

# DC String Combiner Box for Solar PV Arrays

The combiner box merges multiple photovoltaic array source circuits into a single DC output. Each power circuit is individually protected by a touch-safe fuse holder.



## ADDITIONAL IMAGES



## Overview



Standard 4-string configuration suitable for a wide range of solar PV array specifications.

### Reliable Solar PV String Consolidation

This DC String Combiner Box is designed to consolidate multiple photovoltaic source circuits into a single DC output, streamlining system wiring and enhancing safety. It features individual touch-safe fuse holders for fail-safe operation and provides a convenient access point for routine maintenance and troubleshooting. Built for versatility, it is widely utilized in residential setups, solar farms, and solar pumping systems.

## Technical Ratings

### Key Electrical Metrics

**20 kA**

Nominal Discharge Current (In)

**40 kA**

Max Discharge Current (Imax)

**3.5 kV**

Voltage Protection Level (Up)

### System Voltage Ratings

600V DC, 1000V DC, 1100V DC Max

## Protection & Safety



The enclosure is built from high flame retardant material with IP65 water resistance for long service life.

### Safety Components

- Surge Protection Device (SPD) MDSP-600 / MDPV-30
- DC Circuit Breaker MD812-63
- Touch-safe fuse holders for individual circuit protection
- High flame retardant enclosure material

## Environmental & Durability



Engineered to operate in extreme environments ranging from  $-25^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$ .

### Ingress Protection

IP65

### Operating Temperature

$-25^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$

### Build Quality

Waterproof, High-Temperature Resistant, Impact Resistance, UV Resistant Panel

## Construction Details



High-quality internal construction featuring copper busbars and waterproof sealing for maximum reliability.

## Materials & Components

Component	Material/Feature
Enclosure	High flame retardant plastic
Conductors	Copper platons for efficient conduction
Sealing	Waterproof sealing strip
Panel	Grind arenaceous / HD panel

## Installation

### CONVENIENT INSTALLATION



Convenient installation with reserved screw holes on the back for strong mounting stability.

## Mounting & Stability

- Reserved rear screw holes for direct installation
- Fixed screw assembly for strong stability
- Compact design for wall or frame mounting

## Compliance

Executive Standards	CE, GB 7251.3 2006, IEC 60529, E660439-1
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