

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°C to $+55^{\circ}\text{C}$.

Ingress Protection

IP65

Operating Temperature

-25°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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