

MIDNITE SOLAR INC.

PV COMBINERS

MidNite Solar offers a range of V Transition Boxes and Combiners from our MN V3 to the MNPJ10 1000 volt to the MN VB-MC4 Pre-Wired Combiner/

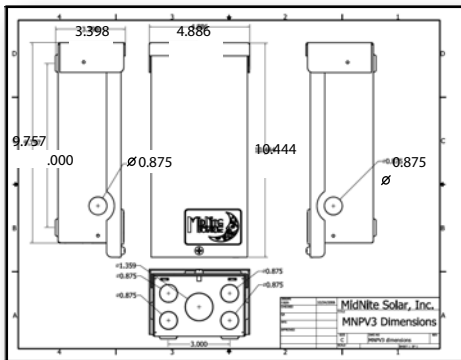
This range of combiners accommodates PV systems as small as a two string off grid cabin up to 12 strings for a 50KW commercial grid tie inverter. The MNPV series of combiners are the result of 20 years of design and manufacturing experience in the renewable energy industry. Each unit has the same quality features such as:

- Aluminum rainproof type 3R enclosure
- Internal plastic injection molded dead front covers
- Knock outs that accept waterproof strain reliefs, conduit or panel mount MC type connectors
- Knock outs for lightning arrestors
- Uses 150VDC & 300VDC breakers or 1000VDC fuses depending on model number
- ETL listed to UL1741 for use in the US and Canada
- Adaptable for two separate inverters or charge controllers on certain models

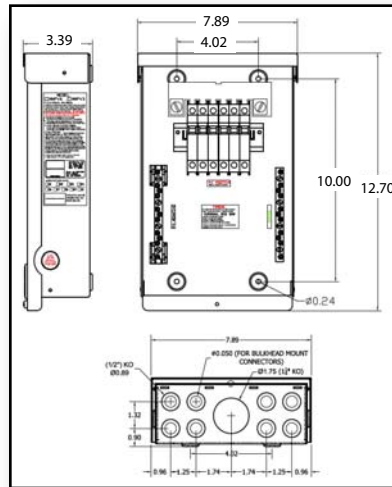


PV Transition Boxes & Combiners

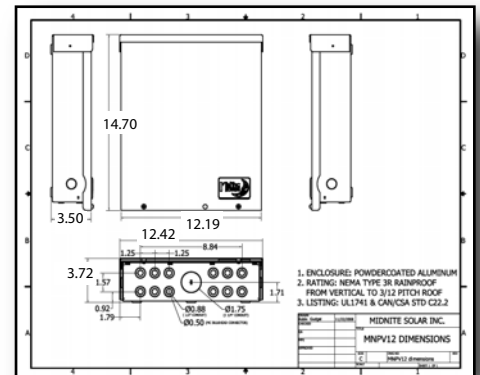
MidNite Solar offers a range of PV Combiners from our MNPV3 to the MNPV12v to the MNPV10-1000 volt to all our pre-wired combiners. This range of combiners accommodates PV systems as small as a two string off grid cabin up to 12 strings for a 50KW commercial grid tie inverter.



MNPV2-MC4, MNPV3 and MNPV2-1000



MNTRANSITION, MNPV4-MC4, MNPV6-MC4, MNPV6, MNPV6-250 and MNPV4-1000



MNPV8-MC4, MNPV12, MNPV12-250 and MNPV10-1000



MidNite Solar PV Combiner Specifications

	MNPV2-MC4, MNPV3 and MNPV2-1000	MNTRANSITION, MNPV4-MC4, MNPV6-MC4, MNPV6, MNPV6-250 and MNPV4-1000	MNPV8-MC4, MNPV12, MNPV12-250 and MNPV10-1000
Enclosure rating	Outdoor Rainproof Type 3R	Outdoor Rainproof Type 3R	Outdoor Rainproof Type 3R
Enclosure material	Powder coated aluminum with stainless hardware	Powder coated aluminum with stainless hardware	Powder coated aluminum with stainless hardware
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 mount to 14 degrees incline (3 in 12 roof pitch)
Number of PV strings	MNPV2-MC4 two strings using fuses up to 600 volts MNPV3 three strings using breakers up to 150 volts or two strings using fuses up to 600 volts MNPV2-1000 two strings using fuses up to 1000 volts	MNPV4-MC4 four strings using fuses up to 600 volts MNPV6-MC6 six strings using fuses up to 600 volts MNPV6 six strings using 150 volt breakers or four strings using fuses MNPV4-1000 four strings with fuses up to 1000 volts MNTRANSITION four strings in, 2 per channel.	MNPV8-MC4 eight strings using included fuses up to 600 volts MNPV12-600-X2 two strings of non isolated up to 600 volts using included breakers MNPV12 twelve strings using breakers up to 150 volts or ten strings using fuses up to 600 volts MNPV12-250 six strings using using breakers up to 300 volt MNPV10-1000 10 strings using fuses up to 1000 volts
Maximum number of output circuits	1 for all	MNTRANSITION, MNPV4-MC4, MNPV6 & MNPV4-1000 is two, MNPV6-250 is one	2 for all
Wire range for string input	MNPV2-MC4 NA uses MC4 connectors, MNPV3 & MNPV2-1000 14-6 AWG	MNPV4-MC4 NA uses MC4 connectors MNPV6, MNPV6-250 & MNPV4-1000, 14-6 AWG MNTRANSITION 14-6 AWG	MNPV8-MC4 NA uses MC4 connectors MNPV12-600-X2 14-6 AWG MNPV12 and MNPV12-250 14-6 AWG
OCPD Included	MNPV2-MC4 - YES MNPV3 & MNPV2-1000 - NO	MNPV4-MC4 & MNPV6-MC6 - YES MNPV6, MNPV6-250 & MNPV4-1000 - NO MNTRANSITION - No none needed	MNPV8-MC4 & MNPV12-600-X2 - YES MNPV12, MNPV12-250 & MNPV10-1000 - NO
Maximum OCPD rating	30 amp with fuses and 63 amps with 150 volt breakers	30 amp with fuses, 63 amps with 150 volt breakers and 50 amps with 300 volt breakers	30 amp with fuses, 63 amps with 150 volt breakers and 50 amps with 300 volt breakers 20 amps with 600 volt breakers
Maximum output amps	60 amps for all	80 amps for fused, 120 amp for breakers 180 amps per channel for MNTRANSITION	200 Amps with Fuses and 150 volt breakers, 168 amps with 300 volt breakers
Output wire range	14 to 1/0 AWG	14 to 1/0 AWG	14 to 1/0 AWG (Except MNPV12-600-X2 it is #6)
Lug temperature rating	90 deg C	90 deg C	90 deg C
Deadfront	Custom molded plastic deadfront	Custom molded plastic deadfront	Custom molded plastic deadfront
Lockable	Yes	Yes	Yes
Rating	UL1741	UL1741	UL1741