

MIDNITE SOLAR

The Disco Combiners

MidNite Solar has 4, 6, 8 and 16 string Disconnecting PV Combiners. The MNPV8HV and MNPV16HV can be re-configured in the field to be used with non-isolated inverters where both the Positive and Negative need to be disconnected. This also allows these to be used to combine and disconnect two arrays feeding two separate isolated inverters. Our Disconnecting and Standard/Pre Wired/ Combiners are Plug and Play, saving both Time and Money in the field.

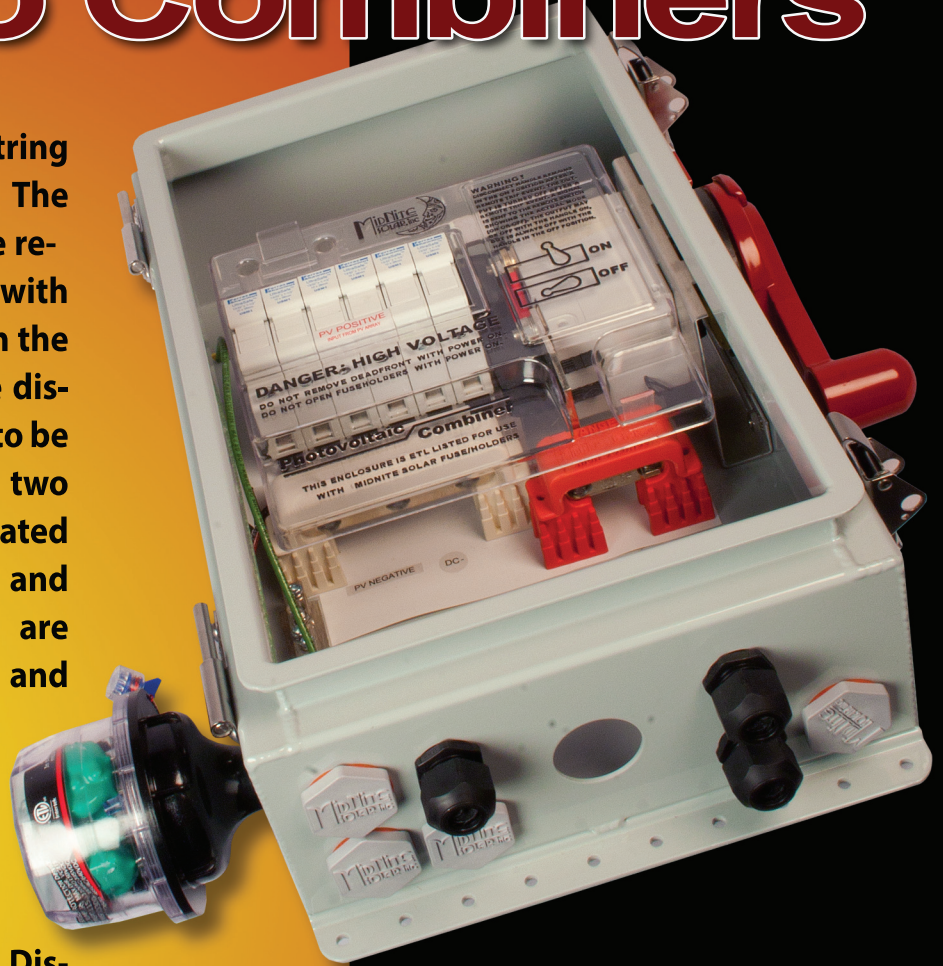
In 2014 the NEC will require a Rapid Shutdown system for solar arrays. MidNite Solar's Birdhouse, when used with our Disconnecting Combiners and optional power supply board meet this requirement (MNDiscoPSB).

The Birdhouse Emergency Shut off Switch Provides a safe means to disconnect high voltage PV arrays as well as battery and PV power on battery based systems when used with our MidNite Battery Disconnect Module.

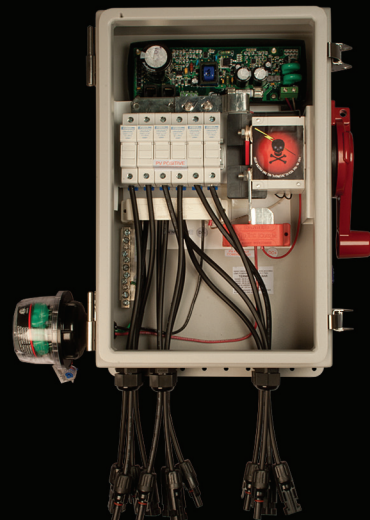


**MidNite Solar, America's #1
Array Combiner Manufacturer!**

www.midnitesolar.com
17722 - 67th Ave NE Arlington, WA 98223
Ph. 360.403.7207 Fax 360.691.6862



**SHOWN ABOVE
Six String 125 Amp/600V
Disconnecting Combiner
Model: MNPV6HV**



**Pre-wired Disconnecting PV
Combiner - MNPV6HV-MC4**

MidNite Solar Disconnecting Combiner Specifications

| Model Num | MNPV4HV 3R Basic | MNPV4HV 3R Deluxe | MNPV6HV 4X | MNPV8HV 4X Or 3R | MNPV16HV 4X |
|--|--|--|--|--|---|
| Strings | 4 | 4 | 6 | 8-Single inverter 4 each for dual inv. 4-transformerless inv. | 16-Single inverter 8 each for dual inv. 8-transformerless inv. |
| Maximum Volts | 600 | 600 | 600 | 600 | 600 |
| Birdhouse Optional PV Power Supply (MNDiscoPSB) | NO | YES | YES | YES | YES |
| *Surge Protection Device Included | NO | SPD600 | SPD600 | SPD600 | SPD600 |
| Fuses/Fuseholders | NOT PROVIDED | PROVIDED | PROVIDED | PROVIDED | PROVIDED |
| Deadfront | YES | YES | YES | YES | YES |
| Lug Temperature Rating | 90° C | 90° C | 90° C | 90° C | 90° C |
| Strain Reliefs & Hole Plugs Provided | NO | YES | YES | YES | YES |
| **Convertible Configuration | NO | NO | NO | YES | YES |
| Enclosure Rating | Nema 3R | Nema 3R | Nema 4X | Nema 4X or 3R | Nema 4X |
| Enclosure - Powder coated aluminum with stainless hardware | YES | YES | YES | YES | YES |
| Maximum Number of Switched Output Circuits | ONE | ONE | ONE | TWO | TWO |
| Wire range for String Input | 14 to 6 AWG (1.63mm to 4.11mm) | 14 to 6 AWG (1.63mm to 4.11mm) | 14 to 6 AWG (1.63mm to 4.11mm) | 14 to 6 AWG (1.63mm to 4.11mm) | 14 to 6 AWG (1.63mm to 4.11mm) |
| Maximum String Fuse Rating | 30 amp | 30 amp | 30 amps | 30 amps | 30 amps |
| Output Switch Rating | 100 amp switch 80 amp busbar | 100 amp switch 80 amp busbar | 100 amp switch 100 amp busbar | 175 amps - single 8 string 100 amps each - 2 inverters 100 amps - transformerless inverter | 175 amps - single 16 string, 100 amps each - 2 inverters 100 amps - transformerless |
| Output Wire Range | 14 to 1/0 (1.63mm to 8.25mm) | 14 to 1/0 (1.63mm to 8.25mm) | 14 to 2/0 AWG (1.63mm to 9.27mm) | 14 to 2/0 AWG (1.63mm to 9.27mm) | 14 to 350mcm |
| Lockable | YES | YES | YES | YES | YES |
| Rating | UL1741 | UL1741 | UL1741 | UL1741 | UL1741 |
| Mounting Options and Angle | Vertical wall mount, pole mount or sloped roof mount to 14 degrees incline (3 in 12 roof pitch) | Vertical wall mount, pole mount or sloped roof mount to 14 degrees incline (3 in 12 roof pitch) | Vertical wall mount, pole mount or sloped roof - Any angle | Vertical wall mount, pole mount or sloped roof NEMA 3R = mount to 14 degrees incline (3 in 12 roof pitch), NEMA 4X = Any angle | Vertical wall mount, pole mount or sloped roof NEMA 4X = Any angle |

*Models with Surge Protection (SPD) are shipped with only one SPD. We suggest that with some of the configurations of the configurable combiners multiple SPD's be used.

**Convertible Configurations can be combined for: All strings in parallel or be separated for use with 2 inverters or be separated for use with non-isolated inverters