



## Features

- z Bi-directional Power Conversion System
- z Built-in transformer
- z Grid-support functions
- z Flexible configuration
- z 6RODU PV FKDUUUEOXGHG
- z 0RGXODUGHVLUOLHFDLELW

## 6XSSRUWUWUWUWHU7SHV

- Lithium-ion based battery
- Lead-carbon battery

## Specification

	US 50kW Model	US 100kW Model		
Model	PWG-50K-NA	PWG-100K-NA	PWG-50K-EX	PWG-100K-EX

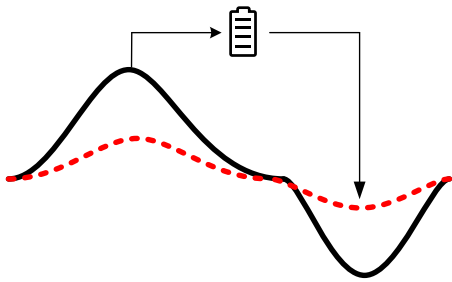
### Utility-interactive Mode

Battery voltage range	400V (250/95/20V)		400V(250/95/20V)	
Batter DC Max Current	150A	300A	150A	300A
PV Voltage Range	520V 900V (MPPT 520V 800V)		520V 900V (MPPT 520V 800V)	
PV DC. Max Current	192A	384A	192A	384A
AC voltage	480V(423V/528V)		400V(340V/460V)	
AC current	60A	120A	72A	144A
Nominal power	50kW	100kW	50kW	100kW
AC frequency Output	60Hz(59.5Hz/60.5Hz)		50/60Hz(±2.5Hz)	
THDI	≤ 3%	≤ 3%	≤ 3%	≤ 3%
AC PF	Listed: 0.8 1 leading or lagging (Controllable)		Listed: 0.81 leading or lagging (Controllable)	
	Actual: 0.11 leading or lagging (Controllable)		Actual: 0.11 leading or lagging (Controllable)	

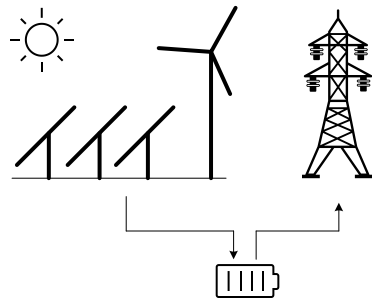
<b>Stand-alone Mode</b>	US 50kW Model		US 100kW Model	
Battery voltage range	250V - 520V		250V - 520V	
Battery DC Max Current	150A	300A	150A	300A
PV Voltage Range	520V- 900V (MPPT 520V-800V)		520V - 900V (MPPT 520V-800V)	
PV DC. Max Current	192A	384A	192A	384A
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AC output voltage	480V (±10% configurable)		400V(±10% configurable)	
AC output current	60A (Max 66A)	120A (Max 132A)	72A(Max 79A)	144A(Max 159A)
Nominal AC output power	50kW	100kW	50kW	100kW
AC Max Power	55kW	110kW	55kW	110kW
Output THDu	≤ 2%	≤ 2%	≤2%	≤2%
AC frequency	60Hz		50/60Hz	
AC PF	Listed: 0.8-1 leading or lagging (Load-dependent)		Listed: 0.8-1 leading or lagging (Load-dependent)	
	Actual: 0.1-1 leading or lagging (Load-dependent)		Actual: 0.1-1 leading or lagging (Load-dependent)	
Overload Capability	105% - 115%	10min	105%-115%	10min;
	115% - 125%	1min	115%-125%	1min;
	125% - 150%	200ms	125%-150%	200ms
<b>Physical</b>				
Cooling	Forced air cooling		Forced air cooling	
Noise	70dB		70dB	
Enclosure	NEMA / IP20		IP20	
Max elevation	3000m / 10000feet (>2000m/6500feet derating)		3000m/10000feet (> 2000m/6500feet derating)	
Operating temp.	-20°C to 50°C (De-rating over 45°C )		-20°C to 50°C (De-rating over 45°C )	
Humidity	0~95% (No condensing)		0~95% (No condensing)	
Size (W*H*D)	800*2160*800mm		800*2160*800mm	
	31.5*85*31.5 inches		31.5*85*31.5 inches	
Weight	520kg	750kg	520kg	750kg
Installation	Floor standing		Floor standing	
<b>Other</b>				
Peak efficiency	95.50%	95.50%	95.50%	95.50%
CEC efficiency	-	-	-	-
Protection	OTP, AC OVP/UVP, OFP/UFP, EPO, AC Phase Reverse,		OTP, AC OVP/UVP, OFP/UFP, EPO, AC Phase Reverse,	

	US 50kW Model	US 100kW Model
	Fan/Relay Failure, OLP, GFDI, Anti-islanding	Fan/Relay Failure, OLP, GFDI, Anti-islanding
Configurable protection limits	Upper/Lower AC Voltage/Frequency limit, Battery EOD voltage.	Upper/Lower AC Voltage/Frequency limit, Battery EOD voltage.
AC connection	3P4W	3P4W
Display	Touch Screen	Touch Screen
Communication	RS485,CAN,Ethernet	RS485,CAN,Ethernet
Isolation	Built-in Transformer	Built-in Transformer
Compliance	UL1741 /UL 9540, CPUC RULE 21,IEEE1547,CSA 22.2	CE LVD, IEC 62477, CE EMC, IEC 61000, AS61000 VDE 4105 AS4777

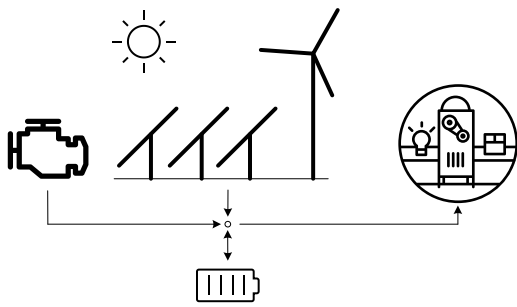
# Applications



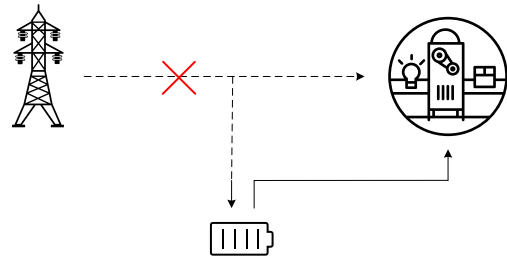
Demand Charge Management



Customer Self Supply

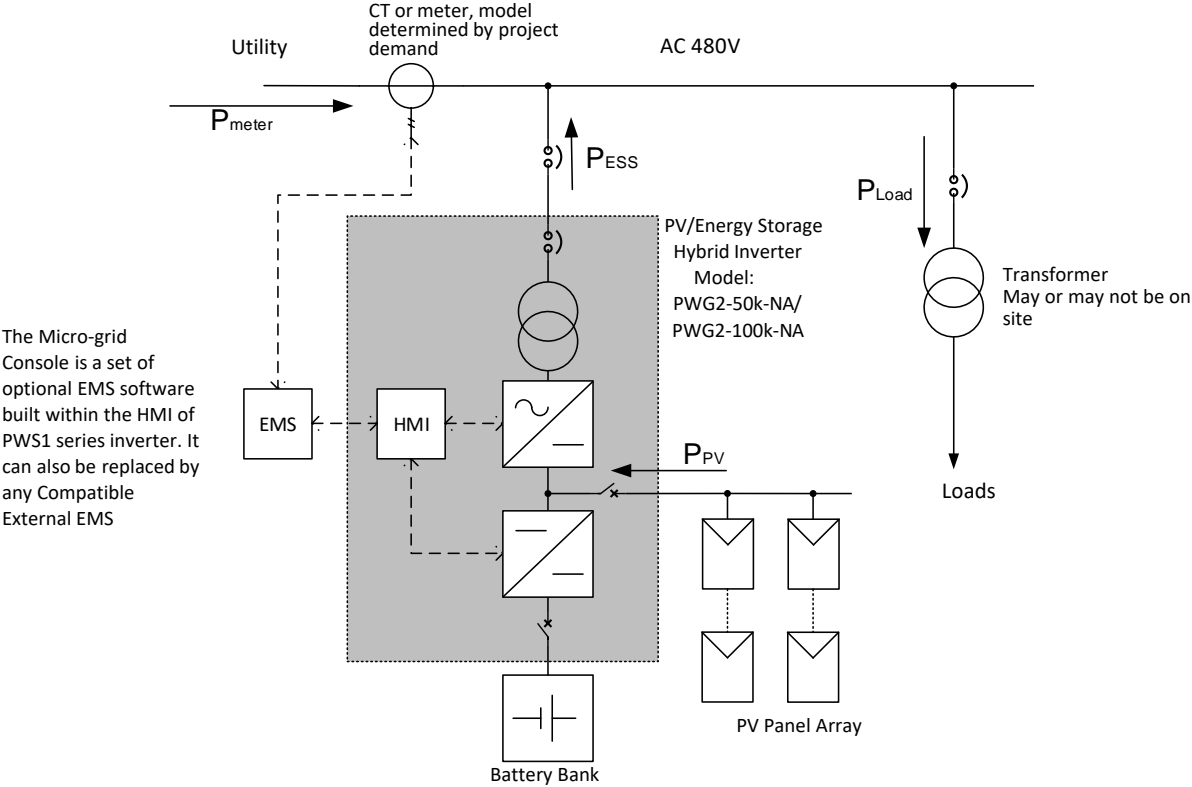


Micro-Grid



Backup power

# 480V Distribution System



The Micro-grid Console is a set of optional EMS software built within the HMI of PWS1 series inverter. It can also be replaced by any Compatible External EMS