



**NEXTEK Power Systems, Inc.**

## NPS-904 PV Combiner Box



The NPS-904 houses up to four 1kW NPS-R1000 MPPT solar regulators, and routes power from up to sixteen solar panel strings to up to four NPS-1000 Power Gateways for a maximum of 4000 Watts of solar power.

**T**he NPS-904 provides a simple method to connect solar panels to four NPS-1000 Power Gateways.

**F**our NPS-R1000 MPPT solar regulators maintain PV voltage for optimum power output under the varying conditions of solar irradiance and temperature.

**S**ixteen 6A, DC rated fused inputs accept 4.5 amps each for a total of 72 amps from PV arrays. The fuses provide 125% overload capacity as required by the NEC.

**O**utput power is distributed to the NPS-1000 Power Gateways through four 25 amp circuit breakers, which are ganged together to form a single disconnect.

**A** single-point connection to ground is made at the backplane, which ties all positive PV inputs together.

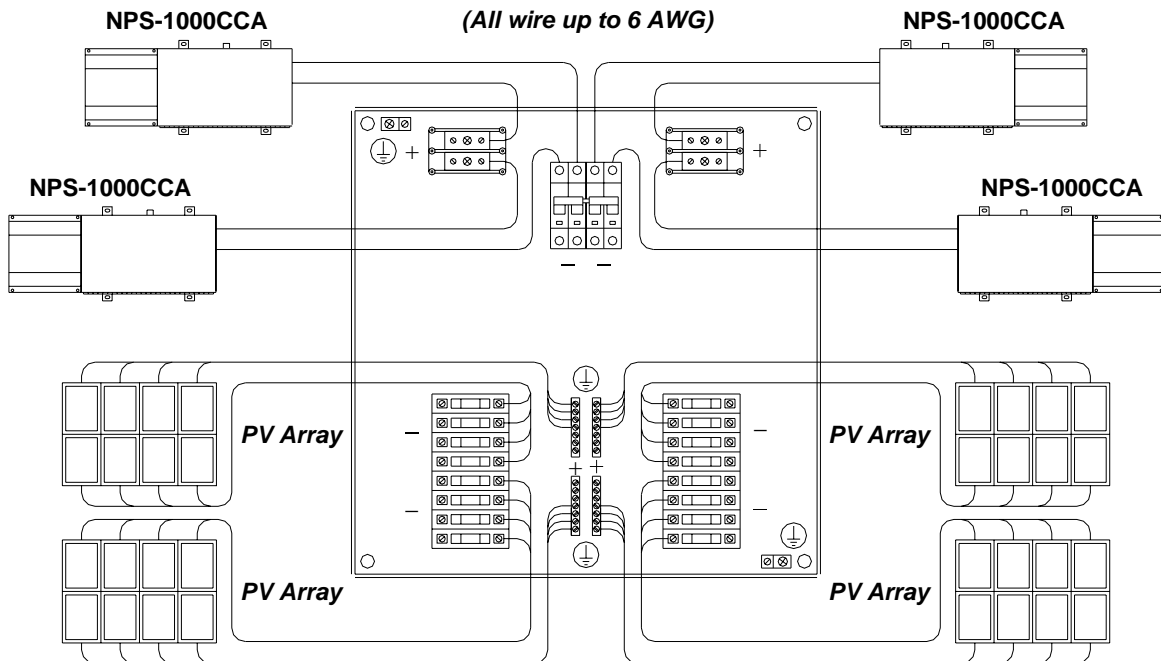
**T**he NEMA 4, 12 enclosure may be mounted horizontally or vertically.

## *NPS-904 Specifications:*

Power (Max.): 4000W  
Output Circuits: 4 (1000W each)  
PV Input Current: 72A (16 x 4.5A)  
PV Input voltage (Max.): 95VDC  
MPPT Tracking Range: 54 to 70VDC  
PV Output Voltage (Max.): 57.5VDC  
Environmental: NEMA 4, 12

Weight: 50 lbs.      Shipping Weight: 55 lbs.  
Size: 20 x 20 x 8"      Shipping Size: 22 x 22 x 10"

## *Wiring to the NPS-904*



***(Four NPS-R1000s are pre-wired and are not shown on this drawing.)***

## *The NPS-R1000 Maximum Power Point Tracker*



*The NPS-R1000 MPPT solar regulator is a 1000W electronic DC-DC converter that automatically adjusts current from the PV array in order to maintain operation at the maximum power point.*