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SOLAR POWER SOLUTIONS

Better Electric
Better Life

SASSIN

COMPANY SUMMARY



Company Profile

Sassin Electric was founded in 1993, and the headquarter is located in Shanghai China. Sassin Electric has 3 sites of own factories and 3 sites of joint venture factories. Sassin Electric was certified with ISO9001, ISO14001, and products were certified with KEMA, CB, VDE, SEMKO, TUV, etc.

As a leading manufacturer in the low-voltage electrical field in China, Sassin Electric has gathered a talented team with profound electric industry background and expertise, to research and develop Sassin's uniquely designed electrical products and solutions for users in residential, commercial, and industrial fields. Sassin's mission is "Make Electric Safe, Simple, Smart ",with this mission, Sassin will pioneer and strive to provide high quality electric products, innovative Intelligent Smart Energy Management Systems to create Better Electric, Better Life for users.

Sassin brand products were exported to more than 120 countries and regions, enjoyed a good reputation in the market. Sassin has the whole production chain from design, tool making, components processing, assembly, testing and packaging so that Sassin can well control every section in production to make sure Sassin products features "high-stability and high-reliability".

Moreover, Sassin Electric has professional sales and service team, with profound international trade experience. They can communicate in English, Spanish, French, German etc. With the service philosophy of "Professional, Effective, Trust Worthy",Sassin Electric is dedicated to bringing more care, more confidence and more convenience to our clients.

COMPANY QUALIFICATION

Laboratory Accreditation





CNAS Laboratory Accreditation Certificate



DEKRA Certificate of Approval



TÜV Reheinland Cooperative Testing LAB



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Solar Power Solutions

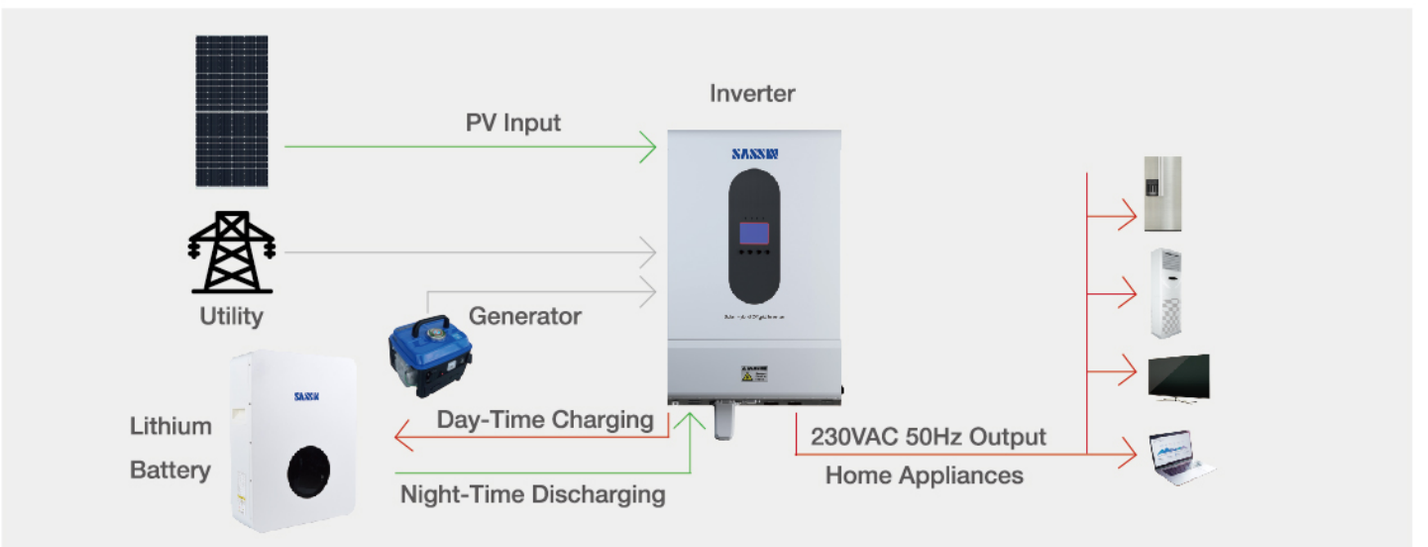
Application Overview

■ Micro inverter on grid



- Self-generate self-use
- Low cost
- Easy installation

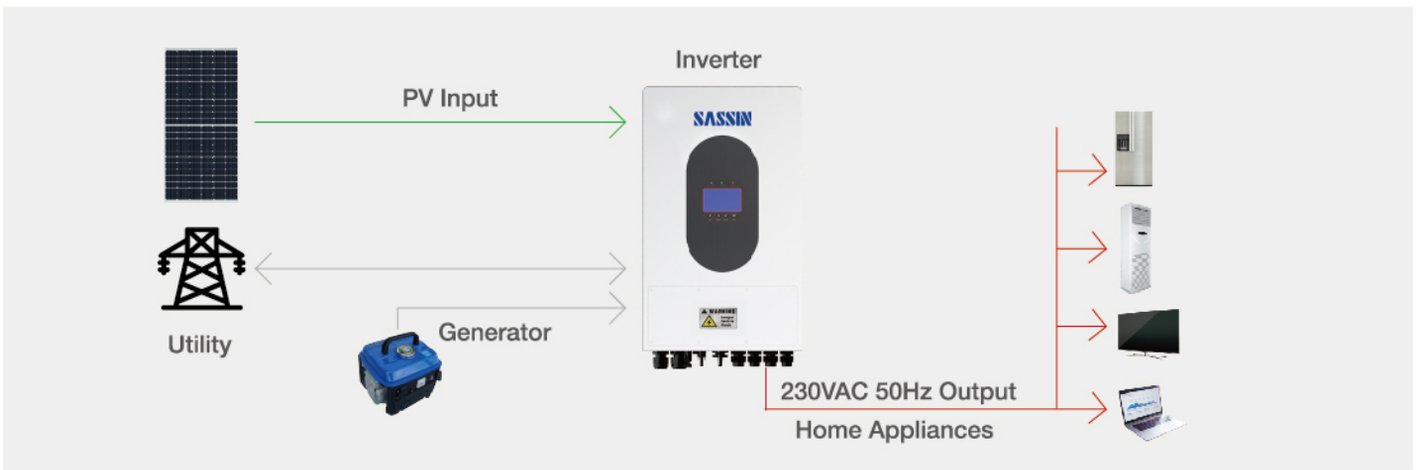
■ Residential off-grid with storage



- Self-generate self-use
- Energy storage
- Flexible adjustment of electricity resources
- Get rid of dependence on the power grid
- Realize independent energy supply

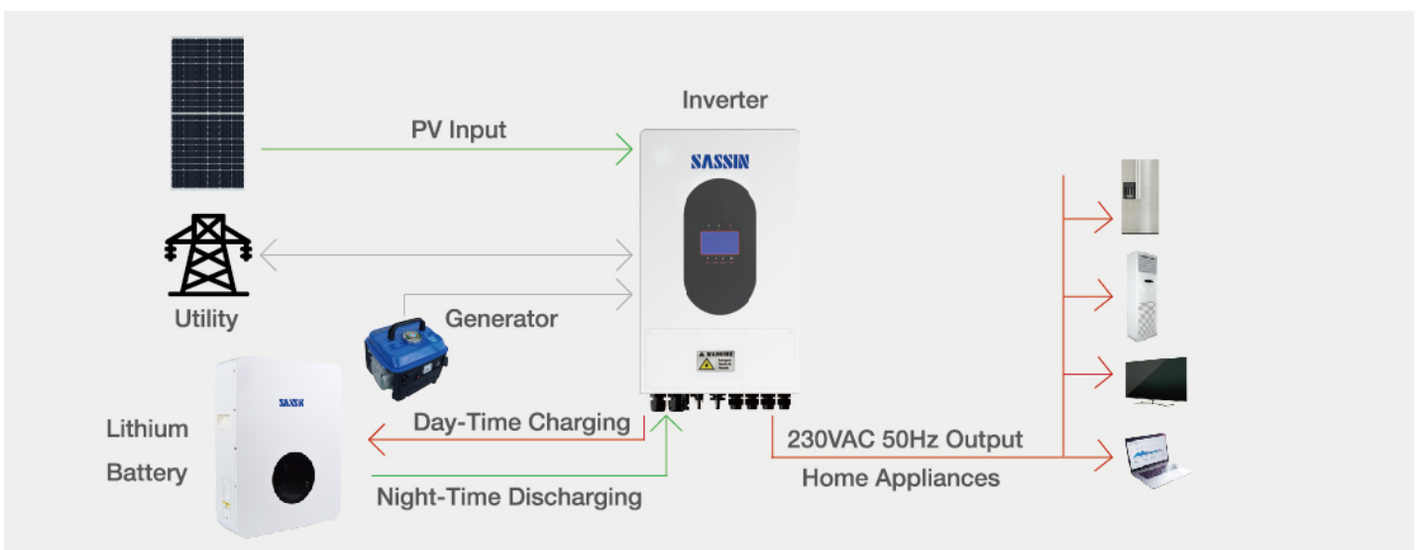
Application Overview

■ Residential on-off grid without storage



- Self-generate self-use
- The excess electricity can be on grid

■ Residential on-off grid with storage



- Self-generate self-use
- Energy storage
- Flexible adjustment of electricity resources
- The excess electricity can be on grid

Balcony Solar Power System
400W

Diagram

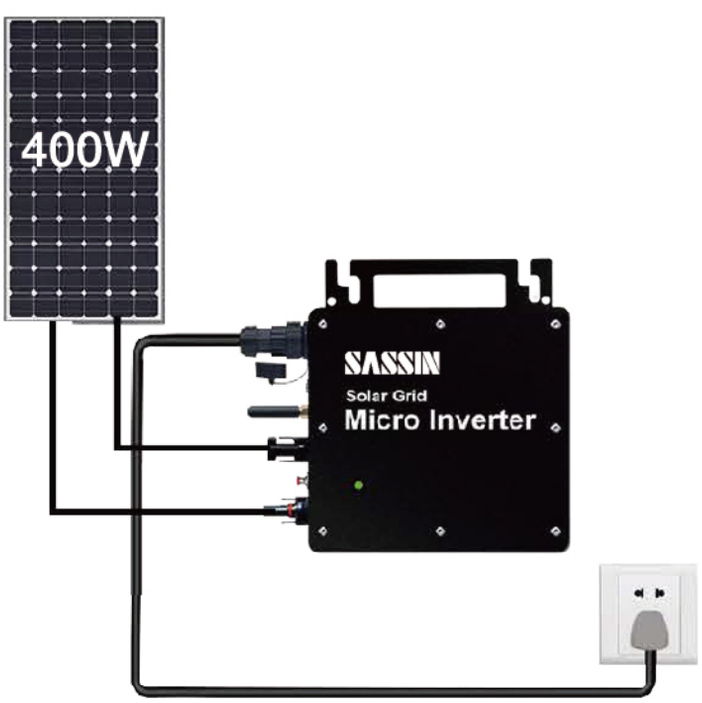
Component	Model	Quantity	Unit
PV modules	single crystal 400W	1	pc
Inverter	3SSI-MI-400	1	set
Mounting system	-	1	set

Power generagion and load capacity

Annual power generation	400W*4h*365days=584kwh
Daily power generation in good sunlight in winter	1.5kwh
Daily power generation in good sunlight in summer	3kwh



Wiring diagram



Balcony Solar Power System
600W

Diagram

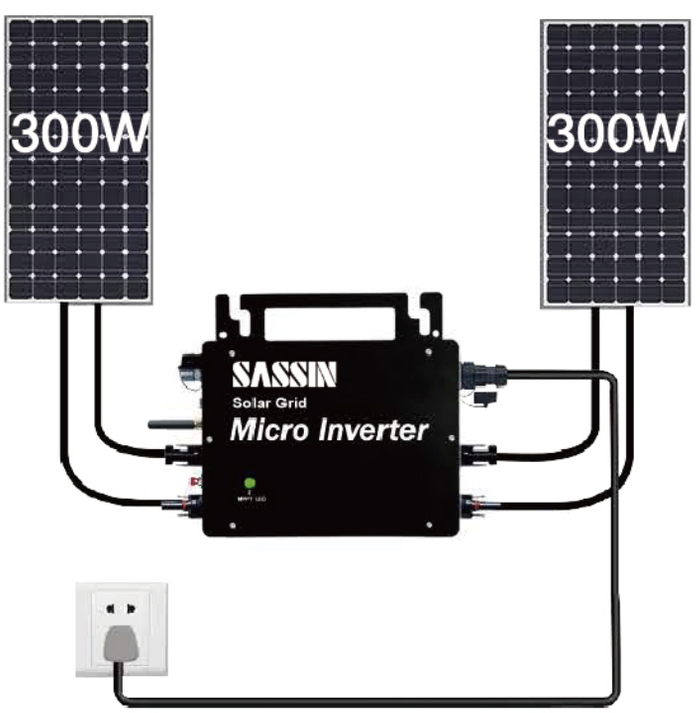
Component	Model	Quantity	Unit
PV modules	single crystal 300W	2	pc
Inverter	3SSI-MI-600	1	set
Mounting system	-	1	set

Power generagion and load capacity

Annual power generation	600W*4h*365days=876kwh
Daily power generation in good sunlight in winter	2.4kwh
Daily power generation in good sunlight in summer	4.8kwh



Wiring diagram



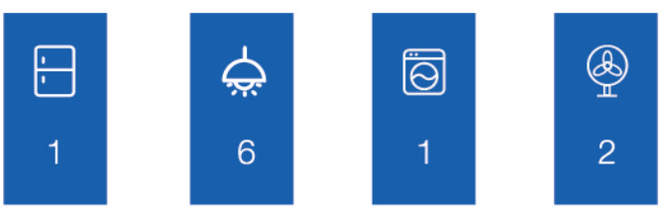
Balcony Solar Power System
800W

Diagram

Component	Model	Quantity	Unit
PV modules	single crystal 400W	2	pc
Inverter	3SSI-MI-800	1	set
Mounting system	-	1	set

Power generagion and load capacity

Annual power generation	800W*4h*365days=1168kwh
Daily power generation in good sunlight in winter	3.2kwh
Daily power generation in good sunlight in summer	6.4kwh



Wiring diagram



Balcony Solar Power System
1200W

Diagram

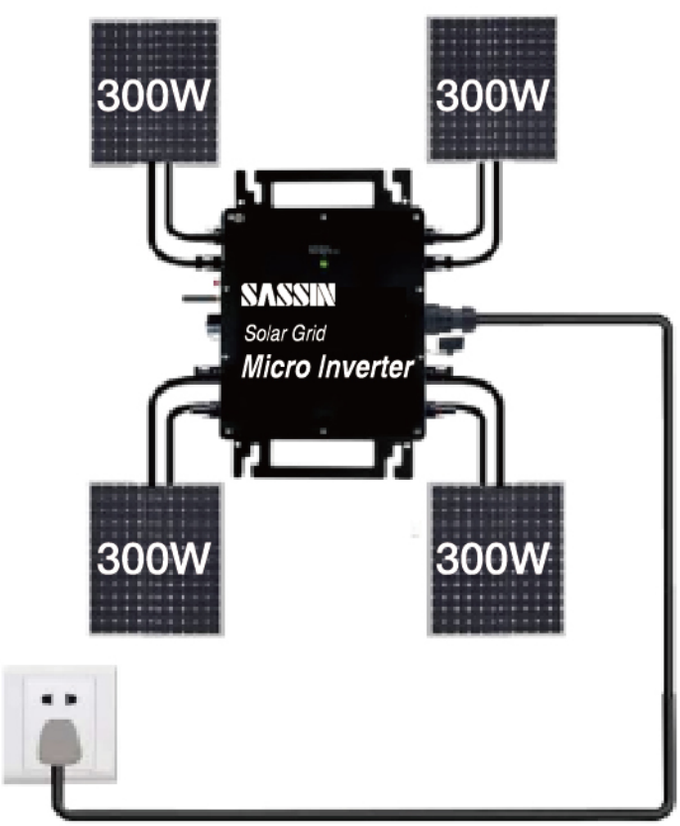
Component	Model	Quantity	Unit
PV modules	single crystal 300W	4	pc
Inverter	3SSI-MI-1200	1	set
Mounting system	-	1	set

Power generagion and load capacity

Annual power generation	1200W*4h*365days=1752kwh
Daily power generation in good sunlight in winter	4.8kwh
Daily power generation in good sunlight in summer	9.6kwh



Wiring diagram



Balcony Solar Power System
1600W

Diagram

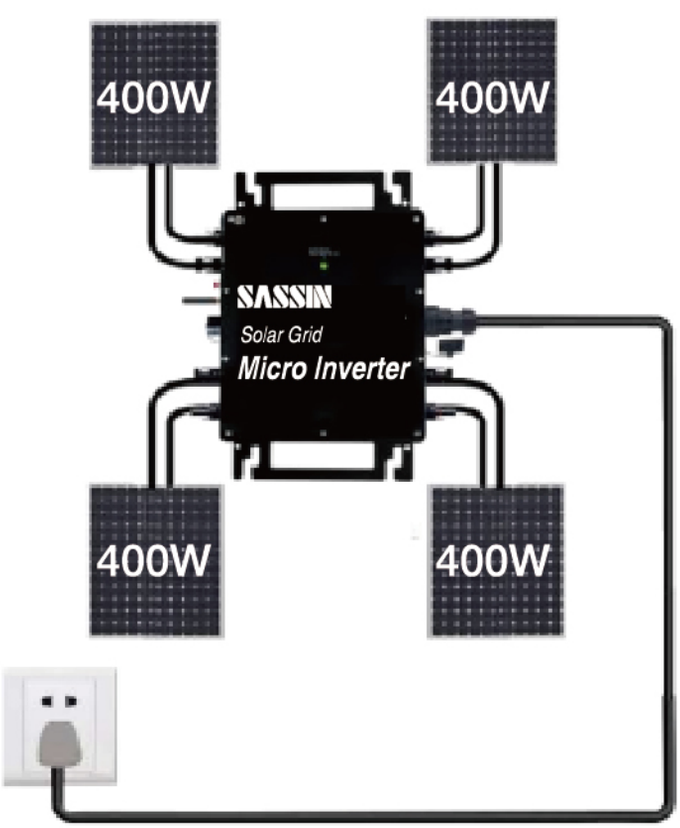
Component	Model	Quantity	Unit
PV modules	single crystal 400W	4	pc
Inverter	3SSI-MI-1600	1	set
Mounting system	-	1	set

Power generagion and load capacity

Annual power generation	1600W*4h*365days=2336kwh
Daily power generation in good sunlight in winter	6.4kwh
Daily power generation in good sunlight in summer	12.8kwh



Wiring diagram



Balcony Solar Power System
2000W

Diagram

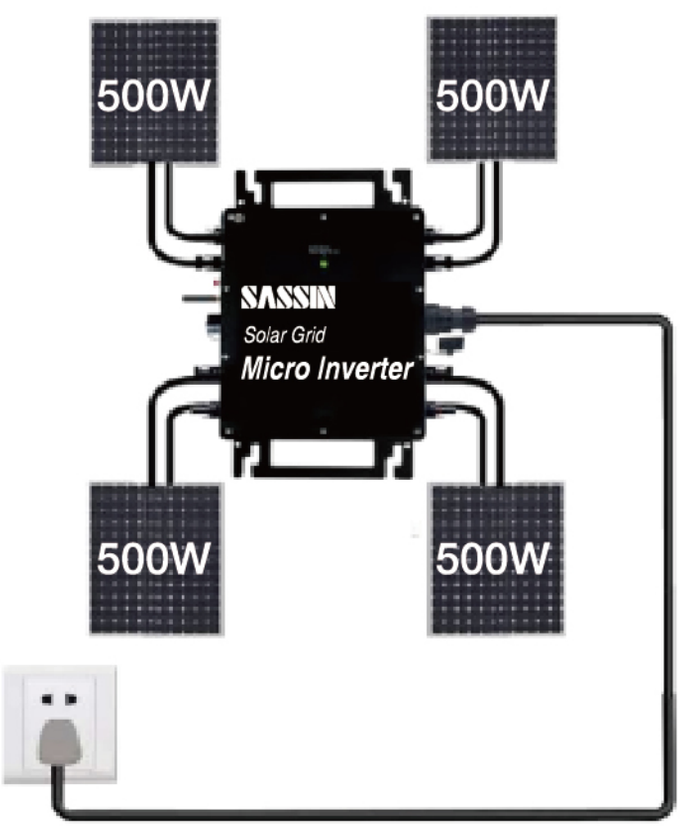
Component	Model	Quantity	Unit
PV modules	single crystal 500W	4	pc
Inverter	3SSI-MI-2000	1	set
Mounting system	-	1	set

Power generagion and load capacity

Annual power generation	2000W*4h*365days=2920kwh
Daily power generation in good sunlight in winter	8kwh
Daily power generation in good sunlight in summer	16kwh



Wiring diagram



Balcony Solar Power System
2400W

Diagram

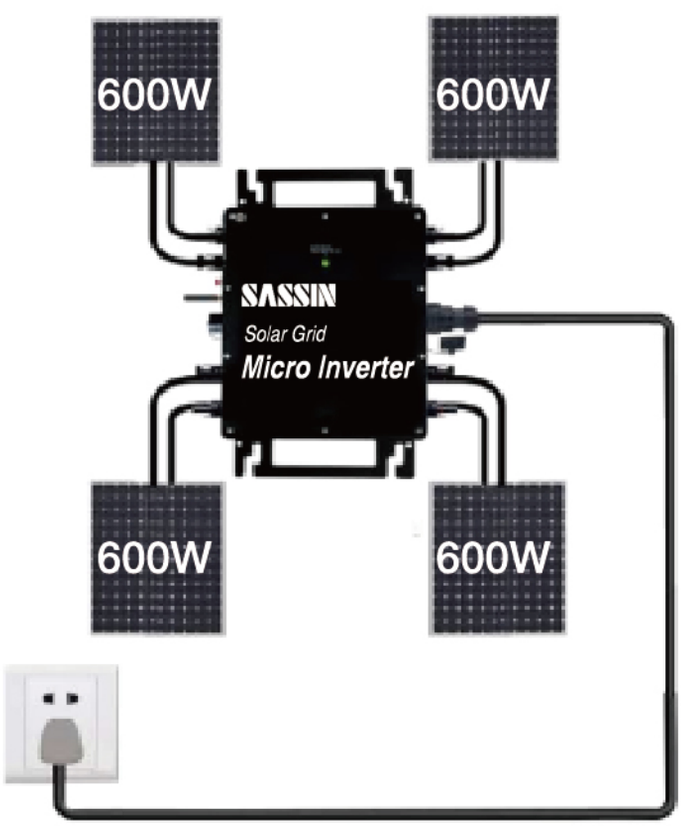
Component	Model	Quantity	Unit
PV modules	single crystal 600W	4	pc
Inverter	3SSI-MI-2400	1	set
Mounting system	-	1	set

Power generagion and load capacity

Annual power generation	2400W*4h*365=3504kwh
Daily power generation in good sunlight in winter	9.6kwh
Daily power generation in good sunlight in summer	19.2kwh



Wiring diagram



Balcony Solar Power System
2800W

Diagram

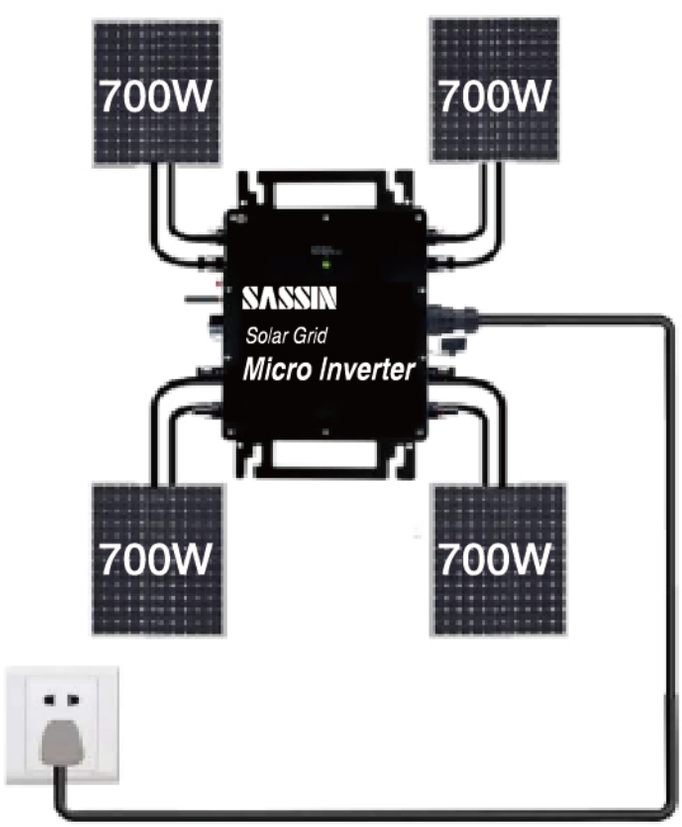
Component	Model	Quantity	Unit
PV modules	single crystal 700W	4	pc
Inverter	3SSI-MI-2800	1	set
Mounting system	-	1	set

Power generagion and load capacity

Annual power generation	2800W*4h*365=4088 kwh
Daily power generation in good sunlight in winter	11.2kwh
Daily power generation in good sunlight in summer	22.4kwh



Wiring diagram



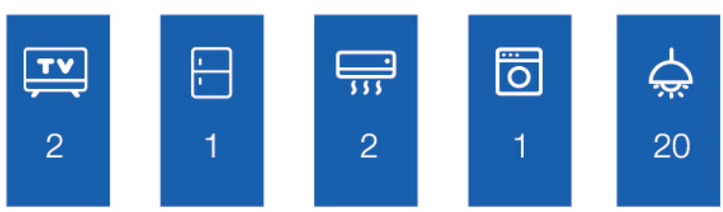
Residential Solar Power System
3kW single-phase off grid

Diagram

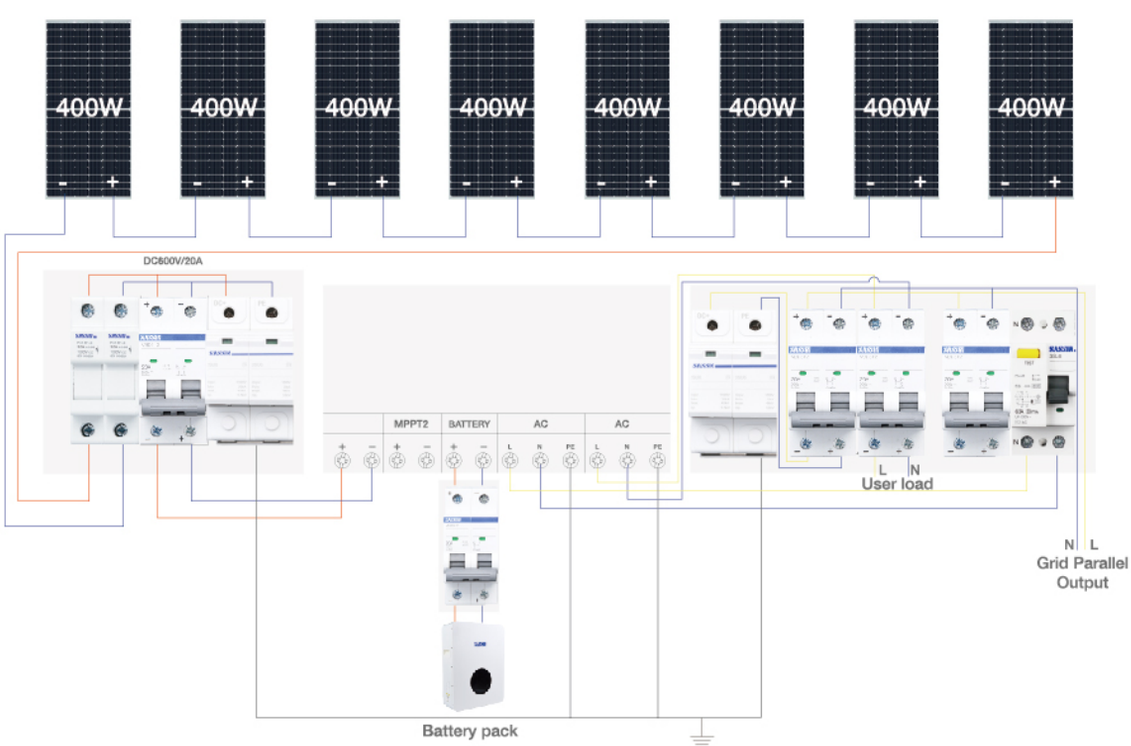
Component	Model	Quantity	Unit
PV modules	single crystal 400W	8	pc
PV combiner box	1 in 1 out 550Vdc	1	set
Inverter	3SSI-FI-3K	1	set
Battery	3SBC-LB-100Ah (5kwh)	1	set
AC distribution box	SPD,MCB,RCBO	1	set
Connector	MC4	1	pair
DC cable	PV-C40	100	meter
AC cable	YJV22	100	meter
Mounting system	-	1	set

Power generagion and load capacity

Annual power generation	3kW*4h*365days=4380kwh
Daily power generation in good sunlight in winter	12kwh
Daily power generation in good sunlight in summer	24kwh



Wiring diagram



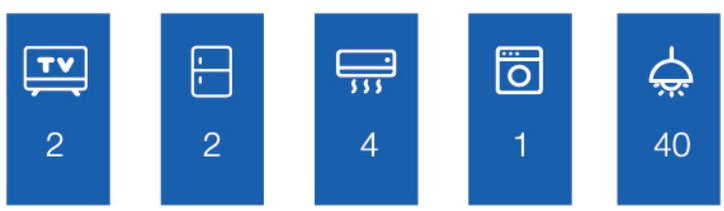
Residential Solar Power System
5kW single-phase off grid/on-off grid

Diagram

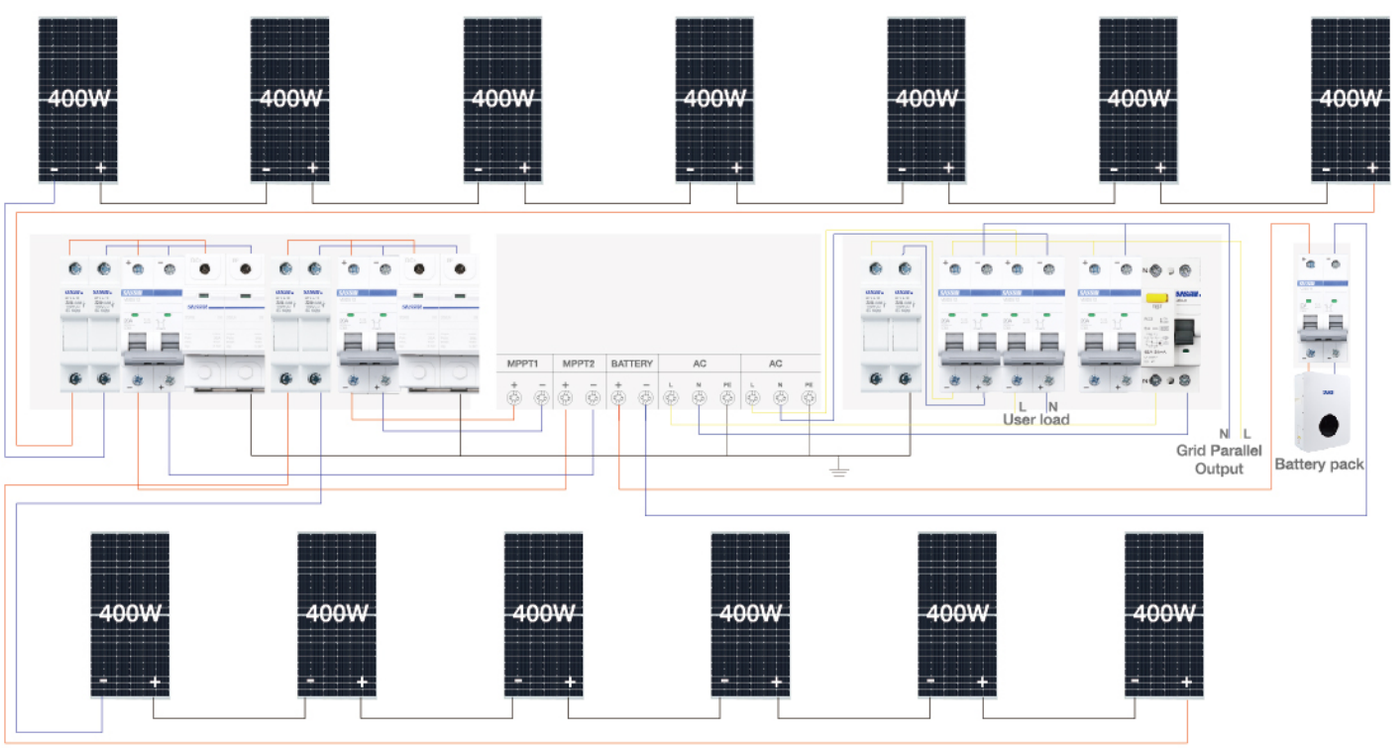
Component	Model	Quantity	Unit
PV modules	single crystal 400W	13	pc
PV combiner box	2 in 2 out 550Vdc	1	set
Inverter	3SSI-FI-5K (off-grid) / 3SSI-HI-5K (on-off grid)	1	set
Battery	3SBC-LB-200Ah (10kwh)	1	set
AC distribution box	SPD,MCB,RCBO	1	set
Connector	MC4	2	pair
DC cable	PV-C40	100	meter
AC cable	YJV22	100	meter
Mounting system	-	1	set

Power generagion and load capacity

Annual power generation	5kW*4h*365days=7300kwh
Daily power generation in good sunlight in winter	20kwh
Daily power generation in good sunlight in summer	40kwh



Wiring diagram



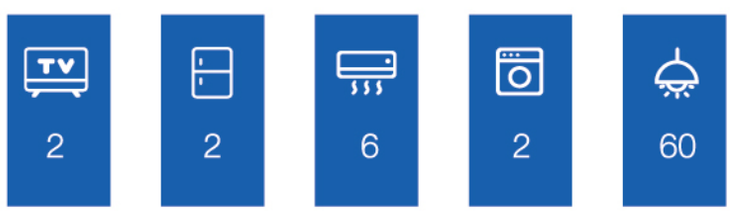
Residential Solar Power System
8KW single-phase off grid/on-off grid

■ Diagram

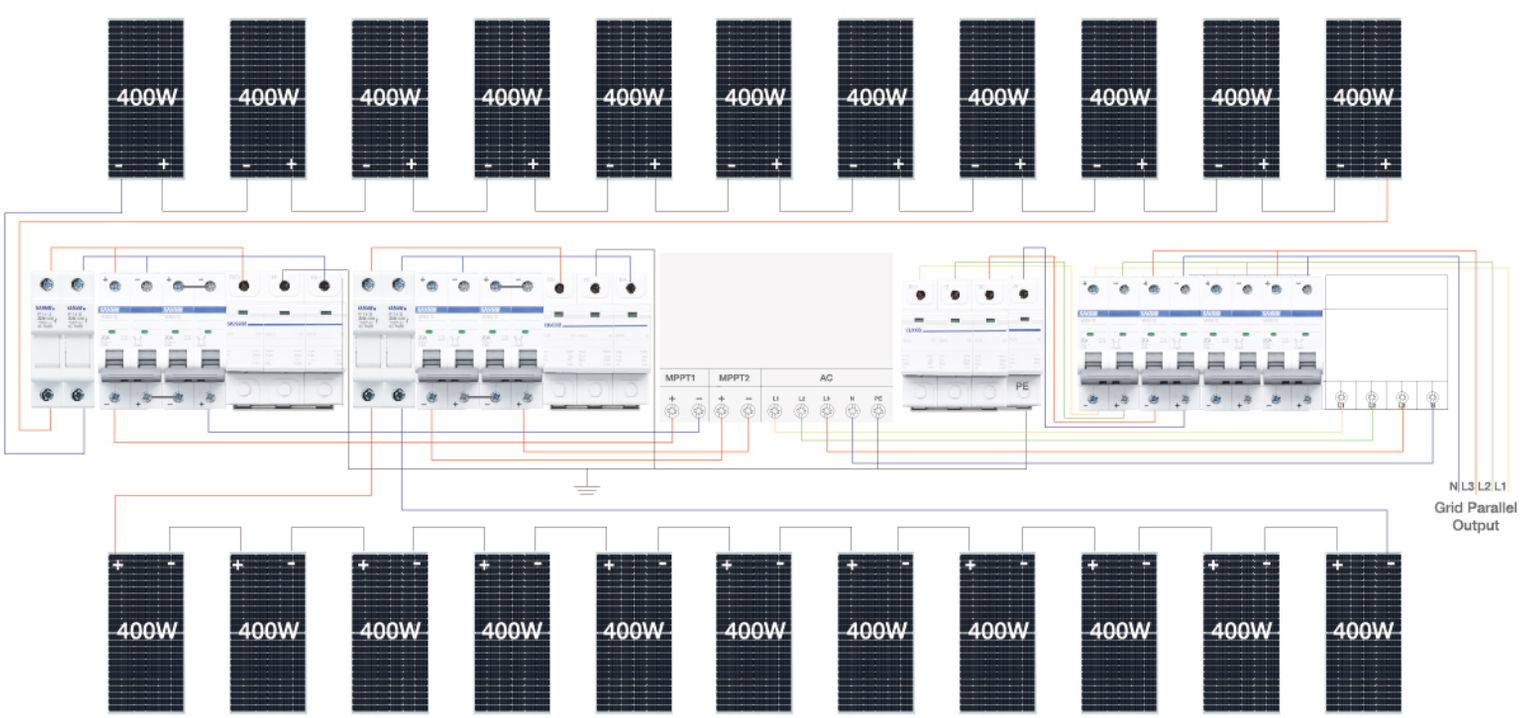
Component	Model	Quantity	Unit
PV modules	single crystal 400W	22	pc
PV combiner box	2 in 2 out 1000Vdc	1	set
Inverter	3SSI-FI-8K (off-grid) / 3SSI-HI-8K (on-off grid)	1	set
Battery	3SBC-LB-200Ah (10kwh)	1	set
AC distribution box	SPD,MCB,RCBO	1	set
Connector	MC4	2	pair
DC cable	PV-C40	100	meter
AC cable	YJV22	100	meter
Mounting system	-	1	set

■ Power generagion and load capacity

Annual power generation	8kW*4h*365days=11680kwh
Daily power generation in good sunlight in winter	30kwh
Daily power generation in good sunlight in summer	60kwh



■ Wiring diagram



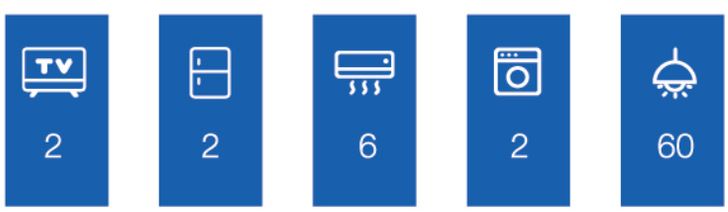
Residential Solar Power System
8KW three-phase off grid/on-off grid

Diagram

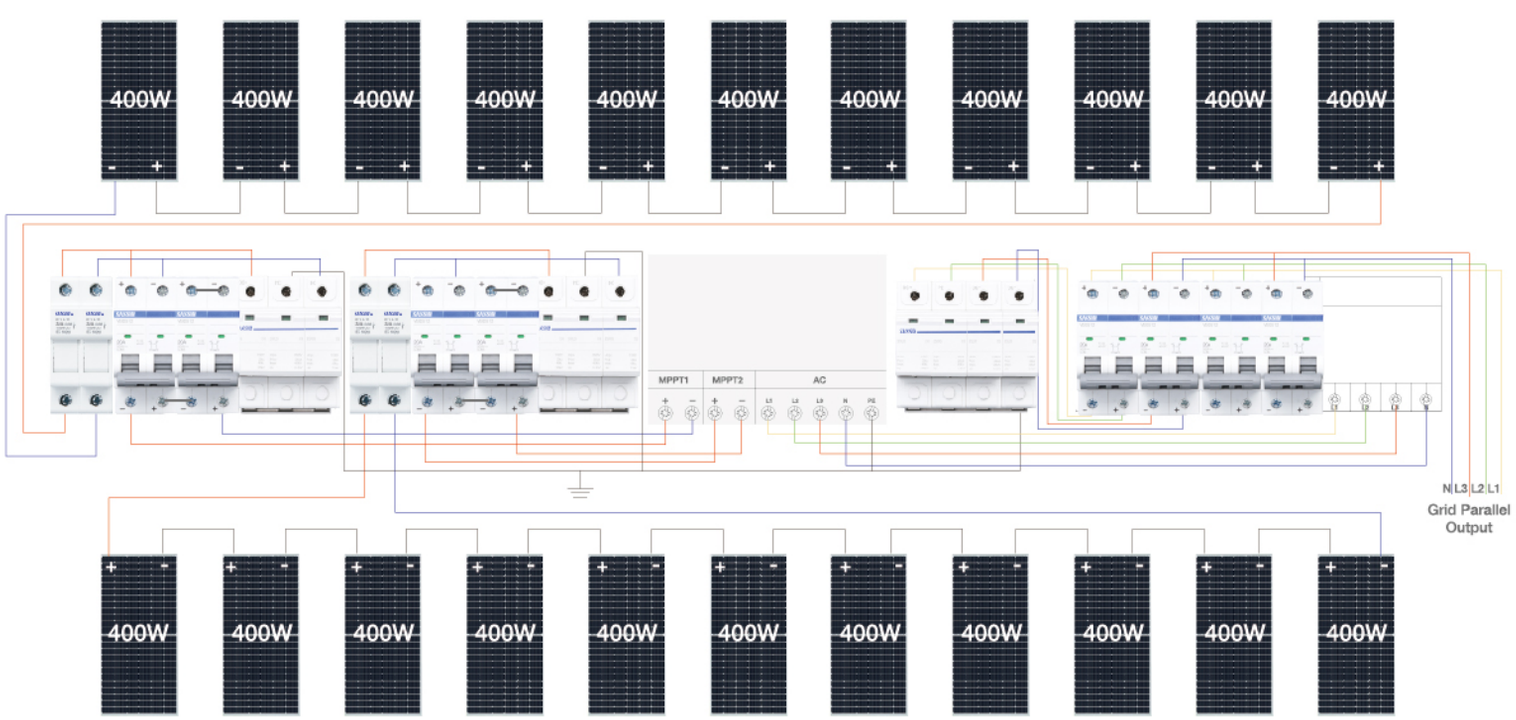
Component	Model	Quantity	Unit
PV modules	single crystal 400W	22	pc
PV combiner box	2 in 2 out 1000Vdc	1	set
Inverter	3SSI-FI-8KT (off-grid) / 3SSI-HI-8KT (on-off grid)	1	set
Battery	3SBC-LB-200Ah (10kwh)	1	set
AC distribution box	SPD,MCB,RCBO	1	set
Connector	MC4	2	pair
DC cable	PV-C40	100	meter
AC cable	YJV22	100	meter
Mounting system	-	1	set

Power generagion and load capacity

Annual power generation	8kW*4h*365days=11680kwh
Daily power generation in good sunlight in winter	30kwh
Daily power generation in good sunlight in summer	60kwh



Wiring diagram



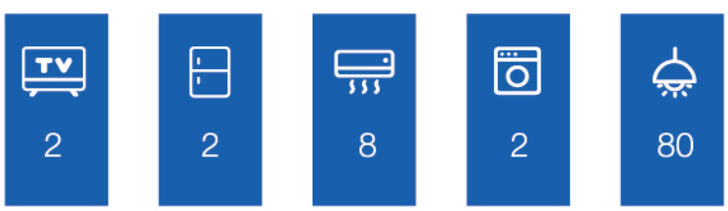
Residential Solar Power System
10KW single-phase off grid/on-off grid

Diagram

Component	Model	Quantity	Unit
PV modules	single crystal 400W	28	pc
PV combiner box	2 in 2 out 1000Vdc	1	set
Inverter	3SSI-FI-10K (off-grid) / 3SSI-HI-10K (on-off grid)	1	set
Battery	3S-LB-200Ah (10kwh)	2	set
AC distribution box	SPD,MCB,RCBO	1	set
Connector	MC4	2	pair
DC cable	PV-C40	100	meter
AC cable	YJV22	100	meter
Mounting system	-	1	set

Power generagion and load capacity

Annual power generation	10kW*4h*365days=14600kwh
Daily power generation in good sunlight in winter	40kwh
Daily power generation in good sunlight in summer	80kwh



Wiring diagram



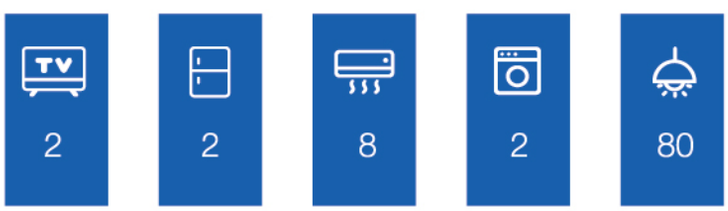
Residential Solar Power System
10KW three-phase off grid/on-off grid

Diagram

Component	Model	Quantity	Unit
PV modules	single crystal 400W	28	pc
PV combiner box	2 in 2 out 1000Vdc	1	set
Inverter	3SSI-FI-10KT (off-grid) / 3SSI-HI-10KT (on-off grid)	1	set
Battery	3S-LB-200Ah (10kwh)	2	set
AC distribution box	SPD,MCB,RCBO	1	set
Connector	MC4	2	pair
DC cable	PV-C40	100	meter
AC cable	YJV22	100	meter
Mounting system	-	1	set

Power generagion and load capacity

Annual power generation	10kW*4h*365days=14600kwh
Daily power generation in good sunlight in winter	40kwh
Daily power generation in good sunlight in summer	80kwh



Wiring diagram



PV Modules

Features

- Monocrystalline silicon for exceptional conversion efficiency
- Innovative half-cell design reduces shading and power loss
- Superior PID resistance with advanced technology and materials
- Enhanced durability in harsh conditions
- Selective colors, black and silver frames
- 25-year output guarantee for long-term performance

Technical specifications

Type	3SPM-400W		3SPM-550W		3SPM-700W	
Picture						
Standard	IEC62109-1/2,IEC61000-3/6					
	STC	NOCT	STC	NOCT	STC	NOCT
Power out (Pmax)	400W	301.3W	550W	414.3W	700W	527.3W
Short circuit current (Isc)	13.7A	11.07A	13.82A	11.17A	17.82A	14.4A
Open circuit voltage (Voc)	37.1V	34.7V	50.2V	46.9V	49.83V	46.55V
Maximum power current (Impp)	12.86A	10.49A	12.98A	10.58A	16.77A	13.67A
Maximum power voltage (Vmpp)	31.1V	28.7V	42.4V	39.1V	41.78V	38.57V
Module efficiency	20.48%		21.29%		22.5%	
Power tolerance	0～+5W					
Maximum system voltage	1500VDC					
Maximum series fuse	25A					
Increased snowload	5400Pa					
Operating temperature	-40～+85°C					
Norminal operating cell temperature (Noct)	45±2°C					
Temperature coefficient of Pmax	-0.35%°C				-0.240%/°C	
Temperature coefficient of Voc	-0.27%°C				-0.220%/°C	
Temperature coefficient of Isc	0.05%°C				0.047%/°C	
Solar cell type	Mono crystalline 182*91mm				210mm HJT	
Numbers of cells	108		144		132	
Front glass	3.2mm tempered low iron glass					
Frame	Anodised aluminium					
Junction box	IP68					
Connector	MC4 compatible					
Output cable	4.0mm^2					
Dimensions	1722*1134*30/35mm		2278*1134*30/35m		2384*1303*30/35mm	

PV Combiner Boxes

Features

- Used in PV solar systems, between solar modules and inverters
- High reliability: equipped with specialized PV MCB, SPD, and fuses for surge and current protection on the solar DC side
- Versatile resilience: waterproof, dustproof, UV-resistant; tested for temperature extremes; easy installation and wiring
- Flexible setup: interchangeable current levels for MCB and fuses

Technical specifications

Type	3SCB-PV1/1		3SCB-PV2/1		3SCB-PV4/1		3SCB-PV4/2	
Picture								
Electrical Characteristics								
Maximum Voltage	550V	1000V	550V	1000V	550V	1000V	550V	1000V
Max DC Short Circuit Current Per Input	15A							
Maximum Current Output	16A	20A	20A	32A	50A	63A	20A	32A
Input string	1	1	2	2	4	4	4	4
Output string	1	1	1	1	1	1	2	2
Inverter MPPT quantity	1	1	1	1	1	1	2	2
Environment								
Operating Temperature	-25°C~ +55°C							
Humidity	99%							
Altitude	2000M							
Installaton	Wall Mounting							
Enclosure								
Material	ABS for Body;PC for door							
Degree of Protection	IP65							
Degree of Resistance to Impacts	IK10							
Fire resistence	650°C/30s							
DC Surge Protection Device	**3SU6DC**							
Max Operation Voltage(Ucpv)	DC 550V	DC 1000V	DC 550V	DC 1000V	DC 550V	DC 1000V	DC 550V	DC 1000V
Norminal discharge current	20kA							
Max discharge current	40kA							
Voltage protection level Up(Kv)	2.8	3.8	2.8	3.8	2.8	3.8	2.8	3.8
Number of poles	2	3	2	3	2	3	2	3
DC Fuse Holder	**RT18DC**							
Rated Working Voltage	1000 VDC							
Fuse	10*38 15A							

PV Combiner Boxes

■ Technical specifications

Type	3SCB-PV6/1	3SCB-PV8/1	3SCB-PV12/1		3SCB-PV16/1	
Picture						
Electrical Characteristics						
Maximum Voltage	1000V	1000V	1000V	1500V	1000V	1500V
Max DC Short Circuit Current Per Input	15A					
Maximum Current Output	80A	125A	200A	200A	200A	200A
Input string	6	8	12	12	16	16
Output string	1	1	1	1	2	2
Inverter MPPT quantity	N	N	N	N	N	N
Environment						
Operating Temperature	-25℃~ +55℃					
Humidity	99%					
Altitude	2000M					
Installaton	Wall Mounting					
Enclosure						
Degree of Protection	IP65					
Degree of Resistance to Impacts	IK10					
DC Surge Protection Device			3SU6DC			
Max Operation Voltage(Ucpv)	DC 1000V	DC 1000V	DC 1000V	DC 1500V	DC 1000V	DC 1500V
Norminal discharge current	20kA					
Max discharge current	40kA					
Voltage protection level Up(Kv)	3.8	3.8	3.8	5.5	3.8	3.8
Number of poles	3	3	3	3	3	3
DC Fuse Holder			RT18DC			
Rated Working Voltage	DC 1000V	DC 1000V	DC 1000V	DC 1500V	DC 1000V	DC 1500V
Fuse	10*38 15A	10*38 15A	10*38 15A	10*85 15A	10*38 15A	10*85 15A

Solar Inverters

Features

- Supply two different types inverters according to usage, Off-grid and On-Off Hybrid inverter
- Equipped with integrated MPPT solar charge controller
- Seamless operation with or without battery support
- Featuring a user-friendly touch button on the LCD display

Technical specifications

Type	3SSI-FI-3K	3SSI-FI-5K	3SSI-FI-8KS	3SSI-FI-10KS	3SSI-FI-8KT	3SSI-FI-10KT
Picture						
Standard	IEC62109-1/2,IEC61000-3/6					
PV input						
Max.recommended PV power	5000W	6000W	2*5500W	2*5500W	2*6000W	2*7500W
Max.PV voltage	500VDC	500VDC	500VDC	500VDC	800VDC	800VDC
Max.PV current	18A	27A	20A	20A	22A	22A
MPPT voltage range	40～450VDC	120～430VDC	90～500VDC	90～500VDC	200～650Vdc	200～650Vdc
Numbers of MPPT	1	1	2	2	2	2
AC input						
Normal input voltage	220/230/240V				phase voltage 170~280V, line voltage 305~485V	
Votage range	170-264V		195-253V		305-485V	
Normal input frequency	50/60Hz					
Battery mode output						
Voltage	24Vdc	48Vdc				
Peak efficinecy (DC to AC)	98%				≥99%	
Overload protection	21s@105%~150% Load11s@150%~200% Load400ms@>200% Load					
Grid mode output						
Voltage	220/230/240VAC				230/400Vac(three-phase)	
Battery and charger						
Battery type supported	Lead acid;Lithum					
Battery voltage	24V	51.2V	56.4V	56.4V	48Vdc	
Max solar charge current	120A	120A	150A	150A	180A	
Max AC charge current	100A	100A	120A	150A	180A	
Max total charge current	120A	120A	150A	150A	180A	
General specificatons						
Protect functions	Short circuit;Overload;Over-temperature protection,etc					
Communication	RSS-232;CAN-BUS;RS485;WIFI;APP,etc					
Protection degree	IP20					
Installation Style	Wall-mounted					
Parallel capability	up to 6 pcs		up to 9 pcs			
Working temperature	-10C~50°C		0~40 °C		-10~55°C, >45°C derated	
Storage temperature	-15C~60°C					
Cooling method	FAN cooling					
Humidity	0~95%					
Altitude	2000m					

Solar Inverters

Technical specifications

Type	3SSI-HI-3.6K	3SSI-HI-5K	3SSI-HI-8KS	3SSI-HI-10KS	3SSI-HI-8KT	3SSI-HI-10KT
Picture						
Standard	IEC62109-1/2,EN61000					
PV input						
Max.recommended PV power	5200W	6600W	10400W	13000W	10400W	13000W
Max.PV voltage	500V	500VDC	500VDC	500VDC	800V	
Max.PV input current per MPPT	15A	15A	22A	26A+26A+26A	13A+13A	26+13A
Max.PV short circuit current per MPPT	18.9A	18.9A	30A	44A+44A+44A	17A+17A	34A+17A
MPPT voltage range	120～430VDC	120～450VDC	90～450VDC	125～500VDC	200～650VDC	
Start voltage	150V	150V	150V	160V	150V	
Rated voltage	360V	360V	360V	370V	550V(160-800V)	
Numbers of MPPT	2	2	2	3	2	
AC input						
Normal input voltage	230VAC				380VAC	
Votage range	170~280V		220-240V		380V	
Normal input frequency	50/60Hz					
AC output data (On-grid)						
rated voltage	230V	230V	230V	230V	220/380Vac,230/400Vac (Three-Phase)	
Max.apparent power output to utility grid	3960VA	5500VA	8800VA	11000VA	8800VA	11000VA
Max.apparent power from utility grid	3960VA	5500VA	8800VA	11000VA	8800VA	11000VA
Normal output voltage	230V	220/230/240V	230V	230V	220/380Vac,230/400Vac (Three-Phase)	
Normal AC grid frequency	50/60Hz					
Max.AC current output to utility grid	17.2A	23.9A	50A	60A	45A	
Max.AC current from utility grid	17.2A	23.9A	50A	60A	45A	
Max.total harmonic distortion	≤3%					
Power factor	0.8 Ahead~0.8 Behind					
Switch time	<10ms					
AC output data (Back-up)						
Back-up rated power	3600W	4500W	8000W	10000W	8000W	10000W
Max.output apparent power	3600VA	4500VA	8800VA	11000VA	8800VA	11000VA
Max.output current	19.6A	23.9A	36.4A/34.8A	45.5A/43.5A	13.4A	18.4A
Normal output voltage	230V	230V	220/230V	220/230V	220/380Vac,230/400Vac (Three-Phase)	
Normal AC grid frequency	50/60Hz					
Output THDv(@Linear load)	≤3%					

Solar Inverters

Technical specifications

Type	3SSI-HI-3.6K	3SSI-HI-5K	3SSI-HI-8KS	3SSI-HI-10KS	3SSI-HI-8KT	3SSI-HI-10KT
Battery data						
Battery type supported	Lithium-Ion/Lead-Acid Batteries					
Normal Battery voltage	51.2V					
Battery voltage range	41.6~58.5V	41.6~58.5V	40-60V	40-60V	40V~60V	
Max.continuous charing current	80A	95A	190A	220A	160A	200A
Max.continuous discharing current	85A	100A	190A	220A	160A	200A
Max.charge/discharge power	3600W	4500W	8000W	10000W	8000W	10000W
Conversion efficiency						
Max.efficiency	97.8%	98%	97.6%	97.6%	97.6%	
EU efficiency	97%	97%	96.5%	96.5%	97%	
MPPTefficiency	99.99%	99.99%	99%	99%	99%	
General specificatons						
Protect functions	Short circuit;Overload;Over-temperature protection,anti-islanding,etc					
Communication	CAN-BUS;RS485;WIFI; APP,etc		RS485/CAN			
Protection degree	IP65					
Installation Style	Wall-mounted					
Parallel capability	up to 6 pcs	up to 6 pcs	up to 16 pcs	up to 16 pcs	up to 10 pcs	
Working temperature	-40-60°C, >45°C Derating				45A	
Humidity	0~95%	0~95%	10-90%	10-90%	10-90%	
Altitude	2000m					

Inverter American Standard Hybrid Network

Technical specifications

Type	3S-FI-US3K	3S-FI-US5K	3S-FI-US10K	3S-FI-US12K
Picture				
Standard	IEC62109-1/2,IEC61000-3/6			
PV input				
Max.recommended PV power	3200W	5500W	12000W	12000W
Max.PV voltage	108V	500V	500V	500V
Max.PV input current per MPPT	40A	22A	22A+22A	22A+22A
MPPT voltage range	30～90V	120～450V	90～450V	90～450V
Numbers of MPPT	1	1	2	2
AC input				
Rated input voltage	120V (L+N+PE)		120V（L1/N,L2/N) /240V (L1/L2)	
Votage range	85～140VAC			
Rated frequency	50/60Hz			
Bypass overload current	40A	41.7A	63A	63A
Inverter output				
Rated output power	3000W	5000W	10000W	12000W
Rated output voltage	120V (L+N+PE)		120V（L1/N,L2/N) /240V (L1/L2)	
Rated frequency	50/60Hz			
Load capacity of motors	2HP	3HP	5HP	6HP
Power factor	1	1	1	1
Wave form	Pure sine wave			
Switch time	≤10ms (typical)			
Maximum efficiency	92%	92%	91%	91%
Battery				
Battery type supported	Lead acid;Lithum			
Battery voltage	24V	48V	51.2V	51.2V
Battery voltage range	20～33V	42～60V	40～58.6V	275A
Max. charge current	100A	100A	120A	120A
General specificatons				
Protect functions	Short circuit;Overload;Over-temperature protection,etc			
Communication	RS485;WIFI;Dry contact			
Protection degree	IP20,only indoor			
Noise	≤60db			
Installation Style	Wall-mounted			
Parallel capability	up to 6 pcs			
Working temperature	-10°C～55°C			
Storage temperature	-15°C～60°C			
Cooling method	Air cooling			
Humidity	0～95%			
Altitude	2000m			

Inverter American Standard Hybrid Network

Technical specifications

Type	3S-HI-US8K	3S-HI-US10K	3S-HI-US12K	3S-HI-US15K
Picture				
Standard	IEC62109-1/2,EN61000			
PV input				
Max.recommended PV power	12000W	15000W	18000W	22500W
Max.PV voltage	525VDC			
Max.PV input current per MPPT	26A+26A+26A			
MPPT voltage range	120～500VDC			
Start voltage	100V			
Numbers of MPPT	2	3	3	3
NUmbers of Strings	2+2	2+2+2	2+2+2	2+2+2
AC input/output (grid)				
Rated power	8kW	10kW	12kW	15kW
Votage range	120VAC/240VAC (split phase), 208VAC (2/3 phase)			
Rated frequency	50/60Hz			
Power factor range	0.8 leading ～0.8 lagging			
Switch time	＜10 ms			
Current (Maximum continuous)	33.4A	41.7A	50A	62.5A
AC output (EPS)				
EPS rated output voltage	120VAC/240VAC (split phase), 208VAC (2/3 phase)			
EPS rated output frequency	50/60Hz			
EPS rated output active power	8kW	10kW	12kW	15kW
EPS rated output apparent power	8kVA	10kVA	12kVA	15kVA
EPS rated output current	33.4A	41.7A	50A	62.5A
Overload capacity (off grid)	200%10s			
Battery				
Battery type supported	Lead acid;Lithum			
Normal Battery voltage	51.2V			
Battery voltage range	40～60V			
Max. charge current	167A	210A	250A	275A
Max. discharge current	167A	210A	250A	275A
Reverse connect protection	YES			
Conversion efficiency				
Max.efficiency	97.5%			
US efficiency	96.5%			
MPPT efficiency	99.9%			
General specificatons				
Protect functions	Short circuit;Overload;Over-temperature protection,anti-islanding,etc			
Communication	RS485;WIFI;CAN			
Protection degree	IP65			
Installation Style	Wall-mounted			
Parallel capability	up to 6 pcs			
Working temperature	-25°C～60°C			
Humidity	0～95%			
Altitude	4000m			

Battery Cells

Features

- Designed for solar power systems
- Fits wall and stacked mounting
- Built in intelligent BMS management system
- Ensures high operational reliability
- No active cooling required
- Supports 80% DOD, 6000 cell cycles, 5-year warranty, 10+ years lifespan

Technical specifications

	Type	3SBC-LB-100Ah	3SBC-LB-200Ah
Picture			
Electrical Characteristics	Rated voltage (VDC)	51.2	51.2
	Rated capacity (AH)	100	200
	Energy storage (KWH)	5.12	10.24
	Cycle life	≥6000 cycles @ 85% DOD	
	Months self discharge	≤3%	
	Efficiency of charge	100% - 0.2C	
	Efficiency of discharge	96～98%- 1C	
Standard Charge	Charge voltage (VDC)	56	56
	Charge mode	CC/CV	
	Charge current (A)	50	100
	Charge cut-off voltage (VDC)	57.6	57.6
Standard Discharge	Contiunous current (A)	100	200
	Discharge cut-off voltage (VDC)	46	46
General specificatons	Protect functions	overload;temperature;short circuit;overcharge;over current;over voltage;batteries proteciton	
	Parallel capability	up to 16 pcs	
	Charge temperature	0°C～45°C @60±25% Relative humidity	
	Discharge temperature	-20°C～60°C@60±25% Relative humidity	
	Storage temperature	0°C～45°C @60±25% Relative humidity	
	IP class	IP60	
	Material system	LiFePO4	
	Case material	Metal	
	Installation Style	Wall mount	
	Protocol (optional)	CAN Bus;RS485;RS232	
	SOC (optional)	LED;LCD	

PV Micro Inverters

Features

- For balcony solar power systems
- WIFI communication and TUYA app control
- Anti-reverse protection
- Cost-effective and easy installation and simple setup

Technical specifications

Type	3SSI-MI-400	3SSI-MI-600	3SSI-MI-800	3SSI-MI-1200	3SSI-MI-1600	3SSI-MI-2000	3SSI-MI-2400	3SSI-MI-2800
Picture								
Standard	IEC61000-3-2/3; IEC55014-2							
PV input								
MPPT voltage range	16-48V	22-48V	22-48V	22-48V	22-48V	22-48V	22-48V	22-48V
Operation voltage range	20-50V	20-60V	20-60V	20-60V	20-60V	20-60V	20-60V	20-60V
Max. input voltage	50V	60V	60V	60V	60V	60V	60V	60V
Startup voltage	22V							
Max. input power	400W	600W	800W	1200W	1600W	2000W	2400W	2800W
Max. input current	16A	12A*2	16A*2	12A*4	15A*4	16A*4	16A*4	16A*4
Numbers of input PV connector	1 Sets	2 Sets	2 Sets	4 Sets	4 Sets	4 Sets	4 Sets	4 Sets
AC Output								
Rated output power	400W	600W	800W	1200W	1600W	2000W	2400W	2800W
Rated output voltage	120/230V							
Default output voltage range	80-160V/180-270V							
Frequency	50/60Hz							
Power factor	>0.99%							
Output THD	<5%							
Efficiency								
Peak efficiency	95%							
Nominal MPPT efficiency	99.5%							
Night power consumption	<1W							
General specificatons								
Protect functions	Short circuit;Overload;Over-temperature ;Over voltage;under voltage;Frequency;Earth;Isolated island protection,etc.							
Communication	WIFI							
Protection degree	IP65							
Cooling mode	Natural convection-no fans							
Max. current of AC cable	20A	20A	20A	20A	20A	20A	20A	20A
Installation Style	Wall-mounted							
Parallel capability	Up to 6pcs							
Working temperature	-40°C~65°C							
Storage temperature	-40°C~85°C							

Smart Power Sensor
3SPS60 Series

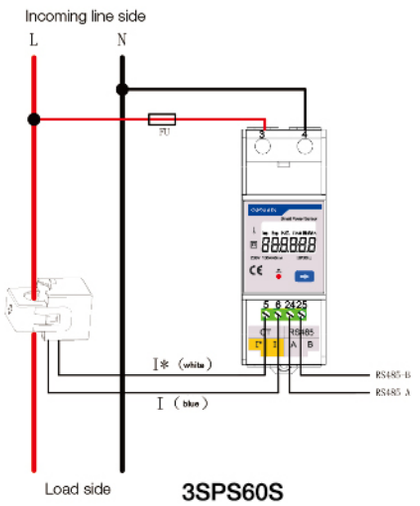
Features

- Used for distributed PV systems. Short circuit protection
- Measuring electrical parameters such as voltage, current, power, frequency, power factor
- Networked with external devices through the RS485 communication interface.
- DIN35mm rail installation and modular structure design Easy installation, easy networking
- Metering function: accurately measure the forward and reverse active energy and combined active energy, voltage, current, frequency, power factor, power, etc. and the data will not be lost after power failure
- Display function: automatic cycle display and key switch display with backlight function
- Communication function:RS485 communication supporting 4800bps, 9600bps, 19200bps, 115200bps
- Local setting function: view the real-time measurement value by turning the page with the key
- Refresh cycle function: refresh cycle ≤75ms
- Pulse indicator function: red LED indicator

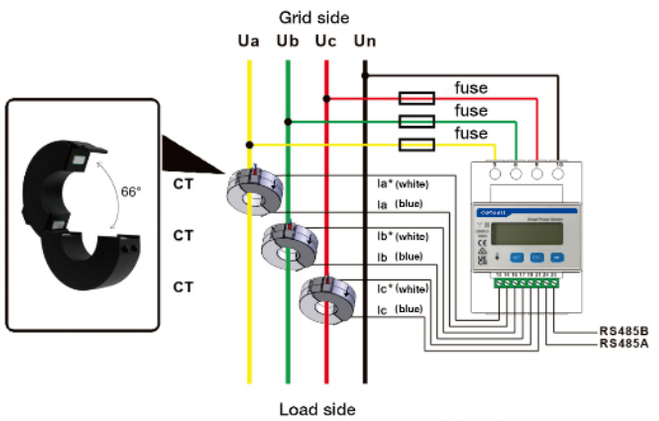
Technical specification

Type	3SPS60S	3SPS60T
Picture		
Standard	IEC 61326-1;IEC 61326-2-1;IEC 61326-2-1;IEC 61010-2-1	
Phase	1P	3P
Rated voltage	230V	230/400V
Measuring voltage range	176~288V	90~500V
Measuring current range	0~100A	0~250A
Measuring frequency range	45~65Hz	45-65Hz
Metering accuracy	voltage 0.5 class; current 0.5 class; power 1 class; energy1 class; frequency +0.01Hz	
Power consumption	1.5W	
Communication	RS485	
Baud rate	4800bps; 9600bps (default);19200bps; 115200bps.	
Data transfer	Modbus	
Degree of protection	IP20	
Working temperature	-25°C~60°C	
Storage temperature	-40°C~85°C	
Humidity	95%	
Altitude	<2000m	
Degree of pollution	II	

Smart Power Sensor
3SPS60 Series



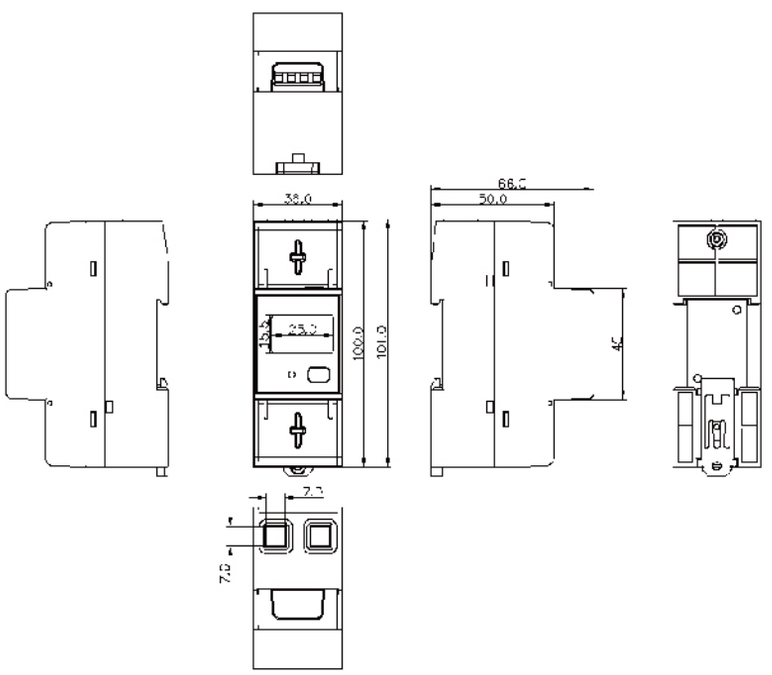
3SPS60S



3SPS60T

■ Outline and installation dimensions

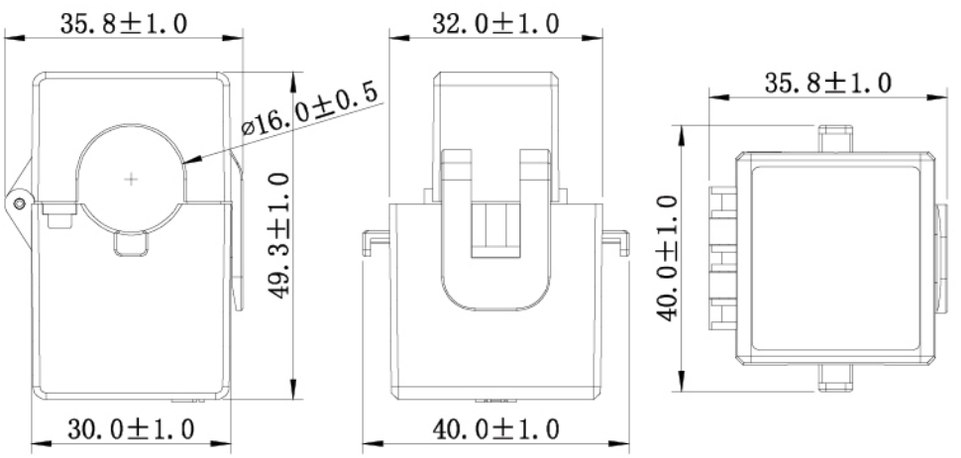
3SPS60S



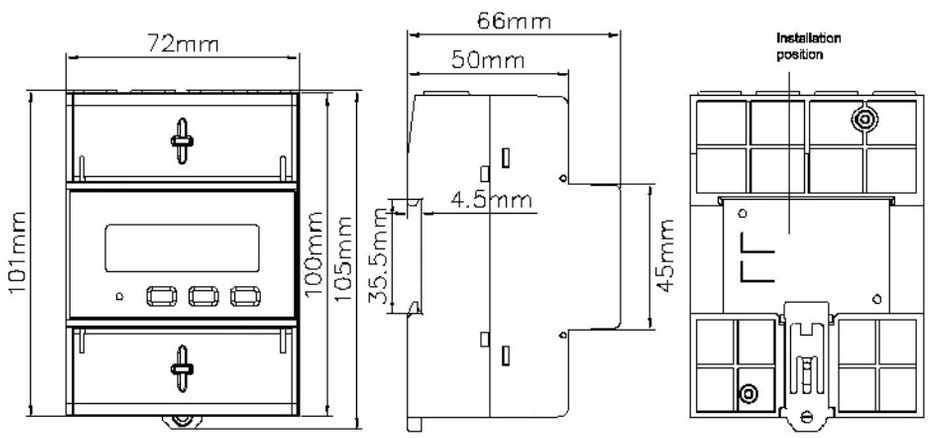
Smart Power Sensor
3SPS60 Series

■ Outline and installation dimensions

CT



3SPS60T



Module Level Rapid Shutdown Device
3S-RSD-M series



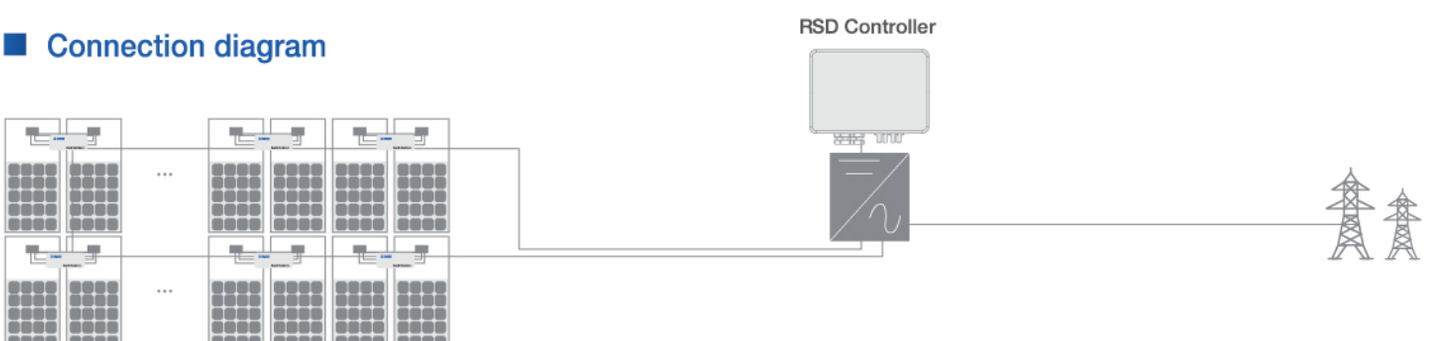
Features

- Quickly cut down power,reduce fire risk,facilitate PV system maintenance and emergency rescue
- Free Installation With RSD
- Avoid The Risk Of Miswiring
- Avoid Cross-Heating Between RSD & Module
- Compatible With Most Brand Of Modules
- Sunspec Compliance

Technical specifications

Type	3S-RSD-M11	3S-RSD-M12
Number Of PV Inputs	1	2
Number Of Modules Recommend	1	2
Input Voltage Range	16V~90V	
Maximum Allowed Input Current	21A	
Maximum Output Voltage	80V	160V
System Voltage	1000V/1500V	
Control Compliance	Power Line Communication(PLC)	
Protections	Input Over / Under Voltage	
Operating Temperature	-40C to +85°C, RH<85%	
Protection Temperature	85°C	
IP Level	>IP 68, NEMA 4X	
Fire-Proof Level	Flame Resistant, UL94-VO	
Humidity	0%~90%	
PV Connectors	MC4(Customized)	
Design Life Span	25 Years	
Size	120*43.8*20mm	
Weight	< 150g(Excluding Cables)	
Cable Length, PV1+ Input	120mm	120mm
Cable Length, PV1-Input	1200mm	1200mm
Cable Length, PV2+ Input	/	1200mm
Cable Length, PV2-Input	/	120mm
Cable Length, Power Output	600mm+600mm	1200mm+1200mm
Standards Compliance	NEC2017/2020(690.12); UL1741; UL3741;IEC/EN62109; IEC/EN61000	

Connection diagram



Module Level Rapid Shutdown Controller
3S-RSD-PC series

Features

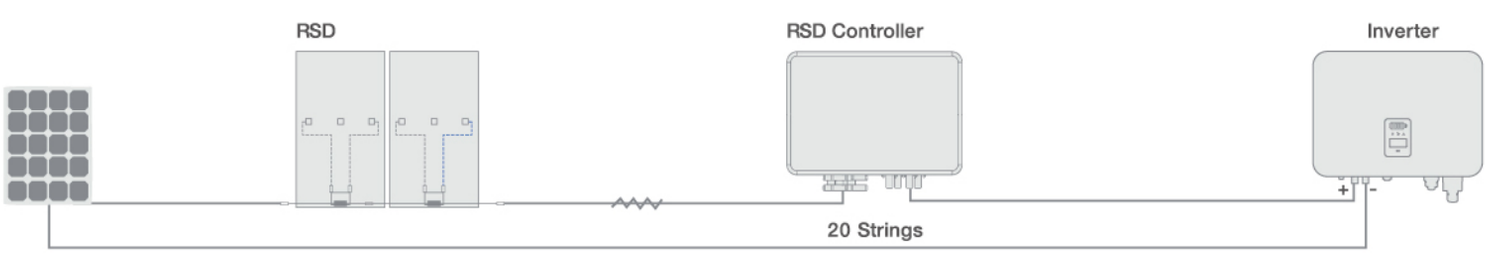
- PLC Base & Sunspec Compliance
- >300m Control Cycle Length
- Max 20 Strings Support
- No Cross Talk
- MC4 Accessory With 20A Fuse Inbuilt
- RSD + Isolating + Fuse, Dual Fail-Safe Protection
- DC String Box Replacement
- DC String Box Replacement
- Send signal to RSD with remote or manual way



Technical specifications

Type	3S-RSD-PC
System Voltage (Vdc)	1500V
Max Current (A)	50A
Number Of Strings	2,4,8,10,20
Poles	2,4,8,10,20
Operating Voltage	100Vac- 270Vac
Nominal Voltage	230Vac
Nominal Current	60mA
Operating Temperature	40°C-+70°C
Automatically Switch Off By Temperature	+70°C
Storage Temperature	-40°C-+85°C
Ingress Protection Level	IP65
Protection Level	Class II
Certification	CE
Regulations Compliance	EN 60947-183
Mechanical Life	10000
Electrical Life	>1500
Fuse Accessory	Optional

Connection diagram



String Level Rapid Shutdown Devices
3S-RSD-SL

Features

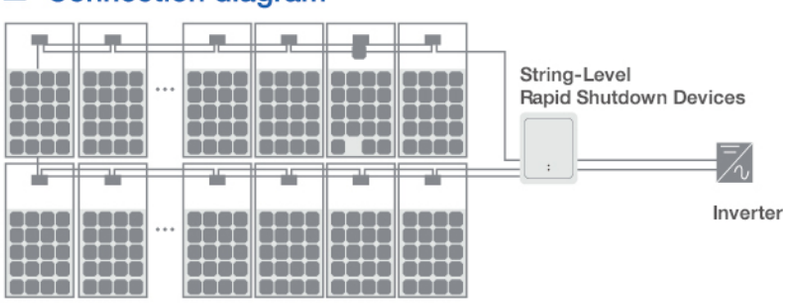
- Quickly cut down power,reduce fire risk,facilitate PV system maintenance and emergency rescue
- Auto Switch Off @ > 70 C Ambient Temp
- Auto Switch Off @ AC Power Loss
- Auto Switch Off @ Arc Fault Detected
- 2 FB1/2 Available For Indicating
- Physical Electric Isolation
- Metal Body， IP65 Outdoor Installation
- 25 Years Long Life Span
- -40°C-+70°C Workable Temp. Range
- Swith off In 5s
- Fuse Proteciton As The Last Firewall



Technical specifications

Parameters	3S-RSD-SL
System Voltage (Vdc)	1500V
Max Current (A)	50A
Number Of Strings	2,4,6,8
	12,16,20
Poles	2,4,6,8
	12,16,20
Operating Voltage	100Vac- 270Vac
Nominal Voltage	230Vac
Nominal Current	60mA
Operating Temperature	40°C-+70°C
Automatically Switch Off By Temperature	+70°C
Storage Temperature	-40°C-+85°C
Ingress Protection Level	IP65
Protection Level	Class II
Certification	CE
Regulations Compliance	EN 60947-183
Mechanical Life	10000
Electrical Life	>1500
Fuse Rating (A)	20A
Arc Fault Protection	Optional

Connection diagram



String Level Rapid Shutdown, After Shutdown The Array Still Exists 600V~1000V DC High Voltage

Solar DC Cable
3SDC-C40/60 series

Functions

- Suited for connectingphotovoltaic system components inside and outside of buildings and equipment
- Over 25 years use life

Technical specifications

Type	3SDC-C40	3SDC-C60
Picture		
Standard	EN50618:2014&IEC62930:2017	
Construction	1*4.0mm^2	1*6.0mm^2
Conductor	Stranded tinned copper (IEC 60228 Class 5) 56/0.285mm (mix0.277mm max0.293mm)	Stranded tinned copper (IEC 60228 Class 5) 84/0.285mm (mix0.277mm max0.293mm)
Stranded OD	2.46mm	3.02mm
Insulation/Sheath	Halogen free crosslinked polyolefin	
Insulation o.d.	4.0±0.15mm	4.6±0.15mm
Color	Black,Red	
Sheath o.d.	5.7±0.2mm	6.3±0.2mm
Properties		
Maximum resistance of conductor at 20°C	≤5.09Ω/km	≤3.39Ω/km
Insulation resistance at 20°C	≥ 709 MΩ·km	≥ 610 MΩ·km
Insulation resistance at 90°C	≥ 0.709 MΩ·km	≥ 0.610 MΩ·km
Surface resistance of sheath	≥10 Ω	
Voltage test of finished cable	AC 6.5KV 5min, No break	
DC Voltage test of insulation	1800V, 240h(85℃, 3%Nacl) No break	
Tensile strength of insulation/ sheath	≥8.0Mpa	
elongation of insulation/sheath	≥125%	
Shrinkage resistant	≤2%	
Acid and alkali resistant	EN60811 - 404	
Ozone resistant	EN60811 - 403/EN50396 - 8.1.3	
UV resistant	EN 50289 - 4 - 17	
Dynamic penetrate force	EN 50618 - Annex D	
(- 40°C,16h) Winding at low temperature	EN 60811 - 504	
(- 40°C, 16h) Impact at low temperature	EN 60811 - 506	
Fire performance	IEC60332 - 1 - 2	
Cland Br Content	EN 50618	
Thermal endurance Test	EN60216 - 1,EN60216 - 2, TI120	

Solar DC Cable
3SDC-C40/60 series

■ Technical specifications

Type	3SDC-C40	3SDC-C60
Application		
Rating voltage	EN/IEC：DC1500V	
Working temperature	-40~90°C	
Max. conductor temperature	120°C	
Short circuit temperature	250°C 5S	
Bending radius	Bending radius	

■ Reference current carrying capacity, Ambient Temperature:60°C

Installation Method	Single cable free in air	Single cable on a surface	Two loaded cables touching, on a surface	Single cable free in air	Single cable on a surface	Two loaded cables touching, on a surface
Reference current carrying capacity	55A	52A	44A	70A	67A	57A

Other PV System Supporting Products

■ PV connector

Mainly used for the connection between lines at DC side in PV solar system

Picture	Item	Withstanding voltage	Rated current	Wire size range	Protection degree	Insulation material	Contactor material	Temperature range
	3SPC-MC4	1500VDC	30A	4mm²/12AWG	IP67	PC	Copper	-40℃～85℃

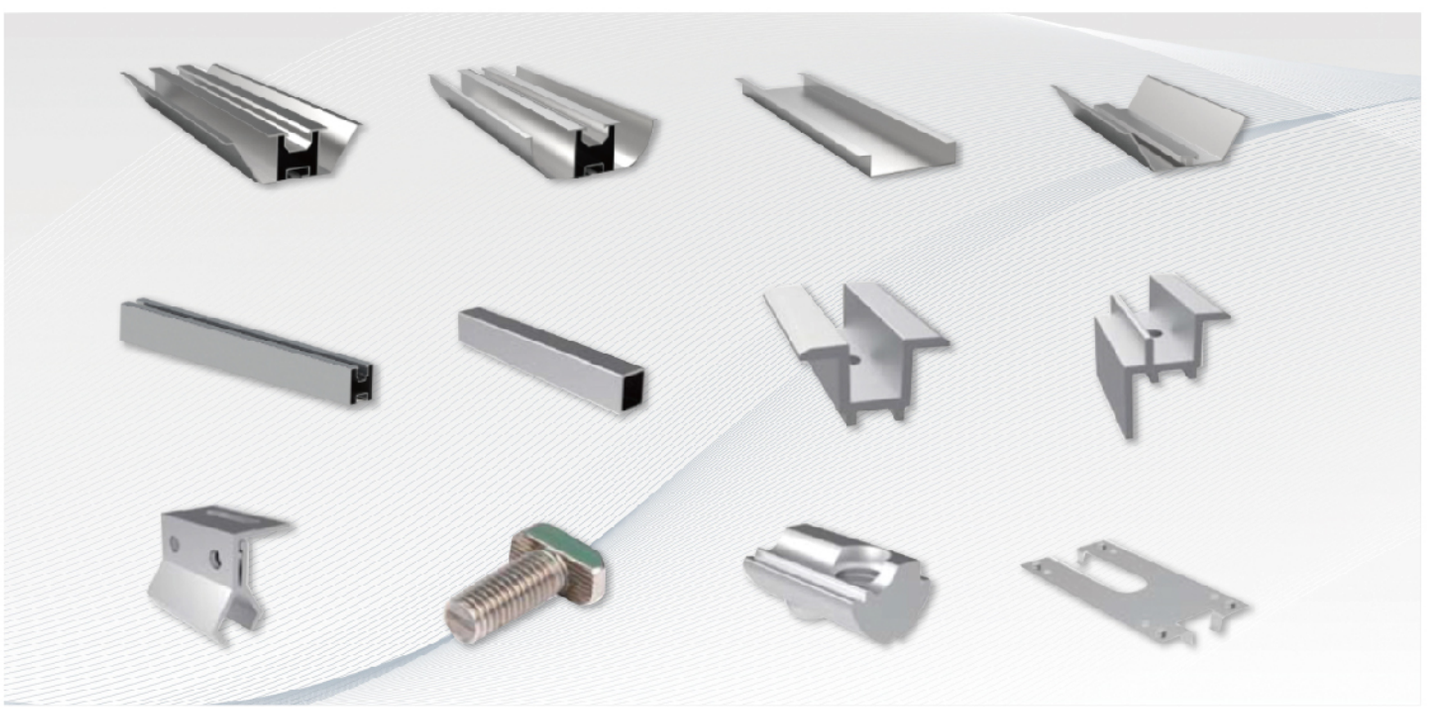
■ DC MCB box

Used in the PV solar power system at DC side for overload protection, short circuit protection, isolation and controlling.

Picture	Item	Rated current	Number of pole	Current	Protection degree	Working temperature
	3SDB-2P	550VDC	2P	10,16,20,25, 32,40,50,63, 80,100,125A	IP65	-25℃～55℃

■ Aluminum alloy series

Provide a variety of aluminum alloy PV bracket, rail and etc. With corrosion resistance, high strength, light weight and other characteristics. Provide a safe, convenient and economical solution for the installation of PV system.



SASSIN INTERNATIONAL ELECTRIC SHANGHAI CO.,LTD.
No.2588 JINHAI ROAD, PUDONG, SHANGHAI, CHINA 201209

TEL: +86-21-50210890 50219970
FAX: +86-21-50217333
E-mail: sassin@sassin.com
Http: //www.sassin.com