



TSUN Module Level Rapid Shutdown(DC 24V)

TSOL-PL80S-11/TSOL-PL80S-21
TSOL-PL120S-11/TSOL-PL120S-21

TSUN Rapid Shutdown Control Box(DC 24V)

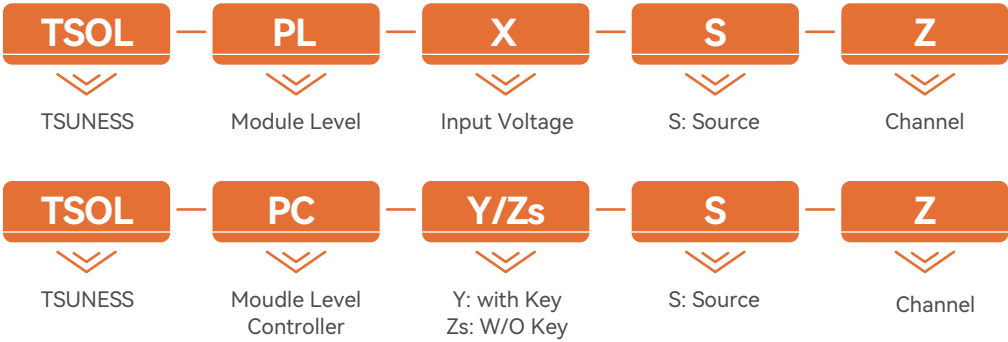
TSOL-PCY/PCZS-S-11
TSOL-PCY/PCZS-S-31
TSOL-PCY/PCZS-S-81

TSUN Module Level Rapid Shutdown(PLC) & Control Box(PLC)

TSOL-PL80P-11
TSOL-PL80P-21
TSOL-PCY/PCZS-P-4



Select Code



TSOL

TSUNESS

—

PC

Moudle Level
Controller

—

Y/Zs

Y: with Key
Zs: W/O Key

—

S

S: Source

—

Z

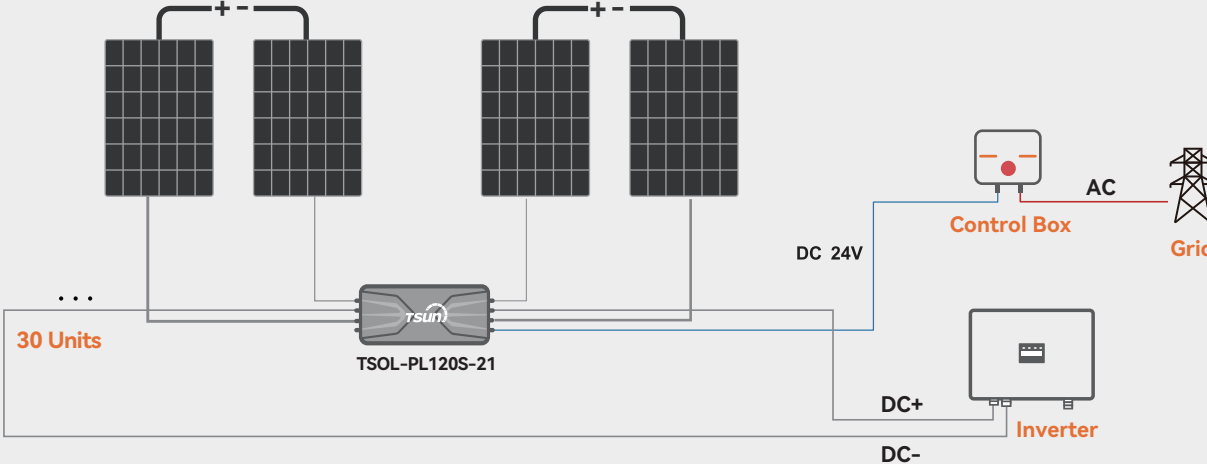
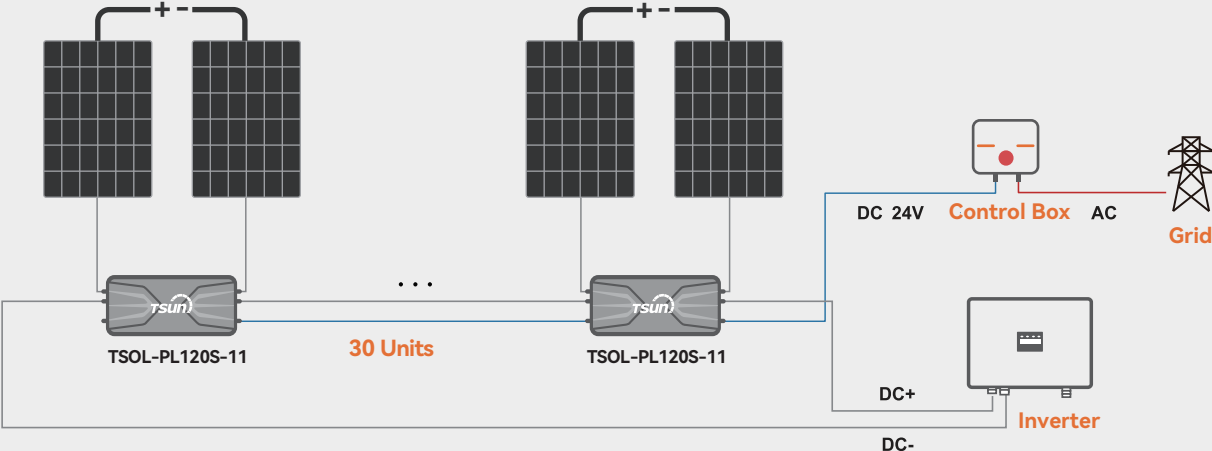
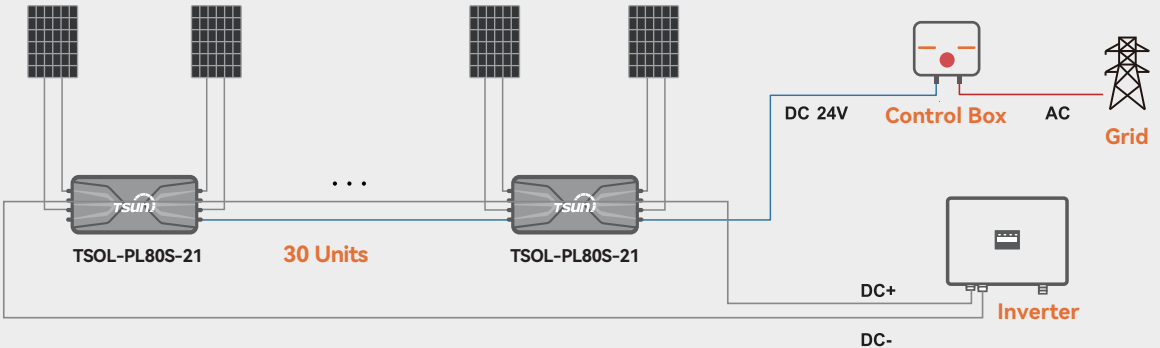
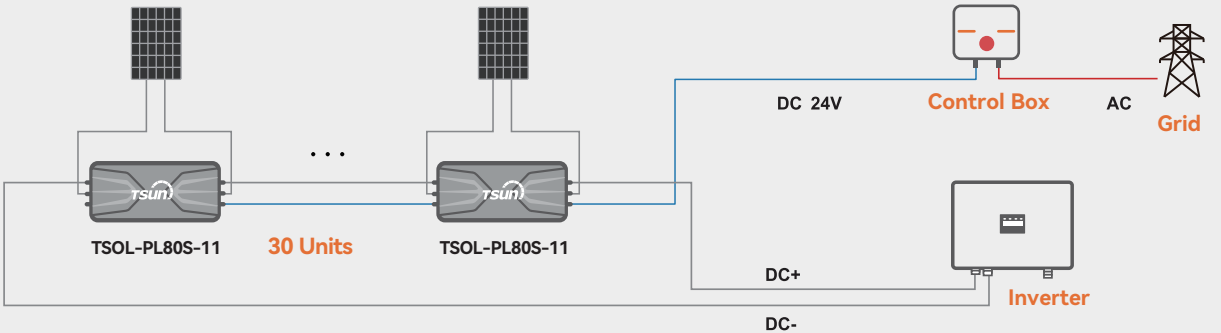
Channel

Technical Data

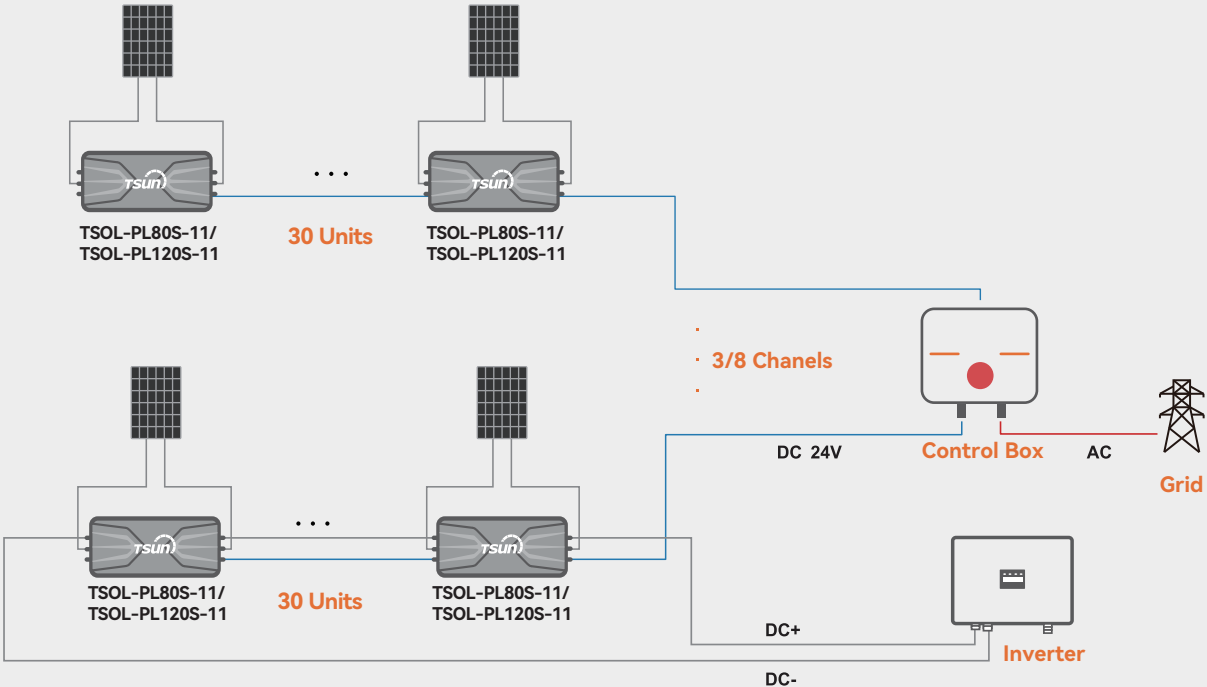
Type	TSOL-PL80S-11	TSOL-PL80S-21	TSOL-PL120S-11	TSOL-PL120S-21
Number of PV Inputs	1	2	1	2
Number of Modules Recommend	1	2	2	4
Maximum Allowed Input Voltage	80V	80V	120V	120V
Maximum Allowed Input Current	20A			
Maximum Output Voltage	80V	160V	120V	240V
System Voltage	1000V / 1500V			
Control Compliance	24VDC +2x 0.8mm² Cable			
Control Requirements	17 W--28 Vat nomi.20mAunit			
Ambient Operating Temperature	-30° C to +80°C			
Protection Temperature	85°C			
IP Level	>IP68,NEMA 4X			
Fire-proof Level	Flame retardant, UL04-V0			
Humidity	0%~90%			
PY Connectors	MC4 (Customized)			
Design Life Span	25 years			
Size	120*51.8*22.4mm	120*50*22.4mm	120*51.9*22.4mm	120*59*22.4mm
Weight	<200g (Excluding Cables)			

Type	TSOL-PCY/PCZS-S-11	TSOL-PCY/PCZS-S-31	TSOL-PCY/PCZS-S-81
Operating AC Voltage Range	180V-264V	180V-264V	180 V-264V
Norminal Frequency	50/60 Hz		
Output Voltage	24V DC		
Output Current	2.2A	8.8A(3 Channels)	17.6A(8 Channels)
24Vdc Control Cable Size	0.823 mm2 /18 AWG		
24Vdc Control Cable Length With Standard Connectors	20 m / 30 m / 100 m		
Spare Terminal Connectors	Yes		
Maximum TSOL-PL	30 Units	3*30 Units	8*30 Units
Dimensions(mm)	155*188*63	248*280*72	248*280*72
With Lock	Optional		
Operating Temperature Range	30°C+55°C (Can work for 8 hours at 70C)		
Protection Class	IP65		
Mounting	Wall Mounted		
Maximum Distance (From controller box to the terminal RSD)	250m		

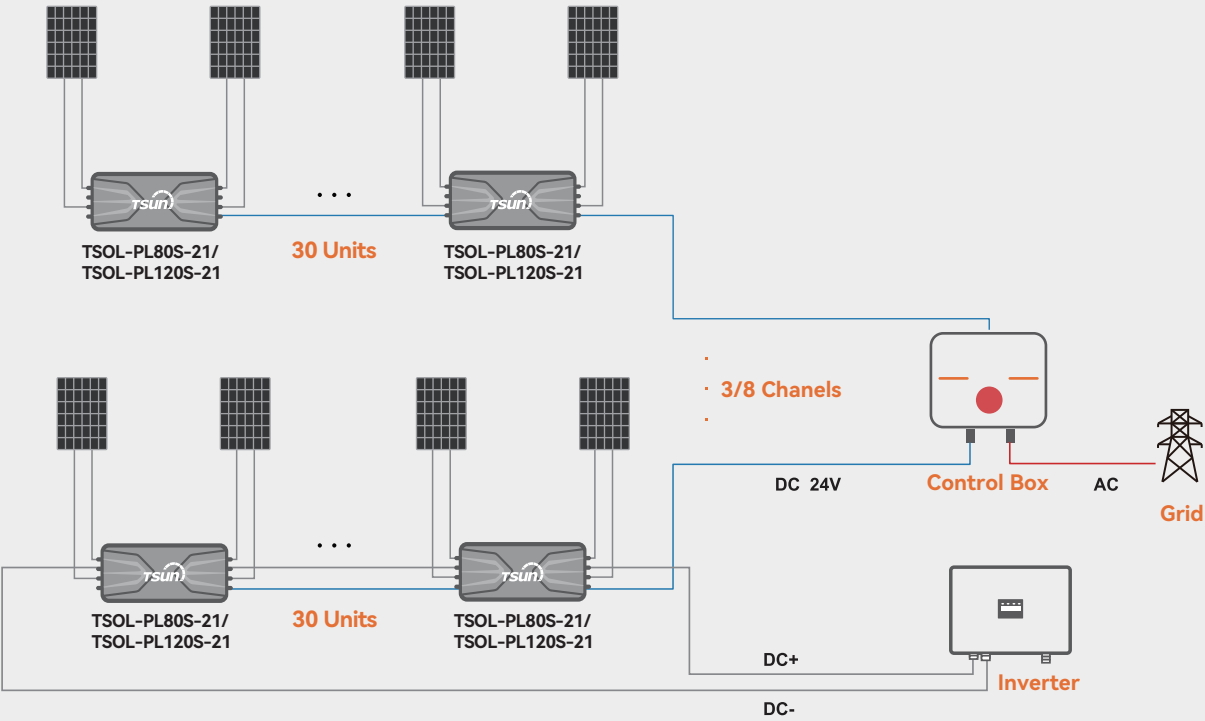
System Diagram



System Digram

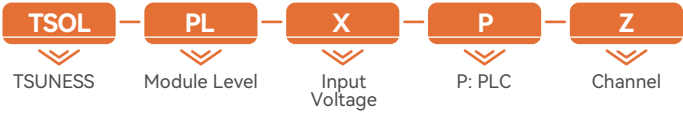


*TSOL-PL120S-11 can connect 1 or 2 modules



*TSOL-PL120S-21 can connect 2 or 4 modules

Select Code



Technical Data

TSOL Series Rapid Shutdown (PLC)

Type	TSOL-PL80P-11	TSOL-PL80P-21
Number of PV Inputs	1	2
Mumber of Modules Recommend	1	2
Maximum Allowed Input Voltage	80V	80V
Maximum Allowed Input Current	15A/20A	
Maximum Output Voltage	80V	80V
System Voltage	1000V / 1500V	
Control Compliance	Power Line Communication (PLC)	
Humidity	Input Over / Under Voltage	
Ambient Operating Temperature	-30° C to +80°C	
Protection Temperature	85°C	
IP Level	>IP68.NEMA 4X	
Fire-proof Level	Flame retardant UL94-VO	
Protections	0%~90%	
PY Connectors	MC4 (Customized)	
Design Life Span	25 years	
Size	120*43.820mm	
Weight	< 150g (Excluding Cables)	
Cable Length, PV1+ Input	600mm	600mm
Cable Length, PV1- Input	600mm	600mm
Cable Length, PV2+ Input	/	600mm
Cable Length, PV2- Input	/	600mm
Cable Length, Power Output	1200mm+1200mm	1200mm+1200mm
Standard Compliance	NEC2017/2020(690.12); UL1741; UL3741; IEC/EN62109; IEC/EN61000	

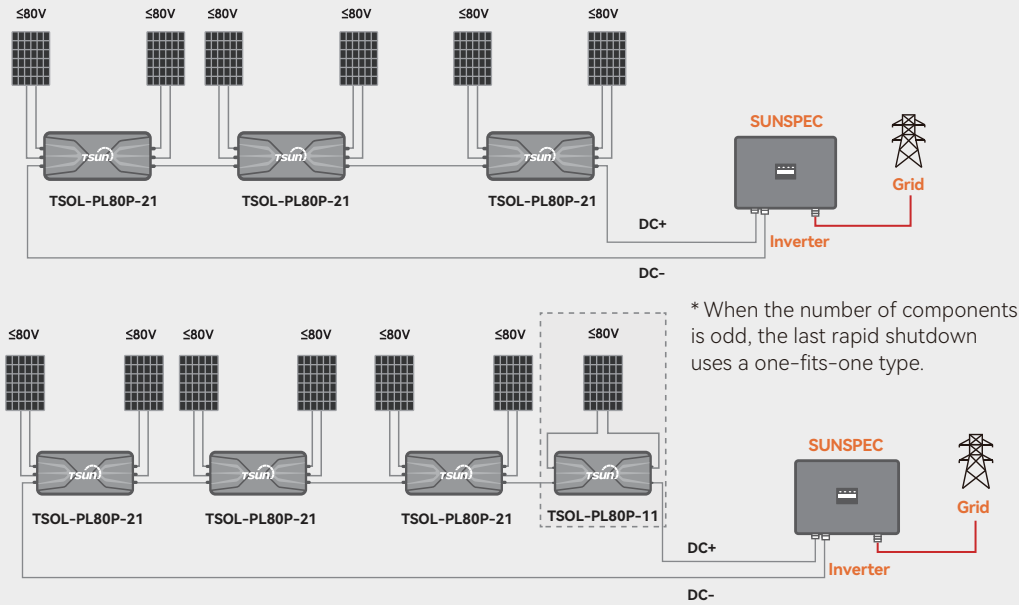
TSOL Series Rapid Shutdown Control Box (PLC)

Model	TSOL-PCY/PCZS-P-4
Operating AC Voltage Range	85 V-264 V
Norminal Frequency	50/60 Hz
Power Consumption	<1W
DC Input Strings	4
Maximum TSOL-PL80P-11	80 Units
Maximum TSOL-PL80P-21	40 Units
Dimensions(mm)	210*175*105
With Lock	Optional
Operating Temperature Range	-30C to +55°C
Protection Class	IP65
Communication	PLC
Mounting	Wall Mounted

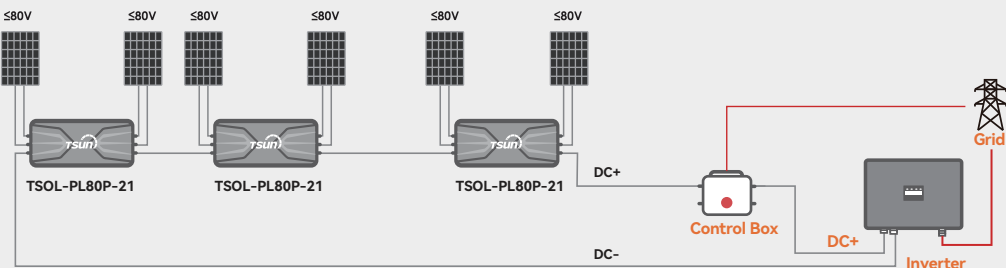
System Digram

TSOL-PL80P-21 When the open-circuit voltage of PV panel is below 80V.

Without control box

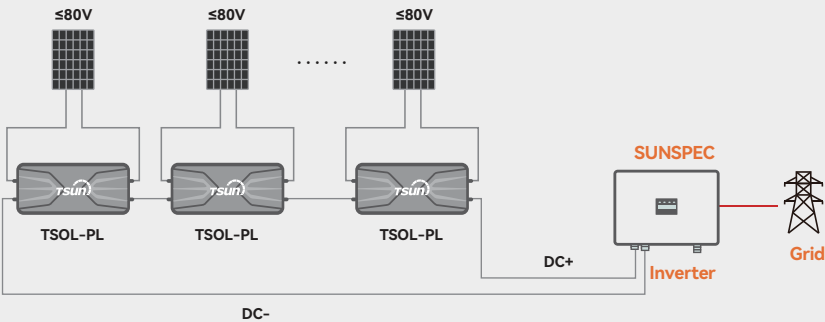


With control box

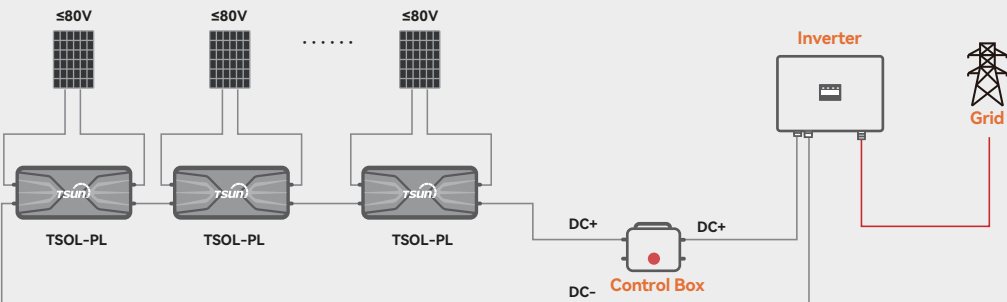


TSOL-PL80P-11 When the open-circuit voltage of PV panel is below 80V.

Without control box



With control box



Technical Data

Type	1-2 strings	3-5 strings	6-10 strings
Main Parameters			
Max System voltage (Vdc)	600/1000/1200/1500		
Max current(A)	600V/1000V-50A		600V/1000V-30A
Number of strings	1/2	3/4/5	6/8/10
Poles	2/4	6/8/10	12/16/20
Operating voltage	100Vac-270Vac		
Nominal voltage	230Vac		
Nominal current	30mA	30mA	60mA
Operating temperature	-40°C~+70°C		
Automatically switch off by temperature	+70°C		
Storage temperature	-40C~+85°C		
Ingress protection level	IP66		IP65
Protection level	Class II		
Certification	CE		
Regulations compliance	EN 60947-1&3		
Mechanical life	10000		
Electrical life	>1500		
PID recovery function	/	Optional	Optional

PID Recovery Module Spec(optional)

AC Input

Static Power	<0.5W
Operating Power	3.75W
Max.Power	8.75W

DC Output

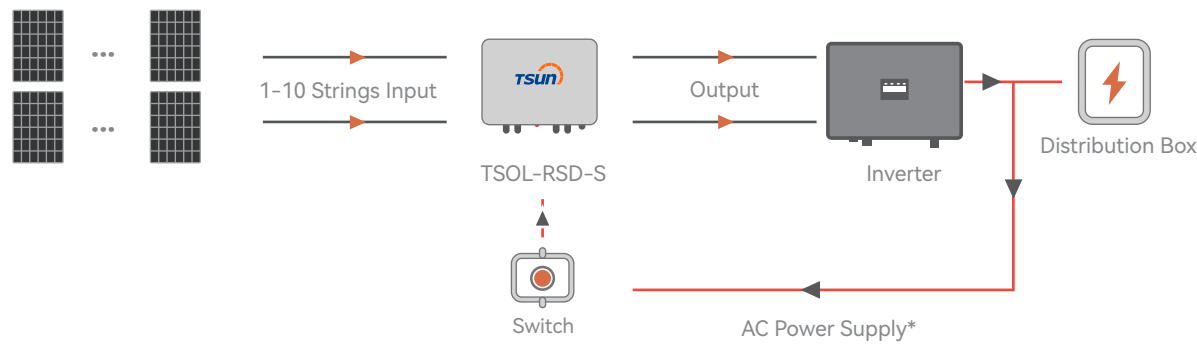
Rated Output Voltage To Ground	600V
Rated Output Current	3.3mA
Max. Short Circuit Current	6.7mA

PV Modules And Inverter Requirements

Max System Volatage	1500V
Module Type Required	P Crystalline Silicon Type
Minimum Insulating mpendance	200kQ

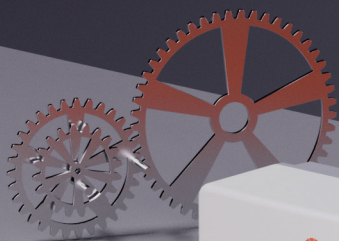
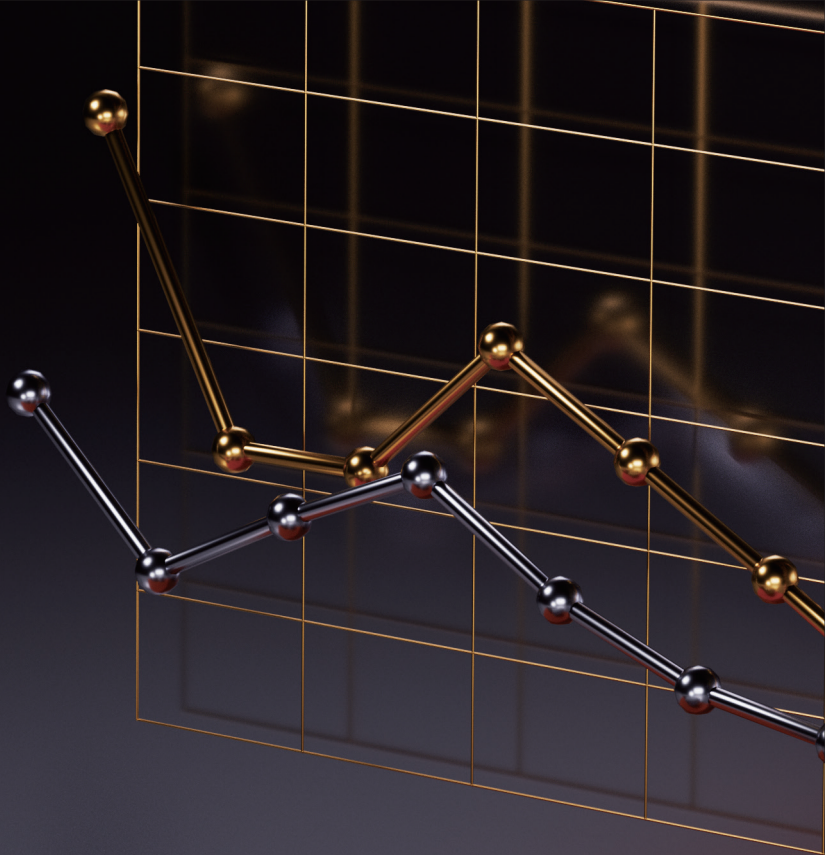
Other Info

Operating Temperature Range	-40°C~+70C(3-5)	-20°C~+60°C(6-10)
Operating Relative Humidity	0%~98%	
Max. Altitude Without Derating	4000m	



TSUN PV Array-level Rapid Shutdown

TSOL-RSD-S600/S1000/S1200/S1500-X



Automatic Shutdown



Automatically shutdown the DC power of panels when detecting temperature of the area is higher than 85°C.

Shutdown With Distribution Box



In emergency, firefighters or homeowners can manually turn off the AC power of the distribution box.

Shutdown With Switch



In emergency, firefighters or homeowners can manually turn off the additional switch.