

PWS1-500KTL-EX

PWS1-500KTL-NA

Sinexcel



Features

- Modular design and wide power range in single cabinet
- Bi-directional Power Conversion System
- Grid-support functions
- Multiple DC battery strings, different battery mixing application
- Flexible derating available

PWS1-500KTL-EX PWS1-500KTL-NA

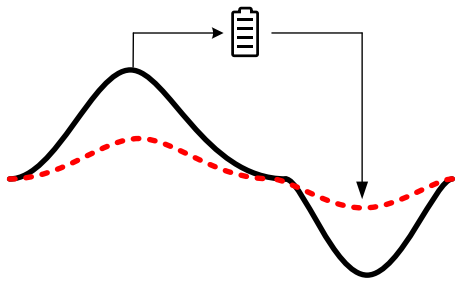


Specification

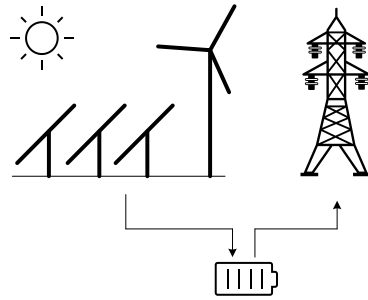
	PWS1-500KTL-EX	PWS1-500KTL-NA
Utility-interactive Mode		
Battery voltage range	600~900V	630~900V
DC max current	873A	
Quantity of battery strings	1/4/8	
AC voltage	380V	400V
AC current	760A	720A
Nominal power	500kVA	
AC frequency	50/60Hz(±2.5Hz)	60Hz(59.5~60.5Hz)
THDi	≤3%	
AC PF	Listed: 0.8~1 leading or lagging (Controllable) Actual: 0.1~1 leading or lagging (Controllable)	
Stand-alone Mode		
Battery voltage range	600~900V	630~900V
DC Max Current	873A	
Quantity of battery strings	1/4/8	
AC output voltage	380V(±10% configurable)	400V(±10% configurable)
AC output current	760A(short term overload 836A max)	720A(short term overload 792A max)
Nominal AC output power	500kVA	
AC max power	550kVA	

Output THDu	≤2% (Linear load)	
AC frequency	50/60Hz	60Hz
AC PF	Listed: 0.8~1 leading or lagging (Load-depend) Actual: 0.1~1 leading or lagging (Load-depend)	
Overload Capability	105%~115%	10min;
	115%~125%	1min;
	125%~150%	200ms
Physical		
Cooling	Forced air cooling	
Noise	70dB	
Enclosure	IP20	NEMA1
Max elevation	3000m/10000feet (> 2000m/6500feet derating)	
Operating ambient temperature	-20°C to 50°C (De-rating over 45°C)	
Humidity	0~95% (No condensing)	
Size (W×H×D)	1100×2160×800mm	
Weight	600kg	
Installation	Floor standing	
Other		
Peak efficiency	98.20%	
CEC efficiency	-	97% w/o transformer
Protection	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.	
AC connection	3-Phase 3-Wire	
Display	Touch Screen	
Communication	RS485,CAN,Ethernet	
Isolation	Non-isolation	
Certification	CE LVD IEC 62477, CE EMC IEC 61000, EN 50549-1:2019 G99, AS4777	ETL listed conforming to UL1741/UL 1741SA/UL 9540, CPUC RULE 21, , CSA 22.2
Short circuit		
Fault current	2000A	
Fault duration	100ms	

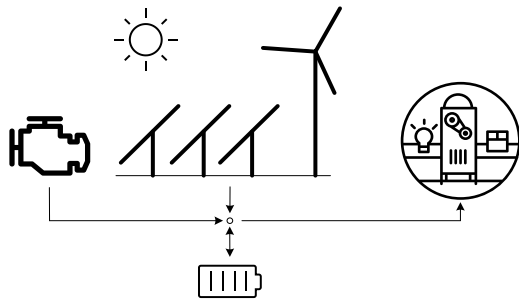
Applications



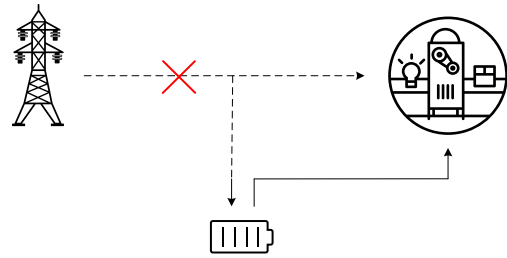
Demand Charge Management



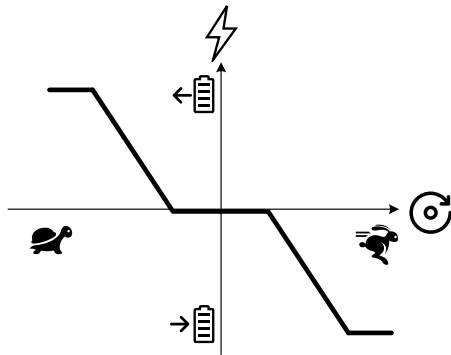
Customer Self Supply



Micro-Grid



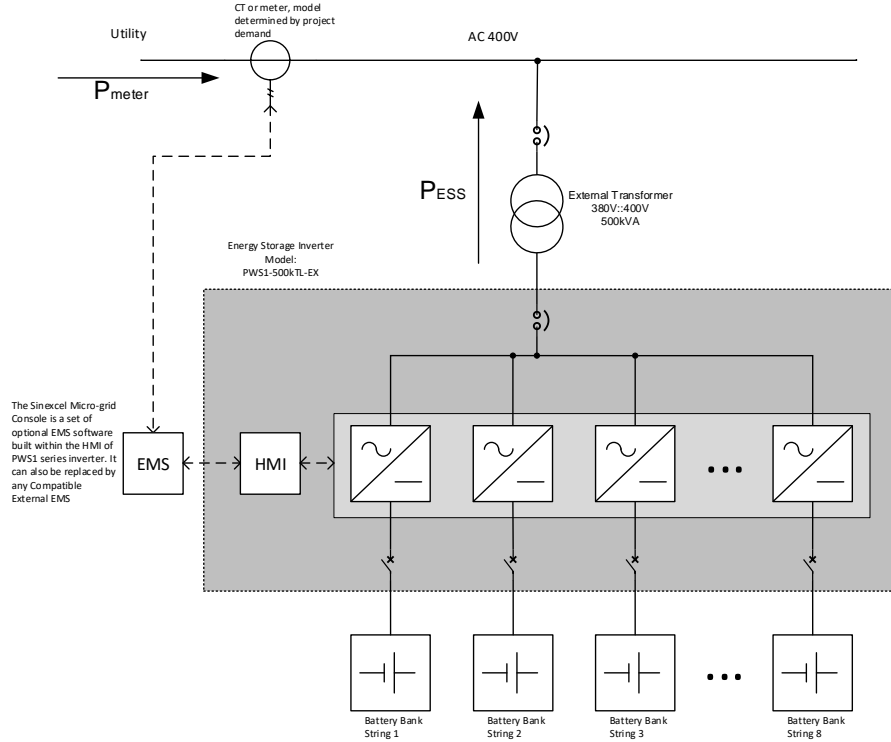
Backup power



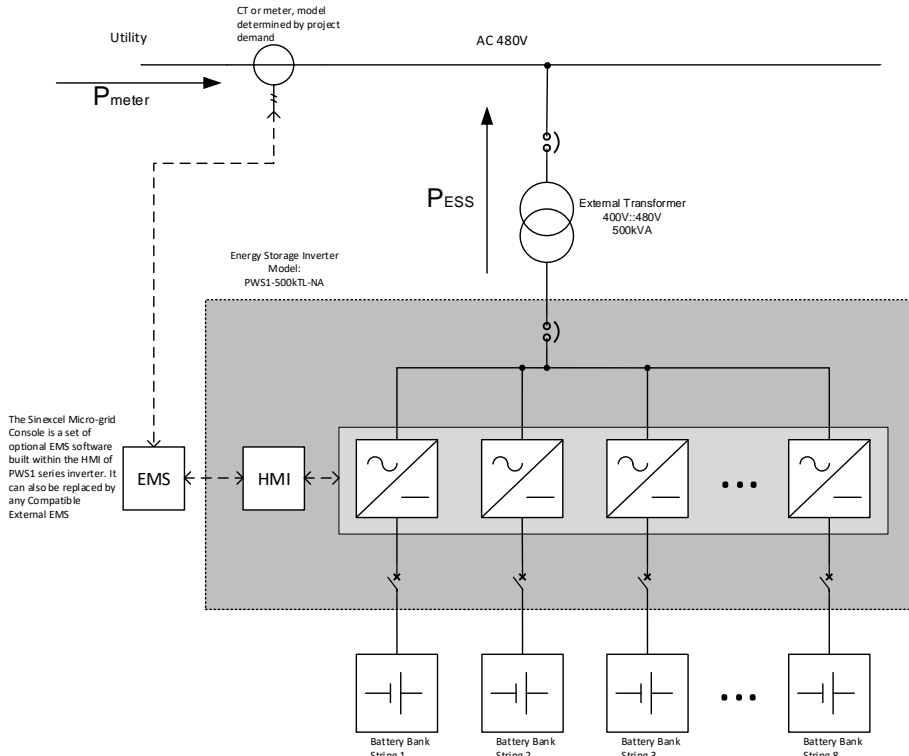
Frequency regulation

Connection patterns

External transformer may be required



400V distribution system connection



480V distribution system connection

Efficiency Curve

