

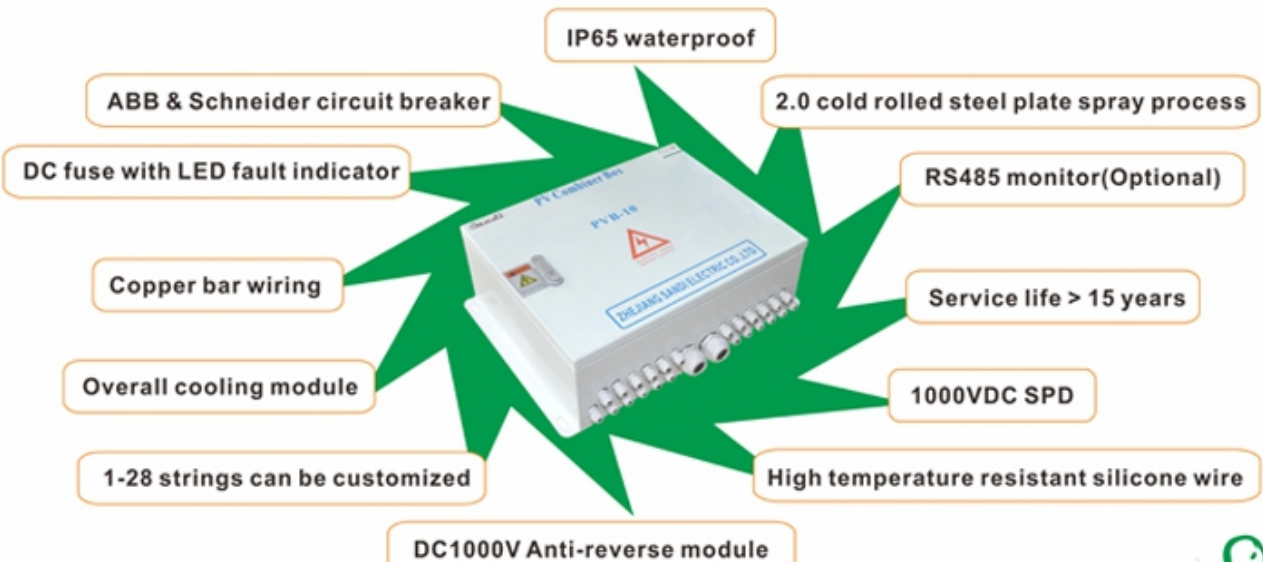


# PV Combiner Box(1-30 strings)

**IP65 Economical ABS Engineering Plastic Type: 1-6 strings**



**IP65 Outdoor Cold Rolled Steel with Powder Coating: 4-30 strings**



## **PV Combiner Box**

### **1. Product description**

In solar photovoltaic system, in order to reduce connection between PV module and inverter, convenient maintenance, reduce consumption, improve its safety and stability, it needs to add combiner box between PV module and inverter.

**PV combiner box** has following function: PV convergence, current anti-reverse protection, over-current, over-voltage protection, lightning protection.


Our combiner box has above function, and also could match with PV grid tie inverter and off grid inverter to compose one complete PV generating system.


When choosing PV combiner box, user could connect solar panels in parallel or in series to place in combiner box according to inverter's input voltage range, output power, then go through breaker and surge protection to work with inverter.

### **2. Main characteristic :**

- Applicable for outdoor PV systems;
- Each PV array attached to DC fused protection;
- Wide DC voltage input range with maximum open-circuit voltage up to 1000V;
- High voltage Lightning protection (SPD) special for PV;
- And anti-reverse protection(optional);
- PG cable glands/MC4 connector input, convenient and safe system wiring;
- PV special high voltage circuit breaker control output;
- Protection class IP65 for outdoor use;
- Output Waterproof terminals;
- Wall mounting type is easy to installation;
- RS485 intelligent monitoring(Optional)

### 3. Technical Parameters:

Model	PVB-1	PVB-2	PVB-3	PVB-4	PVB-5	PVB-6
<b>Input</b>						
Max. PV Array Input Strings	1	2	3	4	5	6
Max. PV Array Voltage	1000Vdc					
Each string input rated current	10A/15A	10A/15A	10A/15A	10A/15A	10A/15A	10A/15A
Input over-current fuse	Yes					
Anti-reverse module protection	Optional					
Input connector	PG7 cable gland					
<b>Output</b>						
Output Strings	1 (can be customized)					
Rated Output Current	10A/15A	20A/30A	30A/45A	40A/60A	50A/75A	60A/90A
Output DC Circuit Breaker	Yes					
Surge protective device (SPD)	Yes					
Output connector	PG21 cable gland					
<b>Other</b>						
Protection Degree	IP65					
Environment Temperature	-25~+60°C					
Environment Humidity	<90% No condensation					
Altitude	≤3000m					
Installation	Indoor/outdoor					
Box material	ABS engineering plastic box					
Product Picture						



Model	PVB-8	PVB-10	PVB-12	PVB-16	PVB-20	PVB-24
<b>Input</b>						
Max. PV Array Input Strings	8	10	12	16	20	24
Max. PV Array Voltage	1000Vdc					
Each string input rated current	10A/15A	10A/15A	10A/15A	10A/15A	10A/15A	10A/15A
Input over-current fuse	Yes					
Anti-reverse module protection	Yes					
Input connector	PG9 cable gland					
<b>Output</b>						
Output Strings	1 (can be customized)					
Rated Output Current	80/120A	100/150A	120/180A	160/240A	200/300A	240/360A
Output DC Circuit Breaker	Yes					
Surge protective device (SPD)	Yes					
Output connector	PG21 cable gland					
<b>Other</b>						
Protection Degree	IP65					
Environment Temperature	-25~+60℃					
Environment Humidity	<90% No condensation					
Altitude	≤3000m					
Installation	outdoor					
Box material	Iron with powder coating					
Type of installation	Wall mount					
Product Picture						

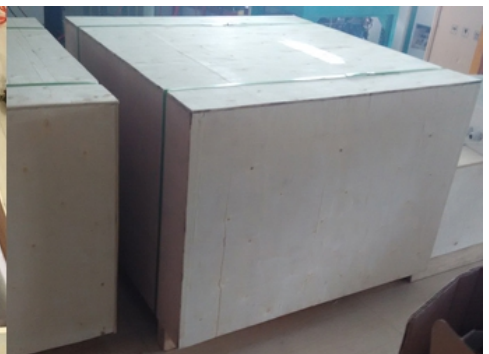
※Above parameter only for reference, could be custom made to user specifications.



Advantages & Packing

**SANDI Difference between SANDI PV Combiner Box and Others**

	SANDI IP65 PV Combiner Box	Others
Picture		
(Surge Protection Device) SPD	Adopts DC1000V-40KA/2P PV special DC high voltage 1000V surge protection device (SPD), which has TUV approved, superior to other low-end product	Ordinary SPD is only suitable for below 300V low voltage, once system voltage is higher than 300V, the ordinary SPD will be burnt and cause the whole pv combiner box get fire
Circuit Breaker	Adopts PV DC high voltage circuit breaker 600V/2P or 1000V/4P, Schneider or ABB, which is more safe and reliable	Used AC/DC universal circuit breaker, less reliable and higher fault rate
Fuse	Adopts DC1000V withstand voltage fuse with LED fault indicator, which ensures reliable disconnection in high DC voltage.	
Anti-reverse module	Adopts Anti-reverse protection module. Withstand voltage can reach 1800V, module bottom with heat sink, won't be oxidized and with longer service life than diode. It can protect solar arrays of reverse the current and PV input reverse-polarity protection.	Used cheap anti-reverse diode, diode without heat sink, time is long, diode is easily oxidized, diode withstand voltage level is also low. Shorter service life
Protection class	IP65 protection class suitable for outdoor use. The seal ring adopts heat-resistant silicon rubber, tightly consolidated with cabinet, it's waterproof, heat-resistant and anti-aging, superior to the common rubber	Normal rubber seal, waterproof performance is not better than us
Cable	Adopts DC1000V silicone wire, which is anti-aging, made by copper core silvering, high conductivity	Normal BVR cable, poor conductivity and aging serious if used long time
Connector	Adopts high quality MC4 PV connector or PG cable glands, which is convenient for wiring and waterproof	
Cooling	Adopts Aluminium radiator, which can keep it radiating well and fully	No radiator, poor cooling performance
Cabinet	The cabinet adopts IP65 ABS engineering plastic or cold-roll steel sheets and spraying technology, which is heat-resistant, anti-corrosion, anti-rust, beautiful and practical, strong and durable	Normal plastic and metal sheet, less durable and easily to rust if used for long time
Service	Direct Manufacture, Professional Factory, Quality and Service is reliable	





Project Case





