# Fused Solar Combiner for Vans & RVs



Price: CAD \$229.00

#### SKU: MO-DCCOMB-F3

**Product Categories**: <u>Combiners: Solar & Battery</u>, <u>Shop</u>, <u>Terminal Blocks</u>, <u>Wiring &</u> <u>BOS</u>

**Product Tags**: <u>canada</u>, <u>fuse</u>, <u>fused combiner</u>, <u>rooftop combiner</u>, <u>rv solar combiner</u>, <u>solar combiner</u>, <u>solar combiner</u>, <u>van conversion solar</u>, <u>van solar combiner</u>, <u>wire transition</u>

#### Product Page:

https://www.modernoutpost.com/product/fused-solar-combiner-for-vans-rvs/

### **Product Summary**

This fused solar combiner for vans & RVs is a bundled set of parts designed to protect your rooftop solar from electrical faults. Included is a rail-mounted junction box with two cable glands, three touch-safe fuse holders with 1000V, 20A fuses, combiner busbar, and distribution block.

# **Product Description**

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The positive lines from your solar modules are wired through the fuses, while the negative wires route through the distribution block.

# Why do you need this fused solar circuit combiner on your RV or van conversion?

You should have a disconnect breaker for the solar array down at the charge controller for fault protection and servicing, so why can't you simply use <u>MC4</u> <u>branch circuit connectors</u>] on the roof for combining your solar panels? You can use the **MC4 branch circuit connectors** for combining 2 solar panels (or series strings) in parallel, but you should not use these connectors for 3 or more

panels (or series strings), and here's why...

Fault Current Handling

In the event of a fault in one of the solar panels or strings (wire of module itself) it is possible that the other two solar modules (or strings) will backfeed that fault. You must ensure that the wiring can handle this fault current. Typically, solar module internal wiring is not up to the task of handling more than 20A (refer to your spec sheet for the max series string rating).

A 300W solar panel must have wiring rated to handle at least 16A (1.56 x 10A), hence two panels backfeeding a fault needs to have wiring & fusing capable of handling more than 30A.

Note also that standard #10 PV wire is only rated for 30A max.

Wire Size Transition

Do you need to move up a wire gauge or two in order to handle your parallel combined circuits? This box allows you to transition to #8, #6, or #4 for the home run down to your controller. Standard #10 wire & MC4 connectors should not go above 30A.

Fused Solar Combiner Specifications...

Box Dimensions :  $6'' \times 5'' \times 3''$ .

DIN rail mount inside.

Fusing : 20A, 1000VDC (other sizes are available)

Terminal block : 80A

# NOT RATED FOR RESIDENTIAL USE.

For residential solar circuit combining, please use standard solar combiners such as...

## MNPV3] MNPV6 MNPV6-DISCO

plus many other models - we carry all models from Midnite Solar and Outback Power.

**Product Attributes** 

- Dimensions: 1 × 1 × 1 cm
- Weight: 1.4 kg