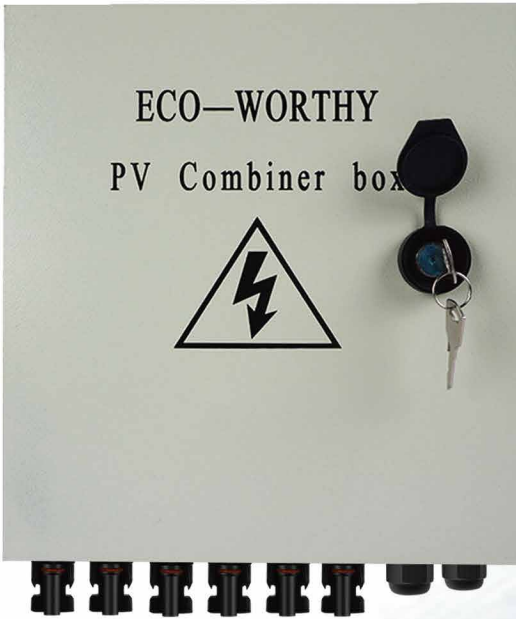




**ECO-WORTHY**  
Make Rural Life Better



# COMBINER BOX

6 string combiner box & 4 string combiner box

User Manual >>>>>>>

## Introduction

ECO-WORTHY PV Combiner Box is widely used in PV grid-tie and off-grid solar power system. With multifunction: PV array input with first class combination. Quickly cut off circuit, anti-thunder protection, anti-reverse, overload, etc. The combiner box protects pv solar panel and inverter. Besides it will reduce the length of cable connect from panel to inverter, optimize system instruction makes the system more useful and maintenance.

All in all, it will make the PV power system increase output power.

## Features

- (1). Multiple PV array input, Max current of single PV input array is 10A.
- (2). Single PV input array installs with high voltage fuse, its function over-load, over-charge protection.
- (3). Install with professional high voltage lightning arrester , both positive and negative with anti-thunder protection.
- (4). Professional high voltage diode, with anti-reverse and reverse connection protection.
- (5). Professional high voltage breaker controls output, with anti-circuit protection and make the system more reliable, safety.
- (6). Suitable for outdoor use, waterproof class is IP65.

## Combiner Box Connection Indicate

DC – INPUT : Solar panel negative“-” input port

DC + INPUT : Solar panel positive“+” input port

DC- OUTPUT : PV combiner box negative“-” output port


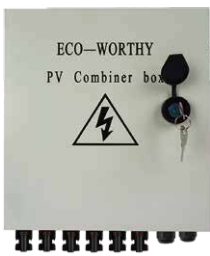
DC+ OUTPUT : PV combiner box positive “+” output port

PV combiner box connects ground/GND port

## Installation & Maintenance

1. Check PV fuse protector timely to prevent the fuse blown. If the fuse blown, the solar panel will under open-circuit status, battery couldn't offer output power.
2. Don't connect PV input and output port reverse, otherwise the output equipment couldn't work normally, moreover damage other equipment.
3. When maintain or test this combiner box, please notice the input and output port may with power, please be careful of electric shock or damage other equipment.
4. After thunder weather, please check anti-thunder module, if the malfunction indicator is "red", please replace the module in time.
5. This box is fixed by the four bottom installation holes with screws, please install at aeration drying place, and avoid direct sunshine, high environment temperature and moisture influence equipment function.
6. This combiner box connects with ground line to prevent thunder damages equipment and solar panel.
7. Usage instruction: Loose the Output Waterproof Connectors and connect the cables with breaker negative (right) and positive (left) port, please make sure tight the cable and waterproof connectors well. Kindly advise choose  $\geq 10\text{mm}^2$  cable, please connect the output negative and positive to solar charge controller or inverter. And then connect solar panel negative and positive with DC Input ports respectively. Last step turn the breaker switch on.

# Parameter

		
	4 string combiner box	6 string combiner box
Number of Max. connection solar array	4	6
Max input current of single solar array	10A	10A
Total input current of solar array	40A	60A
Max input solar system wattage (12V)	720W	1080W
Max input solar system wattage (24V)	1440W	2160W
Max input solar system wattage (48V)	2880W	4320W
Max Input Voltage of single solar array	250V	250V
Max Output Voltage	250V	250V
Number of circuit breaker poles	2	2
Circuit breaker rated current	63A	63A
Product Weight	2kg	4.9kg
Product Size	220*170*110mm	260*320*115mm