

## PWG2-50/100K-NA

## PWG2-50/100K-EX

**Sinexcel**



### Features

- Modular design and wide power range in single cabinet
- Bi-directional Power Conversion System
- Built-in transformer
- Grid-support functions
- Flexible configuration
- Support PV access

### Supported Battery Types:

- Lithium-ion based battery
- Lead-carbon battery

## Specification

**Model** PWG2-50K-NA PWG2-100K-NA PWG2-50K-EX PWG2-100K-EX

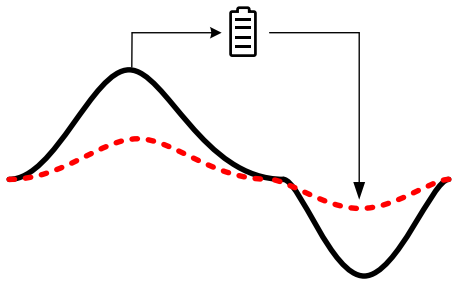
### Utility-interactive Mode

Battery voltage range	400V(250~520V)		400V(250~520V)	
Batter DC Max Current	150A	300A	150A	300A
PV Voltage Range	520~900V (MPPT 520V~800V)		520~900V (MPPT 520V~800V)	
PV DC. Max Current (in case of completely consumption)	192A	384A	192A	384A
PV MAX Power	100kWp	200kWp	100kWp	200kWp
AC voltage	480V(423V~528V)		400V(340V~460V)	
AC current	60A	120A	72A	144A
Nominal power	50kVA	100kVA	50kVA	100kVA
AC frequency	60Hz(59.5Hz~60.5Hz)		50/60Hz(±2.5Hz)	
Output THDI	≤3%	≤3%	≤3%	≤3%
AC PF	Listed: 0.8~1 leading or lagging (Controllable)		Listed: 0.8~1 leading or lagging (Controllable)	

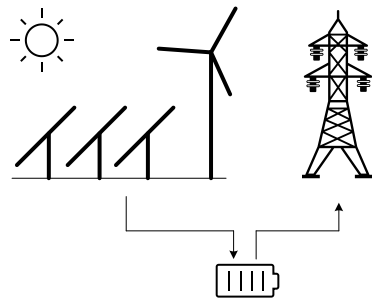
	Actual: 0.1~1 leading or lagging (Controllable)		Actual: 0.1~1 leading or lagging (Controllable)	
<b>Stand-alone Mode</b>				
Battery voltage range	250~520V		250~520V	
Battery DC Max Current	150A	300A	150A	300A
PV Voltage Range	520~900V (MPPT 520V~800V)		520~900V (MPPT 520V~800V)	
PV DC. Max Current (in case of completely consumption)	192A	384A	192A	384A
PV MAX Power	100kWp	200kWp	100kWp	200kWp
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	50kVA	100kVA	50kVA	100kVA
AC Max Power	55kVA	110kVA	55kVA	110kVA
Output THDu	≤2%	≤2%	≤2%	≤2%
AC frequency	60Hz		50/60Hz	
AC PF	Listed: 0.8~1 leading or lagging (Load-depend)		Listed: 0.8~1 leading or lagging (Load-depend)	
	Actual: 0.1~1 leading or lagging (Load-depend)		Actual: 0.1~1 leading or lagging (Load-depend)	
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, Fan/Relay Failure, OLP, GFDI, Anti-islanding	OTP, AC OVP/UVP, OFP/UFP, EPO, AC Phase Reverse, 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	3-Phase 4-Wire	3-Phase 4-Wire		
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 62109, CE EMC, IEC 61000, AS61000 VDE 4105, VDE 0126-1 AS4777 PEA, MEA TOR Erzeuger		

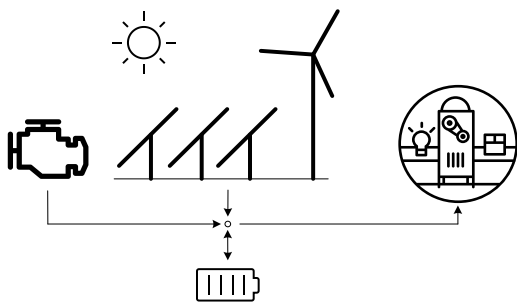
# Applications



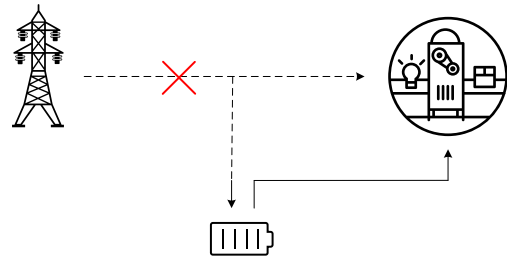
Demand Charge Management



Customer Self Supply

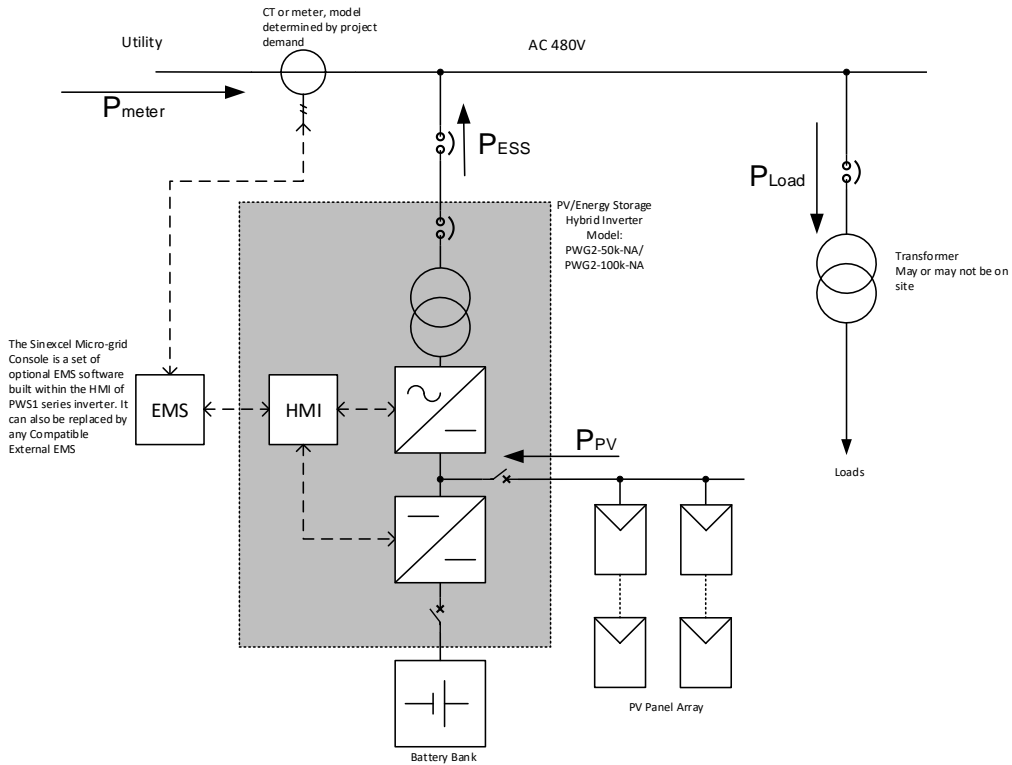


Micro-Grid

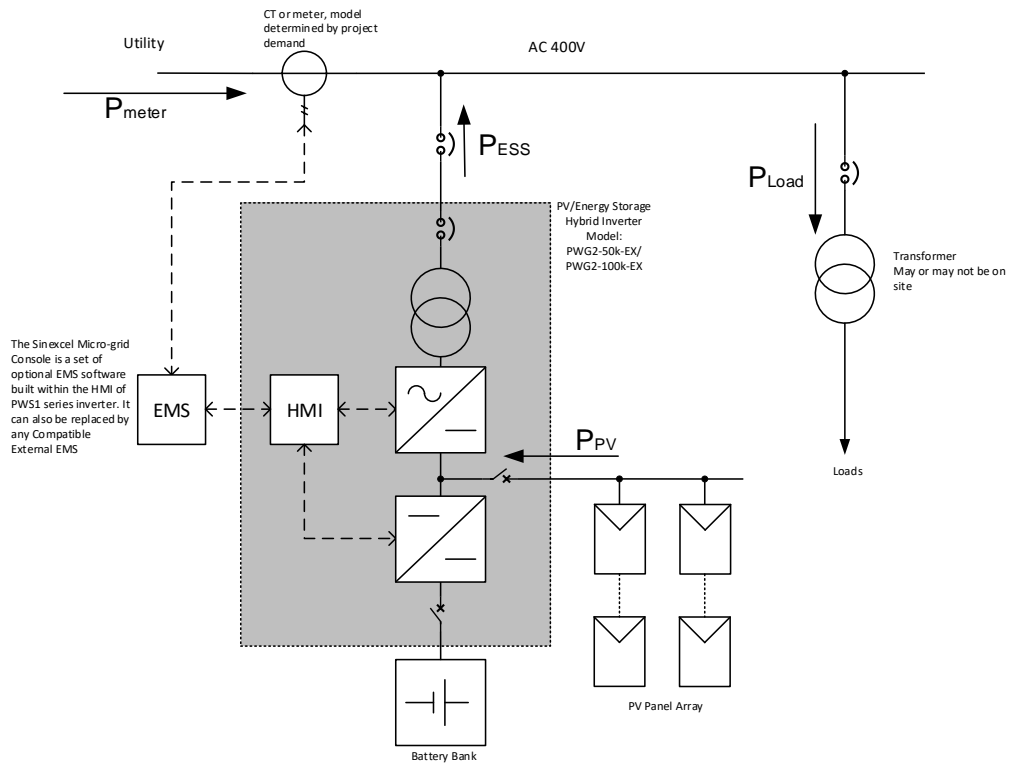


Backup power

# Connection patterns



480V distribution system connection



400V distribution system connection