPPT		1	
Number of Output strings		1	
Lightning protection			
Category of test		II grade protection	
Nominal discharge current		20kA	
Maximum discharge current		40kA	
Voltage protection level	2.8kV		3.8kV
Maximum continuous operating voltage U <sub>c</sub>	630V		1050V
Poles	2P		3P
Structure characteristic		Plug-push module	
System			
Protection grade		IP65	
Output switch		DC isolation switch(standard)/DC circuit breaker(optional)	
SMC4 Waterproof Connectors		Standard	
PV dc fuse		Standard	
PV surge protector		Standard	
Monitoring module		Optional	
Preventing diode		Optional	
Box material		PVC	
Installation method		Wall mounting type	
Operating Temperature		-25°C~ +55°C	
Elevation of temperature		2000M	
Permissible relative humidity		0-95% , no condensation	
Mechanical parameter			
Width×High×Depth		410×285×140	

## SCHEMATIC DIAGRAM



## SHLX-PV4/2 DC COMBINER BOX

- High reliability
  - With DC FUSE
  - With DC Surge Protection Device
  - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
  - IP65 design, waterproof, anti dust and anti ultraviolet.
  - Strict test for high and low temperature, used widely.
  - The simple installation, the simplified system wiring, the convenient wiring .
  - The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
  - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.



DC550V

DC1000V

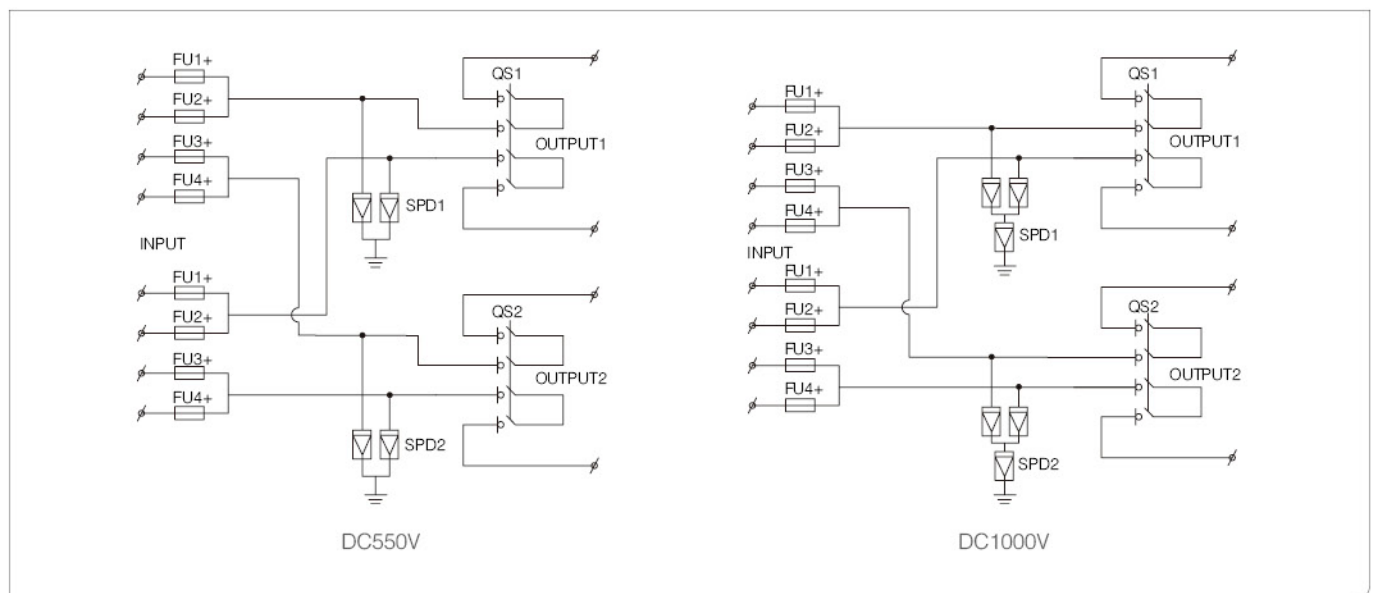
### DESCRIPTION

SHLX-PV4/2 combiner box is suitable for inverter (MAX input voltage DC550V/DC1000V, 4 PV input channel, 2 output channel, double MPPT inverter). Box body is made of PVC engineering materials, with test for fire retardant, temperature rise, anti impact, anti ultraviolet, and other testing. IP65 protection grade.

## TECHNICAL PARAMETERS

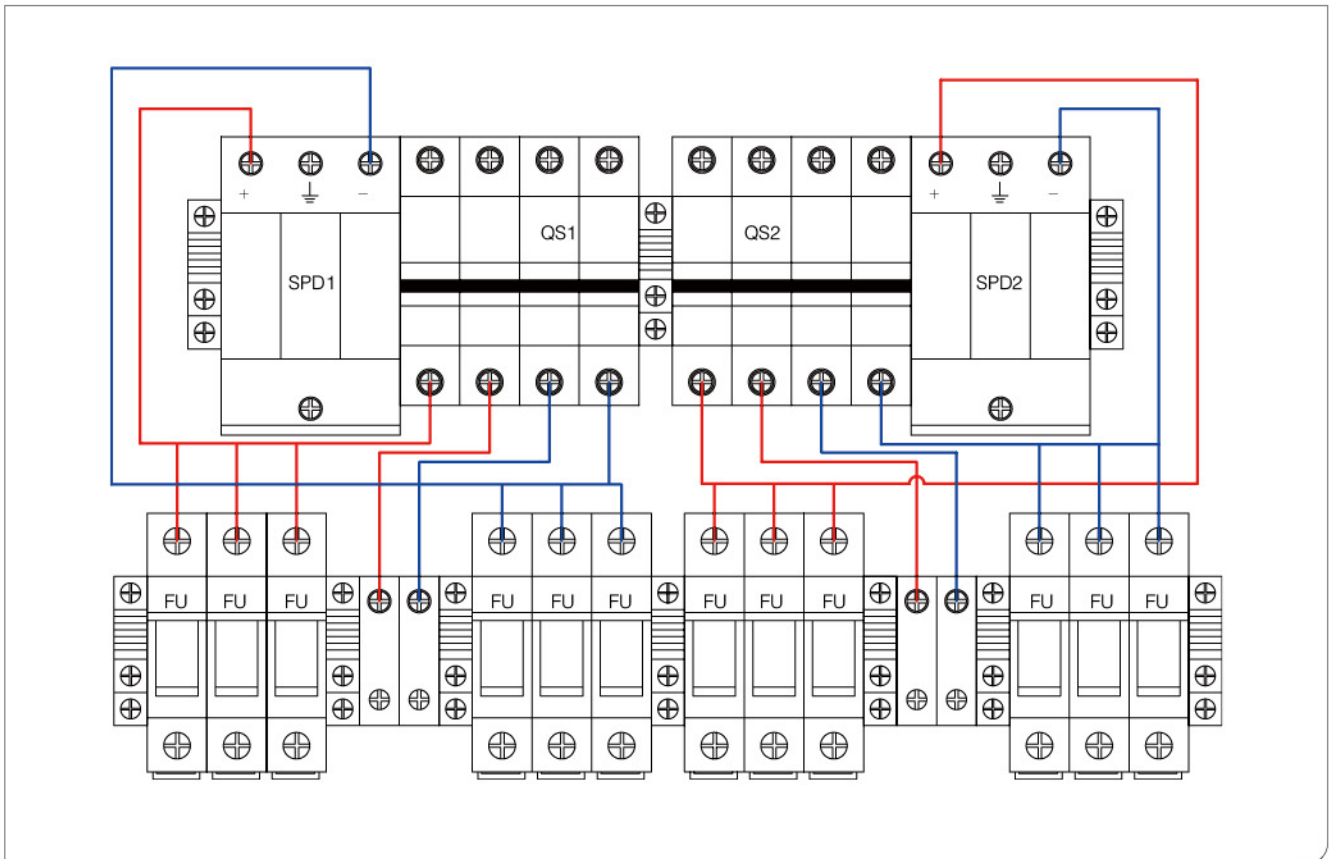
Name		SHLX-PV4/2	
Electric parameter			
System maximum dc voltage	550		1000
Maximum input current for each string		15A	
Maximum input strings		1	
Maximum output switch current		20A/32A	
Number of inverter MPPT		2	
Number of Output strings		2	
Lightning protection			
II grade protection			
Nominal discharge current		20kA	
Maximum discharge current		40kA	
Voltage protection level	2.8kV		3.8kV
Maximum continuous operating voltage Uc	630V		1050V
Poles	2P		3P
Plug-push module			
System			
Protection grade		IP65	
Output switch		DC isolation switch(standard)/DC circuit breaker(optional)	
SMC4 Waterproof Connectors		Standard	
PV dc fuse		Standard	
PV surge protector		Standard	
Monitoring module		Optional	
Preventing diode		Optional	
Box material		PVC	
Installation method		Wall mounting type	
Operating Temperature		-25°C ~ +55°C	
Elevation of temperature		2000M	
Permissible relative humidity		0-95% , no condensation	
Mechanical parameter			
Width×High×Depth		300×415×140	

## SCHEMATIC DIAGRAM



## SHLX-PV6/2 DC COMBINER BOX

- High reliability  
With DC FUSE  
With DC Surge Protection Device  
With DC circuit breaker or DC load isolation switch.
- Strong adaptability  
IP65 design, waterproof, anti dust and anti ultraviolet.  
Strict test for high and low temperature, used widely.  
The simple installation, the simplified system wiring, the convenient wiring .  
The box body is made of cold rolled steel and other metal materials.
- Flexible configuration  
Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.



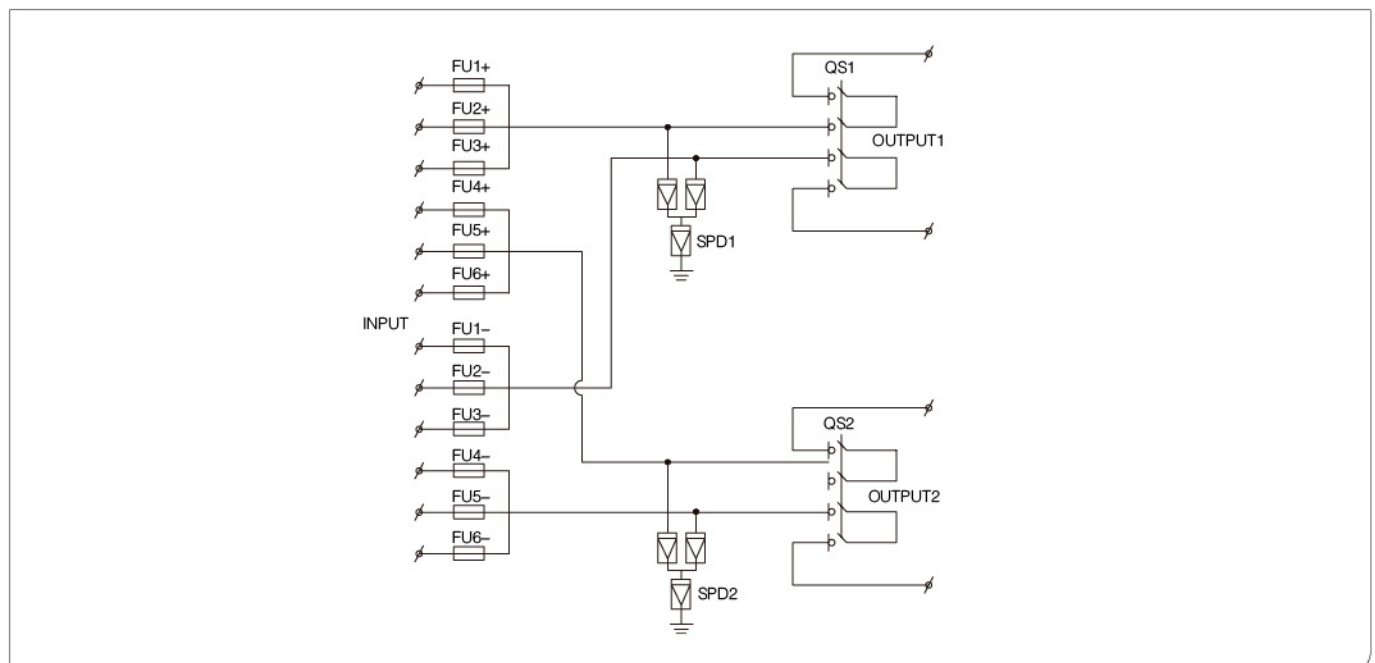
### DESCRIPTION

SHLX-PV6/2 combiner box is suitable for inverter (MAX input voltage DC1000V, 6 PV input channel, 2 output channel, double MPPT inverter). Box body is made of PVC engineering materials, with test for fire retardant, temperature rise, anti impact, anti ultraviolet, and other testing. IP65 protection grade.

## TECHNICAL PARAMETERS

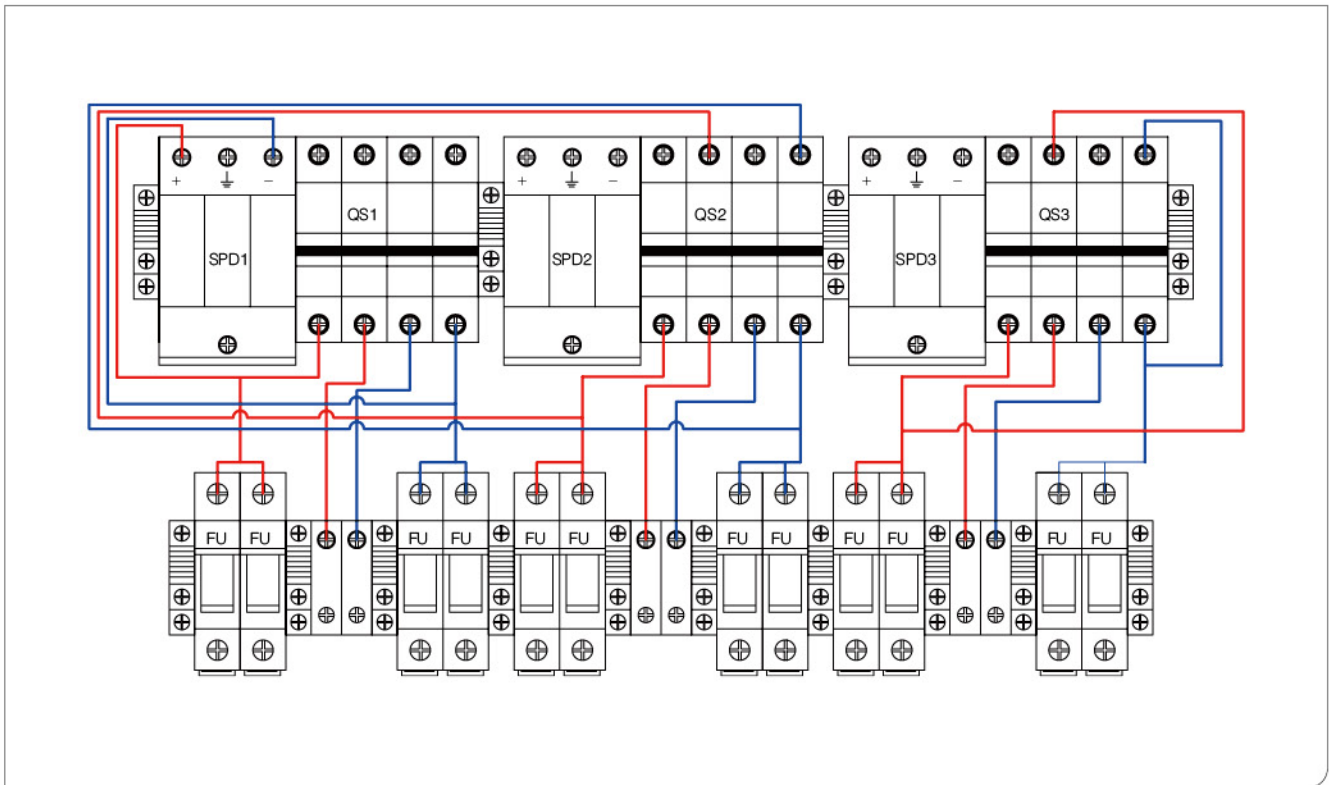
Name	SHLX-PV6/2
<b>Electric parameter</b>	
System maximum dc voltage	1000
Maximum input current for each string	15A
Maximum input strings	6
Maximum output switch current	32A/40A
Number of inverter MPPT	2
Number of Output strings	2
<b>Lightning protection</b>	
II grade protection	
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage U <sub>c</sub>	1050V
Poles	3P
<b>Plug-push module</b>	
<b>System</b>	
Protection grade	IP65
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)
SMC4 Waterproof Connectors	Standard
PV dc fuse	Standard
PV surge protector	Standard
Monitoring module	Optional
Preventing diode	Optional
Box material	PVC
Installation method	Wall mounting type
Operating Temperature	-25°C~ +55°C
Elevation of temperature	2000N
Permissible relative humidity	0~95% , no condensation
<b>Mechanical parameter</b>	
Width×High×Depth	400×300×160

## SCHEMATIC DIAGRAM



## SHLX-PV6/3 DC COMBINER BOX

- High reliability  
With DC FUSE  
With DC Surge Protection Device  
With DC circuit breaker or DC load isolation switch.
- Strong adaptability  
IP65 design, waterproof, anti dust and anti ultraviolet.  
Strict test for high and low temperature, used widely.  
The simple installation, the simplified system wiring, the convenient wiring .  
The box body is made of cold rolled steel and other metal materials.
- Flexible configuration  
Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.



### DESCRIPTION

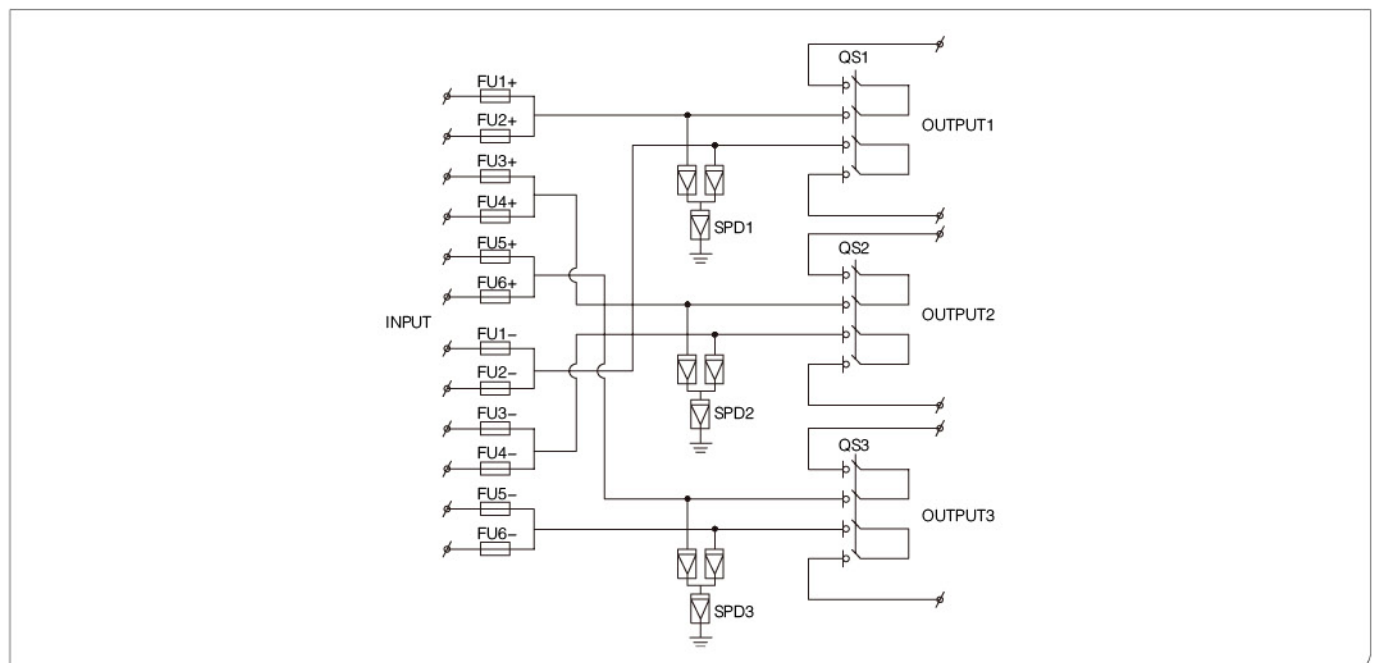
SHLX-PV6/3 combiner box is suitable for inverter (MAX input voltage DC1000V, 6 PV input channel, 3 output channel). Box body is made of PVC engineering materials, with test for fire retardant, temperature rise, anti impact, anti ultraviolet, and other testing. IP65 protection grade. Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment " CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.



## TECHNICAL PARAMETERS

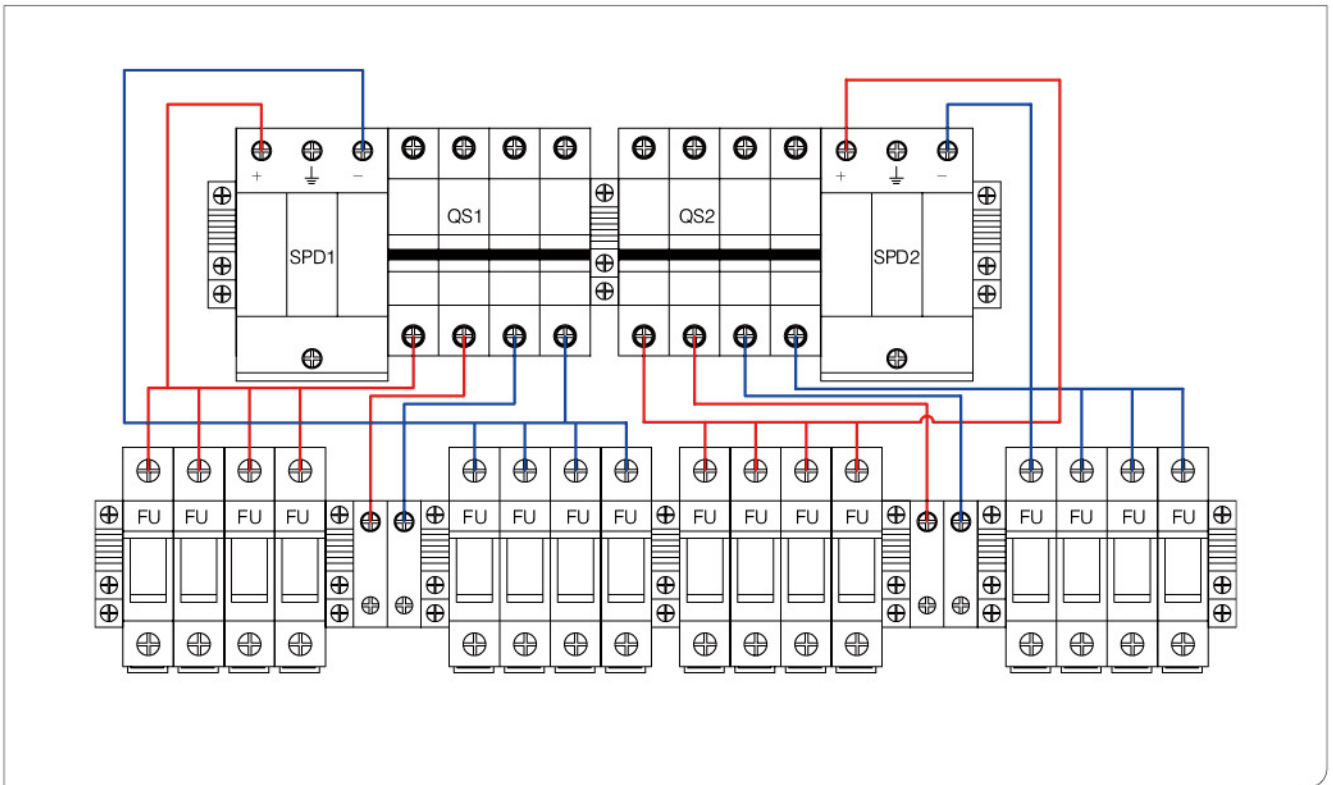
Name	SHLX-PV6/3
	Electric parameter
System maximum dc voltage	1000
Maximum input current for each string	15A
Maximum input strings	6
Maximum output switch current	20A/32A
Number of inverter MPPT	3
Number of Output strings	3
	Lightning protection
Category of test	II grade protection
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage U <sub>c</sub>	1050V
Poles	3P
Structure characteristic	Plug-push module
	System
Protection grade	IP65
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)
SMC4 Waterproof Connectors	Standard
PV dc fuse	Standard
PV surge protector	Standard
Monitoring module	Optional
Preventing diode	Optional
Box material	PVC
Installation method	Wall mounting type
Operating Temperature	-25°C~+55°C
Elevation of temperature	2000M
Permissible relative humidity	0~95% , no condensation
	Mechanical parameter
Width×High×Depth	500×400×190

## SCHEMATIC DIAGRAM



## SHLX-PV8/2 DC COMBINER BOX

- High reliability
  - With DC FUSE
  - With DC Surge Protection Device
  - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
  - IP65 design, waterproof, anti dust and anti ultraviolet.
  - Strict test for high and low temperature, used widely.
  - The simple installation, the simplified system wiring, the convenient wiring .
  - The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
  - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.



### DESCRIPTION

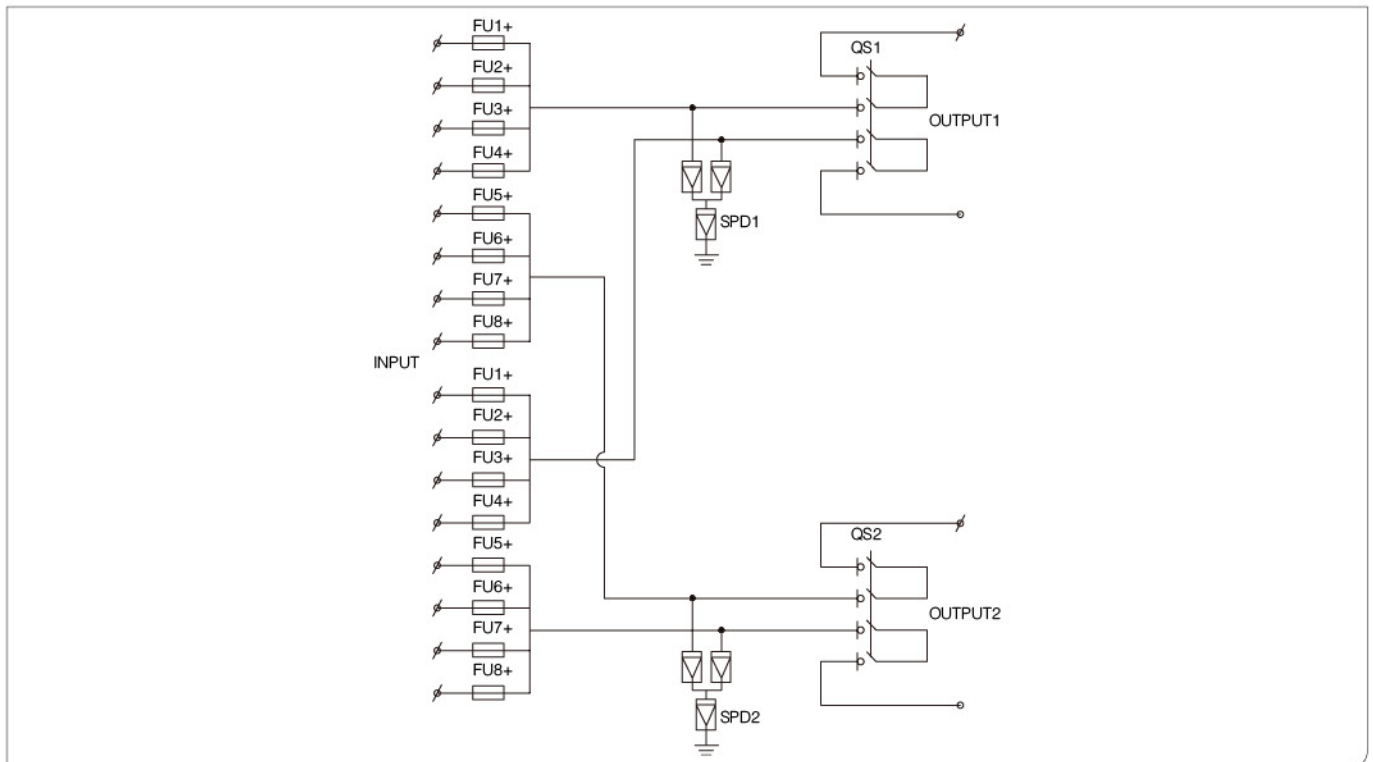
SHLX-PV8/2 combiner box is suitable for inverter (MAX input voltage DC1000V, 8 PV input channel, 2 output channel, double MPPT inverter). Box body is made of PVC engineering materials, with test for fire retardant, temperature rise, anti impact, anti ultraviolet, and other testing. IP65 protection grade.

Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment " CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.

## TECHNICAL PARAMETERS

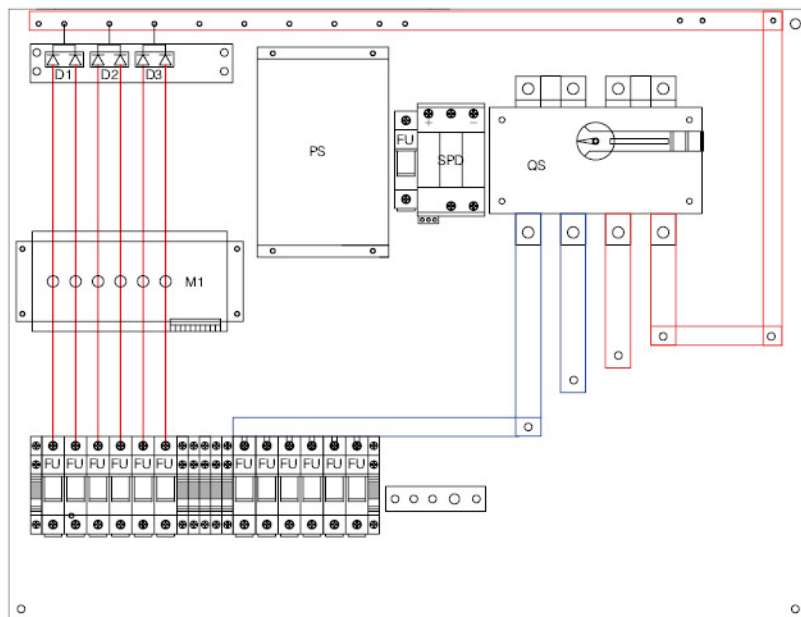
Name	SHLX-PV8/2
<b>Electric parameter</b>	
System maximum dc voltage	1000
Maximum input current for each string	15A
Maximum input strings	6
Maximum output switch current	20A/32A
Number of inverter MPPT	2
Number of Output strings	2
<b>Lightning protection</b>	
Category of test	II grade protection
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage U <sub>c</sub>	1050V
Poles	3P
Structure characteristic	Plug-push module
<b>System</b>	
Protection grade	IP65
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)
SMC4 Waterproof Connectors	Standard
PV dc fuse	Standard
PV surge protector	Standard
Monitoring module	Optional
Preventing diode	Optional
Box material	PVC
Installation method	Wall mounting type
Operating Temperature	-25°C~+55°C
Elevation of temperature	2000M
Permissible relative humidity	0~95% , no condensation
<b>Mechanical parameter</b>	
Width×High×Depth	500×400×190

## SCHEMATIC DIAGRAM



## SHLX-PV6/1 DC COMBINER BOX

- High reliability
  - With DC FUSE
  - With DC Surge Protection Device
  - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
  - IP65 design, waterproof, anti dust and anti ultraviolet.
  - Strict test for high and low temperature, used widely.
  - The simple installation, the simplified system wiring, the convenient wiring .
  - The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
  - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.



### DESCRIPTION

SHLX-PV6/1 PV combiner box bus synthetic DC input of 6 PV components to 1 output. Each channel is with a fuse. Output side is equipped with lightning protection and circuit breaker. It greatly simplify input wiring of DC power distribution cabinet and inverter. Realize lightning protection, short circuit protection and grounding protection. PV combiner box divided into two types: intelligent box and non-intelligent box. Intelligent PV combiner box is equipped with monitoring unit, then detect input current of each string, detect inside temperature, detect lightning protection status, detect circuit breaker status and summarize output voltage and so on.

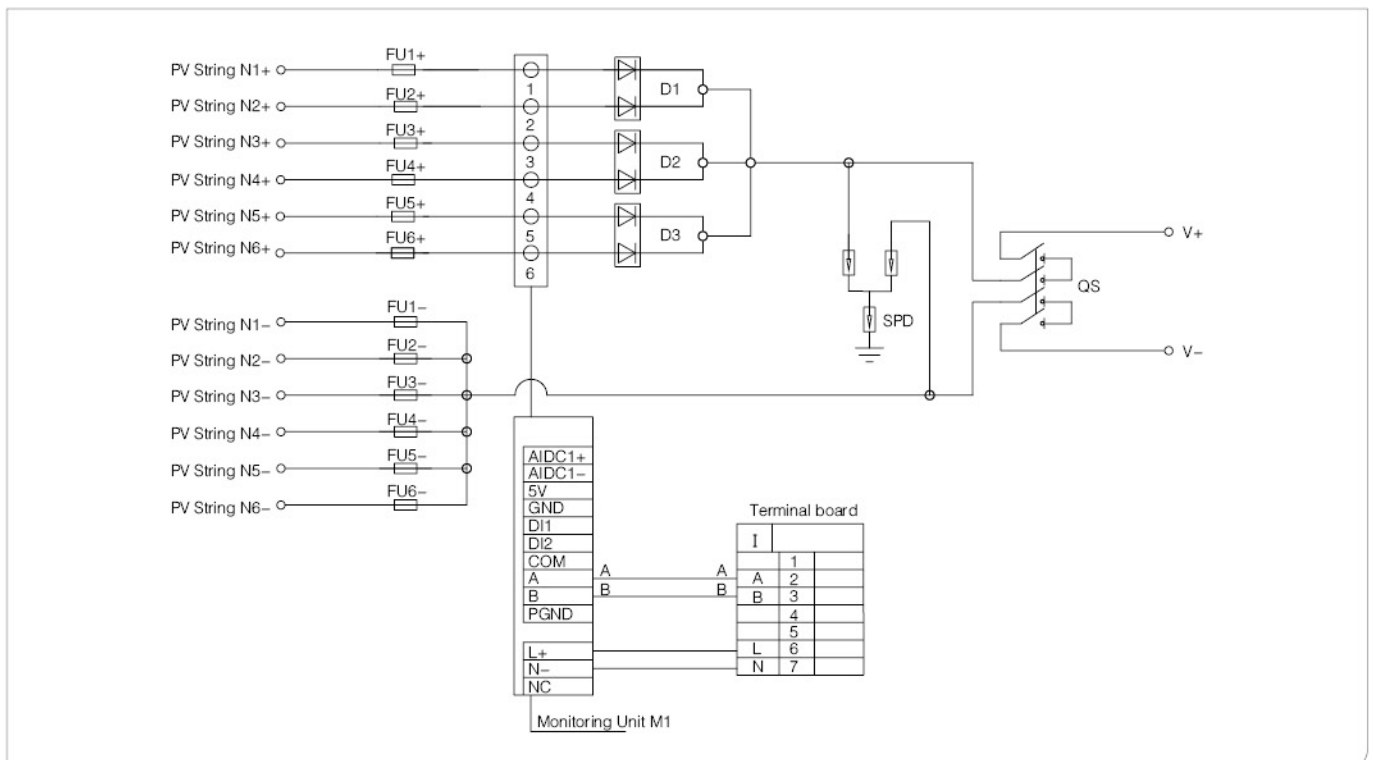
Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment " CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.

The product adopts outdoor wall mounted type, which adapt to the harsh environment. In addition to the core components, the other can be customized by user requirements.

## TECHNICAL PARAMETERS

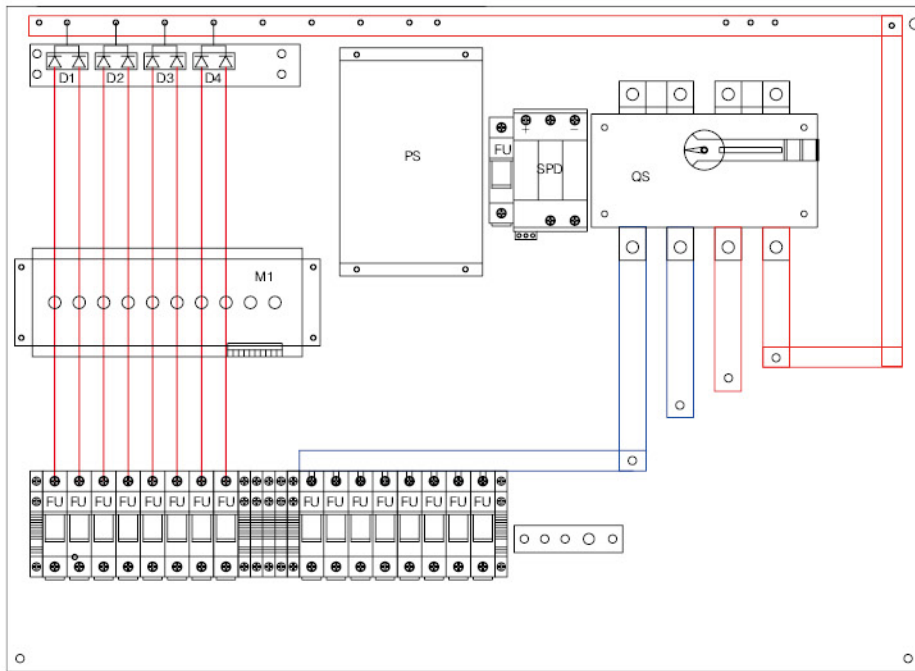
Name	SHLX-PV6/1
	Electric parameter
System maximum dc voltage	1000
Maximum input current for each string	15A
Maximum input strings	6
Maximum output switch current	20A/32A
Number of inverter MPPT	N
Number of Output strings	1
	Lightning protection
Category of test	II grade protection
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage U <sub>c</sub>	1050V
Poles	3P
Structure characteristic	Plug-push module
	System
Protection grade	IP65
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)
SMC4 Waterproof Connectors	Standard
PV dc fuse	Standard
PV surge protector	Standard
Monitoring module	Optional
Preventing diode	Optional
Box material	Metal
Installation method	Wall mounting type
Operating Temperature	-25°C~+55°C
Elevation of temperature	2000米
Permissible relative humidity	0~95% , no condensation

## SCHEMATIC DIAGRAM



## SHLX-PV8/1 DC COMBINER BOX

- High reliability
  - With DC FUSE
  - With DC Surge Protection Device
  - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
  - IP65 design, waterproof, anti dust and anti ultraviolet.
  - Strict test for high and low temperature, used widely.
  - The simple installation, the simplified system wiring, the convenient wiring .
  - The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
  - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.



### DESCRIPTION

SHLX-PV8/1 PV combiner box bus synthetic DC input of 8 PV components to 1 output. Each channel is with a fuse. Output side is equipped with lightning protection and circuit breaker. It greatly simplify input wiring of DC power distribution cabinet and inverter. Realize lightning protection, short circuit protection and grounding protection. PV combiner box divided into two types: intelligent box and non-intelligent box. Intelligent PV combiner box is equipped with monitoring unit, then detect input current of each string, detect inside temperature, detect lightning protection status, detect circuit breaker status and summarize output voltage and so on.

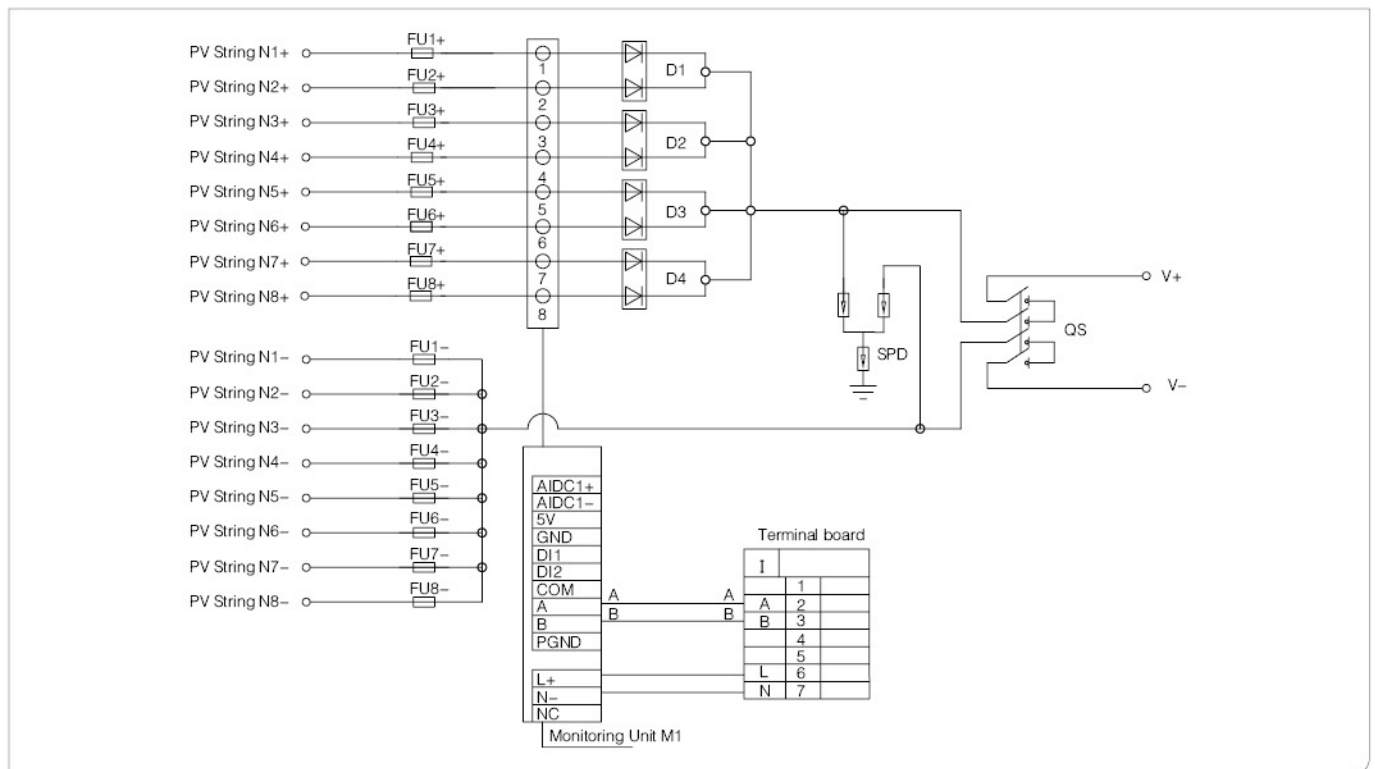
Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment " CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.

The product adopts outdoor wall mounted type, which adapt to the harsh environment. In addition to the core components, the other can be customized by user requirements.

## TECHNICAL PARAMETERS

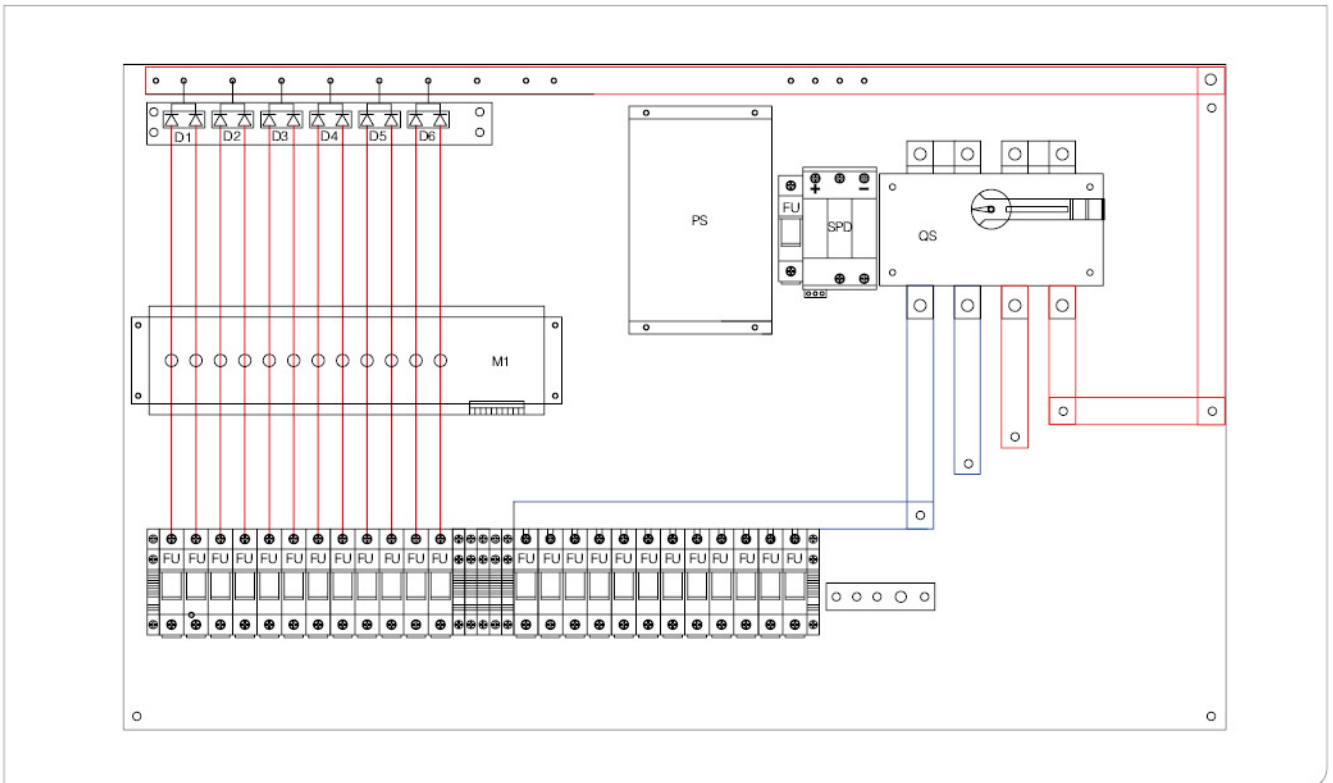
Name	SHLX-PV8/1
	Electric parameter
System maximum dc voltage	1000
Maximum input current for each string	15A
Maximum input strings	6
Maximum output switch current	125A
Number of inverter MPPT	N
Number of Output strings	1
	Lightning protection
Category of test	II grade protection
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage U <sub>c</sub>	1050V
Poles	3P
Structure characteristic	Plug-push module
	System
Protection grade	IP65
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)
SMC4 Waterproof Connectors	Standard
PV dc fuse	Standard
PV surge protector	Standard
Monitoring module	Optional
Preventing diode	Optional
Box material	Metal
Installation method	Wall mounting type
Operating Temperature	-25°C~+55°C
Elevation of temperature	2000米
Permissible relative humidity	0~95% , no condensation

## SCHEMATIC DIAGRAM



## SHLX-PV12/1 DC COMBINER BOX

- High reliability
  - With DC FUSE
  - With DC Surge Protection Device
  - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
  - IP65 design, waterproof, anti dust and anti ultraviolet.
  - Strict test for high and low temperature, used widely.
  - The simple installation, the simplified system wiring, the convenient wiring .
  - The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
  - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.



### DESCRIPTION

SHLX-PV12/1 PV combiner box bus synthetic DC input of 12 PV components to 1 output. Each channel is with a fuse. Output side is equipped with lightning protection and circuit breaker. It greatly simplify input wiring of DC power distribution cabinet and inverter. Realize lightning protection, short circuit protection and grounding protection. PV combiner box divided into two types: intelligent box and non-intelligent box. Intelligent PV combiner box is equipped with monitoring unit, then detect input current of each string, detect inside temperature, detect lightning protection status, detect circuit breaker status and summarize output voltage and so on.

Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment " CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.

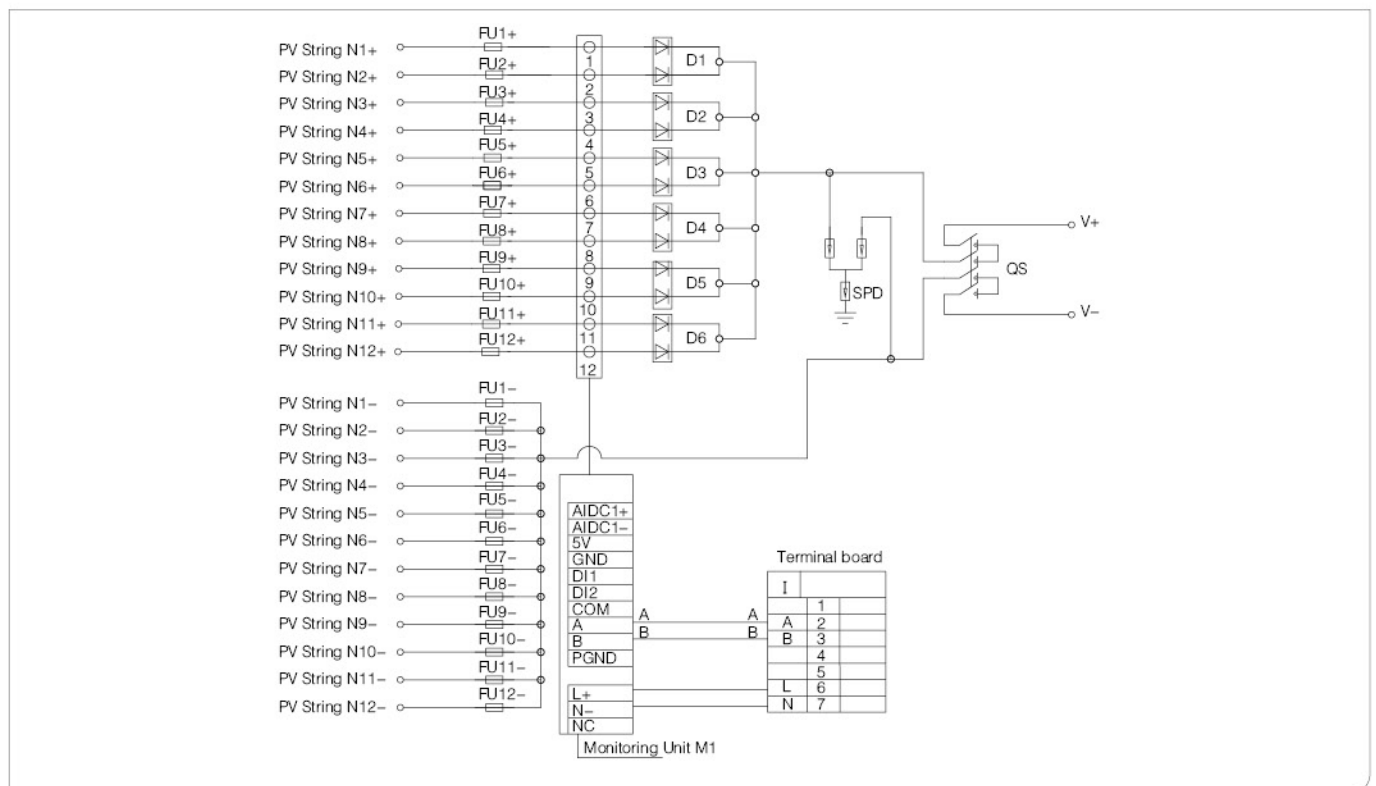
The product adopts outdoor wall mounted type, which adapt to the harsh environment. In addition to the core components, the other can be customized by user requirements.



## TECHNICAL PARAMETERS

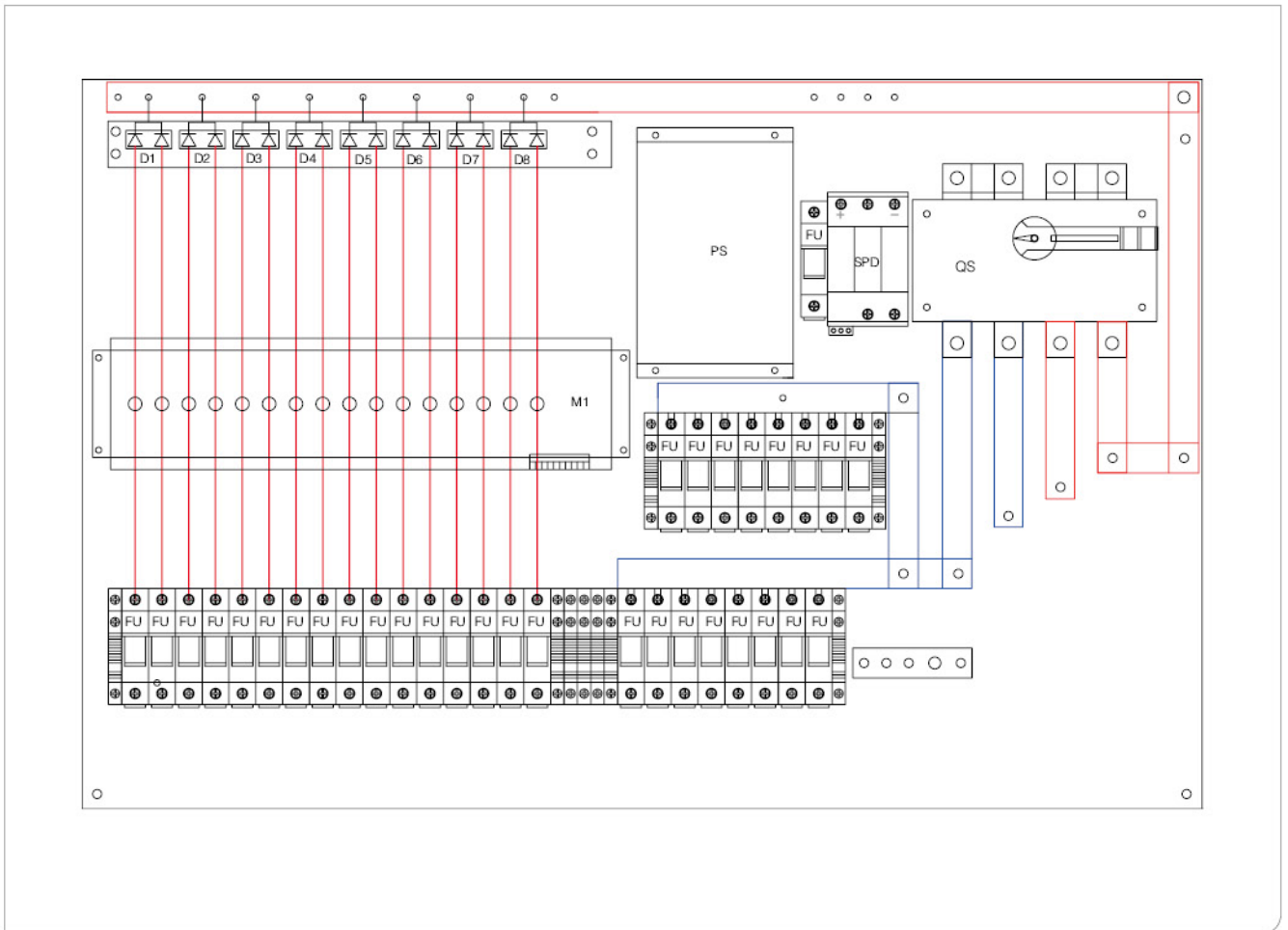
Name	SHLX-PV12/1
<b>Electric parameter</b>	
System maximum dc voltage	1000
Maximum input current for each string	15A
Maximum input strings	12
Maximum output switch current	160A
Number of inverter MPPT	N
Number of Output strings	1
<b>Lightning protection</b>	
Category of test	II grade protection
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage Uc	1050V
Poles	3P
Structure characteristic	Plug-push module
<b>System</b>	
Protection grade	IP65
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)
SMC4 Waterproof Connectors	Standard
PV dc fuse	Standard
PV surge protector	Standard
Monitoring module	Optional
Preventing diode	Optional
Box material	Metal
Installation method	Wall mounting type
Operating Temperature	-25°C~+55°C
Elevation of temperature	2000米
Permissible relative humidity	0~95% , no condensation

## SCHEMATIC DIAGRAM



## SHLX-PV16/1 DC COMBINER BOX

- High reliability  
With DC FUSE  
With DC Surge Protection Device  
With DC circuit breaker or DC load isolation switch.
- Strong adaptability  
IP65 design, waterproof, anti dust and anti ultraviolet.  
Strict test for high and low temperature, used widely.  
The simple installation, the simplified system wiring, the convenient wiring .  
The box body is made of cold rolled steel and other metal materials.
- Flexible configuration  
Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.



## DESCRIPTION

SHLX-PV16/1 PV combiner box bus synthetic DC input of 16 PV components to 1 output. Each channel is with a fuse. Output side is equipped with lightning protection and circuit breaker. It greatly simplify input wiring of DC power distribution cabinet and inverter. Realize lightning protection, short circuit protection and grounding protection. PV combiner box divided into two types: intelligent box and non-intelligent box. Intelligent PV combiner box is equipped with monitoring unit, then detect input current of each string, detect inside temperature, detect lightning protection status, detect circuit breaker status and summarize output voltage and so on.

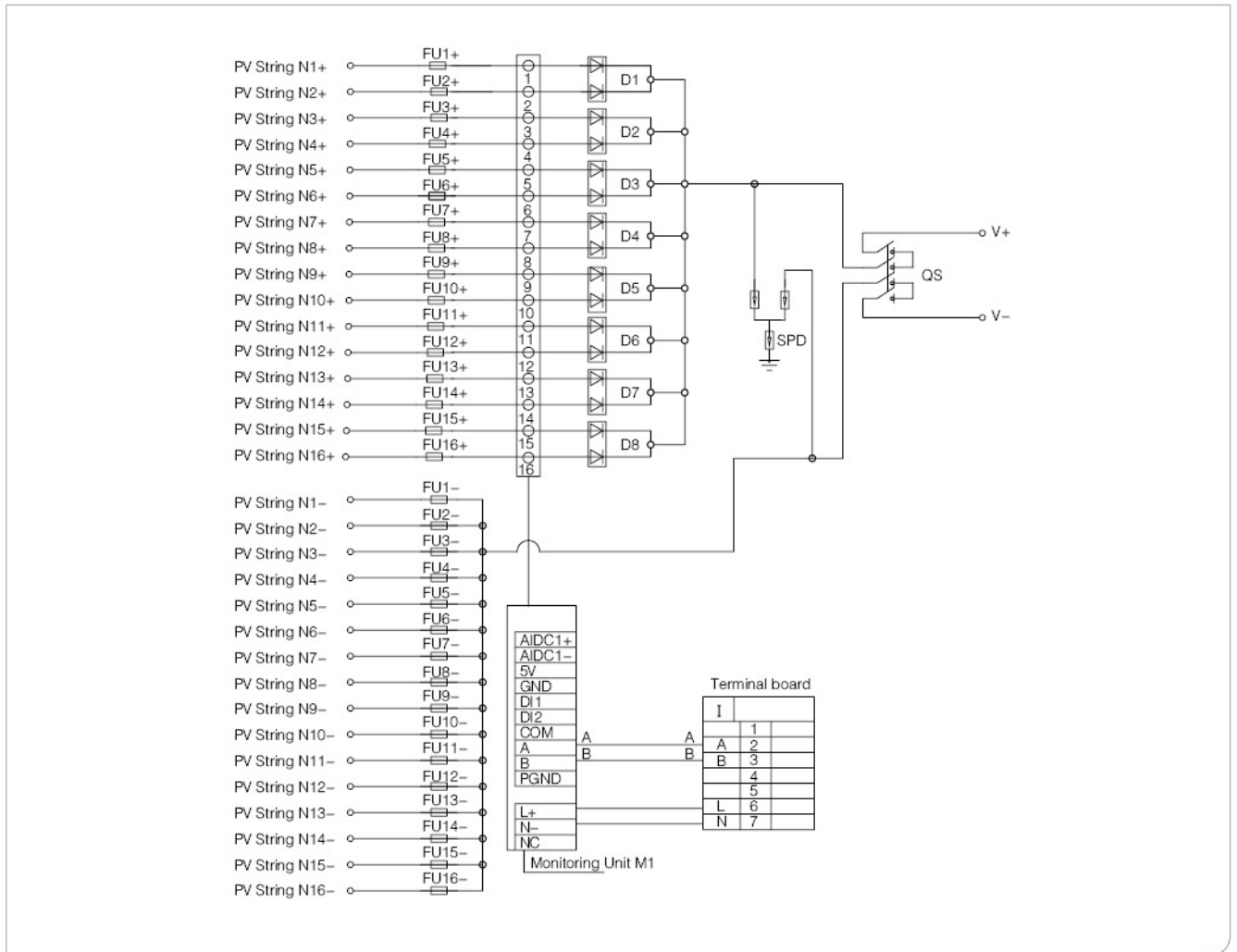
Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment " CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.

The product adopts outdoor wall mounted type, which adapt to the harsh environment. In addition to the core components, the other can be customized by user requirements.

## TECHNICAL PARAMETERS

Name	SHLX-PV16/1
Electric parameter	
System maximum dc voltage	1000
Maximum input current for each string	15A
Maximum input strings	16
Maximum output switch current	200A
Number of inverter MPPT	N
Number of Output strings	1
Lightning protection	
Category of test	II grade protection
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage Uc	1050V
Poles	3P
Structure characteristic	Plug-push module
System	
Protection grade	IP65
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)
SMC4 Waterproof Connectors	Standard
PV dc fuse	Standard
PV surge protector	Standard
Monitoring module	Optional
Preventing diode	Optional
Box material	Metal
Installation method	Wall mounting type
Operating Temperature	-25°C~+55°C
Elevation of temperature	2000米
Permissible relative humidity	0~95% , no condensation

## SCHEMATIC DIAGRAM

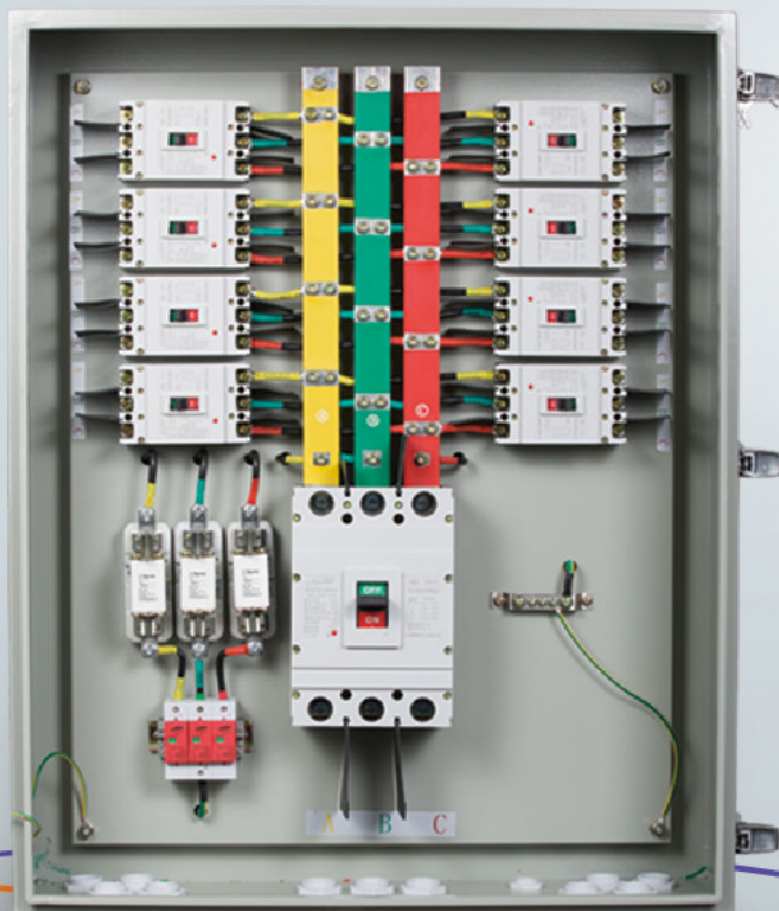




### AC COMBINER BOX TYPE

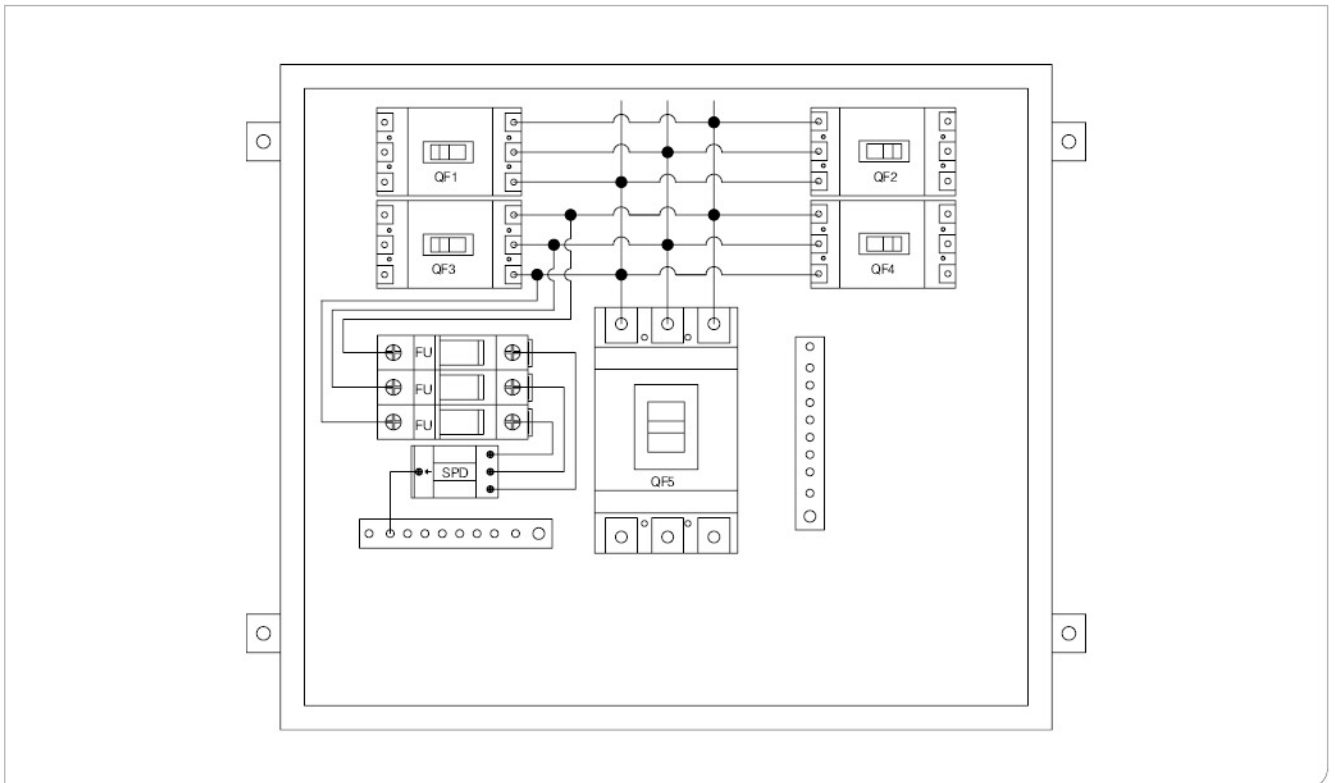


- ① Suntime electric
- ② Product model (combiner box)
- ③ PV AC
- ④ Input channel (4/6/8)
- ⑤ Output channel
- ⑥ AC400V/AC480V/AC690V



## SHLX-AC4/1 AC COMBINER BOX

- High reliability
  - With AC Surge Protection Device
  - With DC circuit breaker, rated voltage AC690V
- Strong adaptability
  - IP65 design, waterproof, anti dust and anti ultraviolet.
  - Strict test for high and low temperature, used widely.
  - The simple installation, the simplified system wiring, the convenient wiring .
  - The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
  - Used for AC output of 1-50kw inverter. Current rating of the photovoltaic fuse, circuit breaker is modified.



### DESCRIPTION

SHLX-AC4/1 AC PV combiner box is applicable to the PV group on power system. It is an important part to undertake series inverter and AC power distribution cabinet or a step-up transformer and access up to four sets of photovoltaic group on inverter. Into line with the input of circuit breaker and output line with circuit breaker or the load isolating switch. Bus bar with two levels of lightning protection. Highest rated system voltage is AC690V. IP65 Protection class same as inverter. Installed outdoor. With waterproof, dustproof, anti UV, anti salt spray corrosion etc. function.

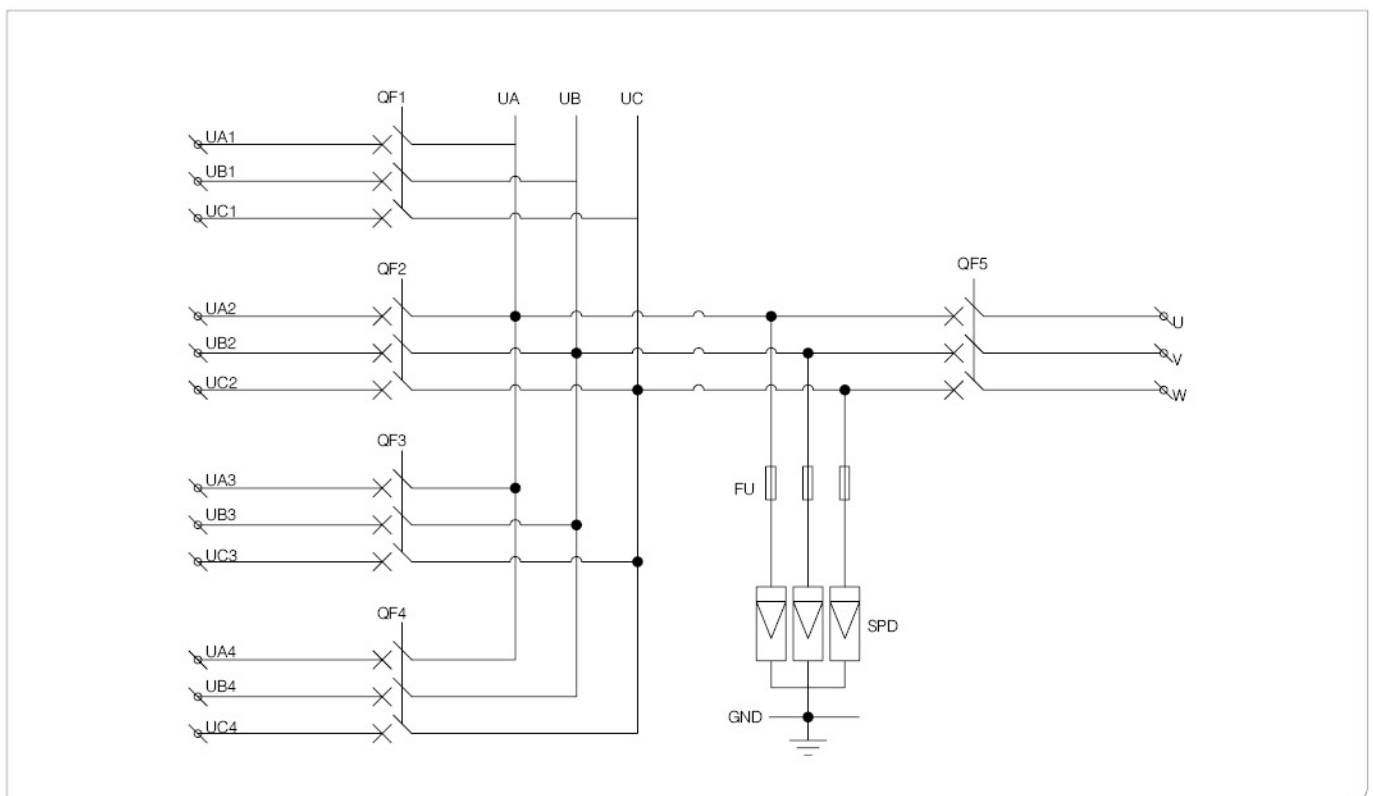
The combiner box greatly simplifies the connection between series inverter and AC power distribution cabinet or boost transformer. Simple and clear internal structure make reasonable wiring.

High reliability and simple maintenance. Outdoor wall mounted can adapt to the harsh environment. In addition to the material and size, it

## TECHNICAL PARAMETERS

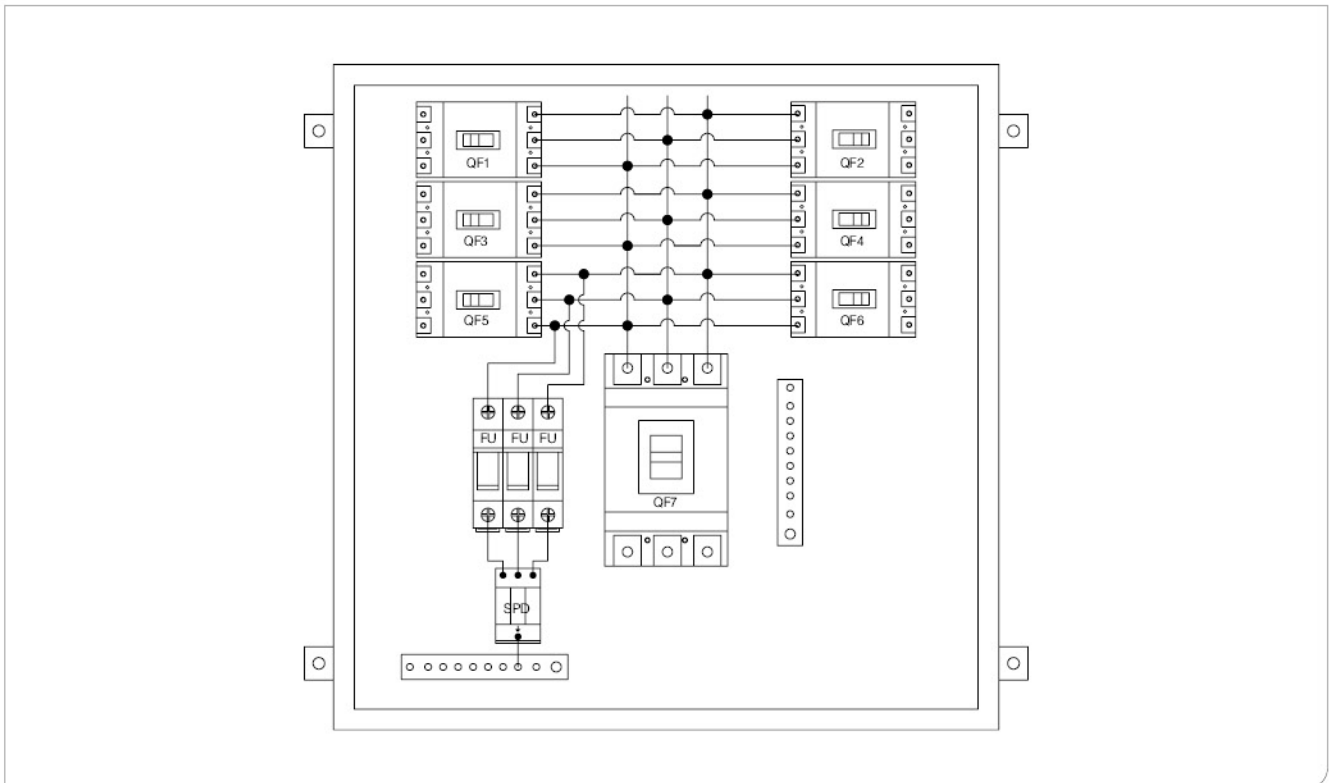
Product model	SHLX-AC4/1
Number of input strings	4
maximum input voltage	AC690
Input current for each string	0~100A
maximum input current	250A
Rated working voltage Un	480VAC
voltage protection level	≤3.2KV
Nominal discharge current(8/20us)	20KA(customizable)
Maximum discharge current I <sub>max</sub> (8/20us)	40KA(customizable)
Response time	<25ns
Temperature and humidity	Working temperature : - 40~ + 85.humidity 95% , no condensation , No corrosive gas
Elevation	≤4000m
Input and output switch	Circuit breaker
surge protector	Standard
Box material	Galvanized steel/stainless steel/cold rolled steel sheet/plastics
Enclosure protection grade	IP65
Cable grade protection grade	IP65
Volume ( Width*High*Depth)	800mm*600mm*200mm

## SCHEMATIC DIAGRAM



## SHLX-AC6/1 AC COMBINER BOX

- High reliability
  - With AC Surge Protection Device
  - With DC circuit breaker, rated voltage AC690V
- Strong adaptability
  - IP65 design, waterproof, anti dust and anti ultraviolet.
  - Strict test for high and low temperature, used widely.
  - The simple installation, the simplified system wiring, the convenient wiring .
  - The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
  - Used for AC output of 1-50kw inverter. Current rating of the photovoltaic fuse, circuit breaker is modified.



### DESCRIPTION

HLX-AC6/1 AC PV combiner box is applicable to the PV group on power system. It is an important part to undertake series inverter and AC power distribution cabinet or a step-up transformer and access up to four sets of photovoltaic group on inverter. Into line with the input of circuit breaker and output line with circuit breaker or the load isolating switch. Bus bar with two levels of lightning protection. Highest rated system voltage is AC690V. IP65 Protection class same as inverter. Installed outdoor. With waterproof, dustproof, anti UV, anti salt spray corrosion etc. function.

The combiner box greatly simplifies the connection between series inverter and AC power distribution cabinet or boost transformer. Simple and clear internal structure make reasonable wiring.

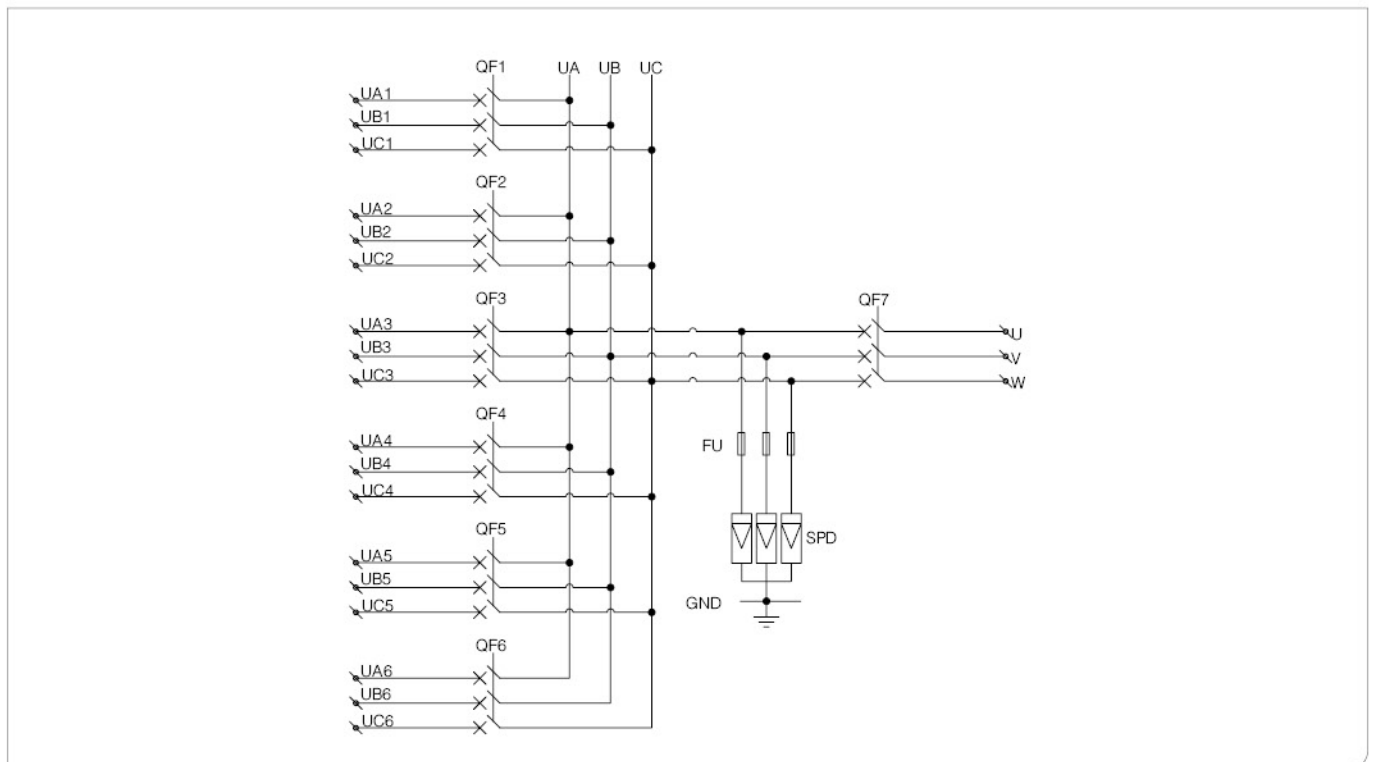
High reliability and simple maintenance. Outdoor wall mounted can adapt to the harsh environment. In addition to the material and size, it



## TECHNICAL PARAMETERS

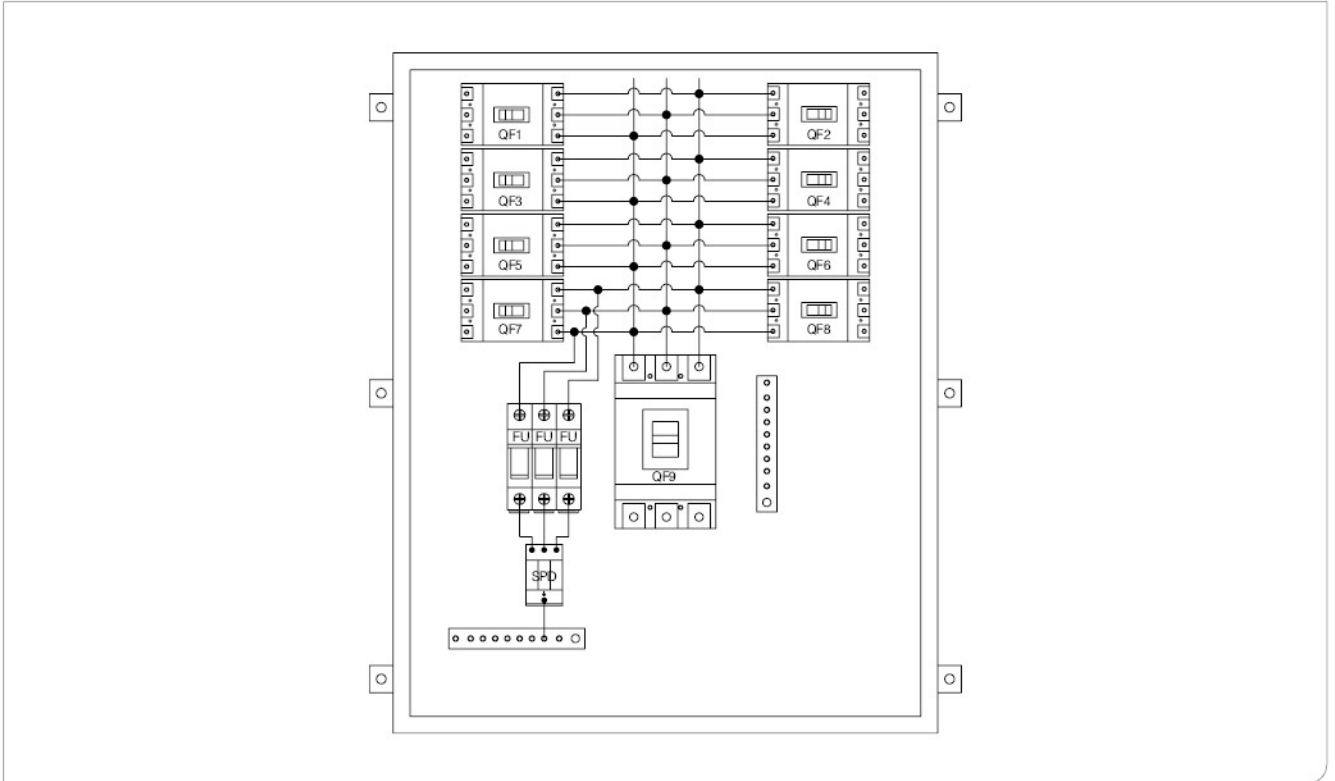
Product model	SHLX-AC6/1
Number of input strings	6
maximum input voltage	AC690
Input current for each string	0~100A
maximum input current	400A
Rated working voltage Un	480VAC
voltage protection level	≤3.2KV
Nominal discharge current(8/20us)	20KA(customizable)
Maximum discharge current I <sub>max</sub> (8/20us)	40KA(customizable)
Response time	<25ns
Temperature and humidity	Working temperature : - 40~ + 85.humidity 95% , no condensation , No corrosive gas
Elevation	≤4000m
Input and output switch	Circuit breaker
surge protector	Standard
Box material	Galvanized steel/stainless steel/cold rolled steel sheet/plastics
Enclosure protection grade	IP65
Cable grade protection grade	IP65
Volume ( Width*High*Depth)	800*800*200mm

## SCHEMATIC DIAGRAM



## SHLX-AC8/1 AC COMBINER BOX

- High reliability
  - With AC Surge Protection Device
  - With DC circuit breaker, rated voltage AC690V
- Strong adaptability
  - IP65 design, waterproof, anti dust and anti ultraviolet.
  - Strict test for high and low temperature, used widely.
  - The simple installation, the simplified system wiring, the convenient wiring .
  - The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
  - Used for AC output of 1-50kw inverter. Current rating of the photovoltaic fuse, circuit breaker is modified.



### DESCRIPTION

SHLX-AC8/1 AC PV combiner box is applicable to the PV group on power system. It is an important part to undertake series inverter and AC power distribution cabinet or a step-up transformer and access up to four sets of photovoltaic group on inverter. Into line with the input of circuit breaker and output line with circuit breaker or the load isolating switch. Bus bar with two levels of lightning protection. Highest rated system voltage is AC690V. IP65 Protection class same as inverter. Installed outdoor. With waterproof, dustproof, anti UV, anti salt spray corrosion etc. function.

The combiner box greatly simplifies the connection between series inverter and AC power distribution cabinet or boost transformer. Simple and clear internal structure make reasonable wiring.

High reliability and simple maintenance. Outdoor wall mounted can adapt to the harsh environment. In addition to the material and size, it can be customized according to user requirements.

## TECHNICAL PARAMETERS

Product model	SHLX-AC8/1
Number of input strings	8
maximum input voltage	AC690
Input current for each string	0~100A
maximum input current	630A
Rated working voltage Un	480VAC
voltage protection level	≤3.2KV
Nominal discharge current(8/20us)	20KA(customizable)
Maximum discharge current I <sub>max</sub> (8/20us)	40KA(customizable)
Response time	<25ns
Temperature and humidity	Working temperature : - 40~ + 85.humidity 95% , no condensation , No corrosive gas
Elevation	≤4000m
Input and output switch	Circuit breaker
surge protector	Standard
Box material	Galvanized steel/stainless steel/cold rolled steel sheet/plastics
Enclosure protection grade	IP65
Cable grade protection grade	IP66
Volume ( Width*High*Depth)	800mm*1000mm*200mm

## SCHEMATIC DIAGRAM

