

PWRmicro

SOLAR MICROINVERTER

Model Number: PM-820

The Generac PWRmicro is a powerful, reliable and installer-friendly microinverter designed to maximize energy captured from today's high-powered solar panels. With 820W output and a streamlined installation process, homeowners can harness their solar power to its fullest potential while installers enjoy a faster and more confident installation and commissioning experience. Backed by an industry-leading 25-year warranty, the PWRmicro also delivers unparalleled performance and peace of mind.



PWRmicro

Smart Combiner



Powerful

- 820W reduces clipping with panels up to 500W per input
- Individually optimized DC inputs maximize energy and increase savings opportunities
- 97% CEC efficiency increases power delivered to the home



Reliable

- Backed by a 25-year warranty from a company you can trust
- Rigorously tested for extreme temperature variations, sustained high-humidity environments and extensive power cycling



Installer-Friendly

- Nighttime commissioning with Field Pro helps you finish the install in one day
- Instant microinverter discovery reduces commissioning time
- 2:1 architecture requires half as many microinverters

Maximum Input DC Voltage:
70V

MPPT Voltage Range:
31 - 42.5V

Maximum Module I_{sc} :
18A



PWRmicro Warranty

Includes Industry-leading 5-Year Labor Coverage



Smart Combiner Warranty

Part of Generac Solar & Battery Solutions, PWRmicro integrates seamlessly with the PWRcell 2 Home Energy Storage System and other compatible AC-coupled batteries.



PWRmicro PM-820 Specifications

Ordering Part #: APKEPM820



INPUT DATA (DC)	
Recommended Input Power (STC)	Up to 500W per DC input
Maximum DC Input Voltage	70V
MPPT Voltage Tracking Range	31 – 42.5V
Operating Range	24 – 65V
Min./Max. Start Voltage	22.5 – 51V
Max. Input DC Short-Circuit Current	21A
Max. Module I_{sc}	18A
Ground Fault Protection	Transformer isolated 2000 V _{rms} input/output/chassis

OUTPUT DATA (AC)	@ 240V	@ 208V ¹
Max. Continuous Output Power	820VA	820VA
Max. Continuous Output Current	3.42A	3.94A
Nominal Output Voltage / Range	240 / 211 – 264V	208 / 183 – 229V
Nominal Frequency	60Hz	60Hz
Power Factor (Programmable)	-0.9 to 0.9	-0.9 to 0.9
Maximum Units Per 30 A Branch Circuit	7 (14 modules)	6 (12 modules)
Total Harmonic Distortion	< 5%	< 5%
Maximum Output Overcurrent Protection	30A Fuse	30A Fuse

EFFICIENCY	@ 240V	@ 208V ¹
CEC Weighted Efficiency	97.0%	97.0%
Peak Inverter Efficiency	97.3%	97.1%
Static MPPT Efficiency (EN 50530)	99.5% - 99.8%	
Nighttime Power Consumption (After Commissioning)	400mW	

MECHANICAL DATA	
Dimensions (W X H X D)	14.8" x 10.0" x 2.2" (37.6 cm x 25.5 cm x 5.7 cm)
Weight	8 lbs (3.62 kg)
Ambient Temperature Range	-40 to 149 °F (-40 to 65 °C)
Enclosure Rating	Type 6
Compatible DC Connector Type	MC4

FEATURES	
Microinverter Warranty	25 years
Communication	Mesh Networked Power Line (Spread Spectrum Carrier)
Monitoring	Monitoring via Smart Combiner
Certifications	UL 1741, UL 1741-SA (CA Rule 21), UL 1741-SB, IEEE 1547:2018/1:2020, IEEE 2030.5 CSIP, UL 2703, Rule 14H (HECO SRD V2.0), ISO-NE, PRC-024, Regulation No. 89915, FCC Part 15 Class B
Compatibility	PV modules must be within maximum input DC voltage and maximum module I_{sc}

¹Single phase residential only.

Smart Combiner Specifications

Ordering Part #: APKEAC100



MECHANICAL DATA

Dimensions (W X H X D)	17.6" x 23.9" x 6.1" (44.8 cm x 60.7 cm x 15.6 cm)
Weight	29 lbs (13.2 kg)
Ambient Temperature Range	-40 to 131 °F (-40 to 55 °C)
Enclosure Rating	Type 3R
Cooling	Natural convection

ELECTRICAL SPECIFICATION

System Voltage	120/240VAC or 120/208VAC, 60Hz
Busbar Rating	125A
Maximum PV Output Current	100A
Maximum Number of PWRmicros ¹	28 at 240VAC (24 at 208VAC)
Branch Circuits	Up to five 2-pole Eaton BR branch circuits for plug-in breakers (not included)
Circuit Breakers	Supports up to 30A breakers per circuit
Production CT	200A solid core pre-installed and wired (Revenue grade metering ±0.5%)
External CT	Supports up to 2 pairs of consumption, net, and external production CTs (±2.5%)
Gateway Breaker	15A Eaton included

COMPATIBILITY

Microinverter	PWRmicro PM-820
Internet Connection	802.11 b/g/n and support for 2.4GHz WiFi, Ethernet supported
Cellular Support	Cellular built-in for remote support and firmware updates
Storage	PWRcell 2 support via CAN connection to Smart Disconnect Switch

WARRANTY

Smart Combiner	10 years
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COMPLIANCE

Certifications	UL 1741, IEEE 1547-2018, IEEE 2030.5, FCC Part 15 Class B
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¹Additional PWRmicro microinverters may be installed on a single system with an additional sub panel.



Questions?

Clean Energy Inside Sales Team

855-635-5186, Option 1 | pwrcell.sales@generac.com

Clean Energy Installer Resources

<https://www.generac.com/ceinstaller>

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