

# Pi'n Power™



Providing smart and sustainable energy solutions:  
***solar energy systems, electric vehicle (EV) chargers, energy storage systems and more.***

# HYBRID INVERTER

## Single Phase & Dual MPPT G5000

Application: Residential Use

### Higher Efficiency :

- Maximum efficiency: 97.8%
- Self-learning MPPT Technology
- Ultra-Wide MPPT Voltage Range: 100V to 535V

### Reliable and Safe:

- Designed for North American users: maximized-consumption, backup power and load-shifting
- Switch between on and off grid within 10 ms
- IP65 enclosure for outdoor and indoor installation
- Arc fault detection for protection



### Smarter

- Multiple communication methods: WiFi/GPRS/RS485
- Remote configuration and upgrade are available

Model	G5000
<b>PV Input</b>	
Max Input Voltage	550Vdc
Min. Input Voltage/Initial Feeding Voltage	100Vdc/150Vdc
Range of PV Input Operating Voltage	100Vdc-535Vdc
MPPT Range	100Vdc-535Vdc
Range of PV Voltage@ Full Output	255Vdc-500Vdc
Max PV Input Current	11Adc
Max Input Short Circuit Current	13.5A
No. of MPPT/Strings Per MPPT	2/1
Max Input Power Per MPPT	2,800W
Max. PV Input Power	5,600W
<b>Grid Terminal Parameters</b>	
Nominal AC Output Voltage	240Vac
Nominal AC Output Frequency	60Hz
Operating Frequency Range	59.3Hz - 60.5Hz
Operating AC Output Voltage Range	211.2V - 264.0V@240V
Nominal AC Output Current	20.8Aac
Max. Continuous AC Output Current	22Aac
Max AC Output Over Current Protection	45A
Nominal AC Output Power	5,000VA
Max. Continuous AC Output Power	5,000VA
Output Power Factor Rating	>0.99
<b>AC Load Terminal Parameters</b>	
Nominal AC Output Voltage	240Vac
Nominal AC Output Frequency	60Hz
Max. Continuous AC Output Current	20.8Aac
Max. Continuous AC Output Power	5000VA

Model	G5000
<b>Battery Terminal Parameters</b>	
Battery Type	Li-on
Nominal Voltage	48Vdc
Range of DC Charging Voltage	42Vdc-58Vdc
Range of DC Discharging Voltage	42Vdc-58Vdc
Max. Charging Current	80Adc
Max. Charging Power	4,200W
Max. Discharging Current	100Adc
Max. Discharging Power	5,000W
<b>General Parameter</b>	
Storage Temperature Range	-30°C to +60°C
Operation Temperature Range	-20°C to +60°C with derating above 40°C
Enclosure Type	NEMA 3R
BMS Communication Port BMS	CAN/RS485
Operating Relative Humidity	0 to 95%
Max. Operating Altitude	4000m
Noise	< 25dB
Dimensions (W*H*D)	445mm*630mm*215mm
Weight	30kg
Cooling Method	Natural convection
Installation	Wall-mounted
Firmware Upgrade	USB flash disk
HMI	LED&LCD, Touch key
<b>Certification</b>	
Safety Standard	UL 1741, UL 1699B, UL 1998, UL 991 CSA C22.2 No. 107.1-16
Grid Code	IEEE 1547-2003 (R2008), IEEE1547.1-2005 (R2011)

## AUTO-TRANSFORMER

Split Phase Auto-transformer	
Model	AT5000w
<b>Input (From Converter load terminal):</b>	
Nominal Input Voltage (Vac)	240 Vac (L-L)
Max. Continuous AC Input Current (L-L) (A)	20.8A
Nominal AC Input Frequency (Hz)	60 Hz
Max. Continuous AC Input Power (L-L) (A)	5000VA
<b>Output (To Panel board Backup load):</b>	
Nominal AC Output Voltage (Vac)	120/240 Vac split phase
Max. Continuous AC Output Power (VA)	5000 VA
Max. Continuous AC Output Current (L-N) (A)	20.8A
Max. Continuous AC Output Current (L-L) (A)	20.8A
Normal Operation Temperature Range	-20°C to +60°C
Enclosure Type	Type 3R
Certification	Compliance with G5000

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