

PCS Inverter without transformer

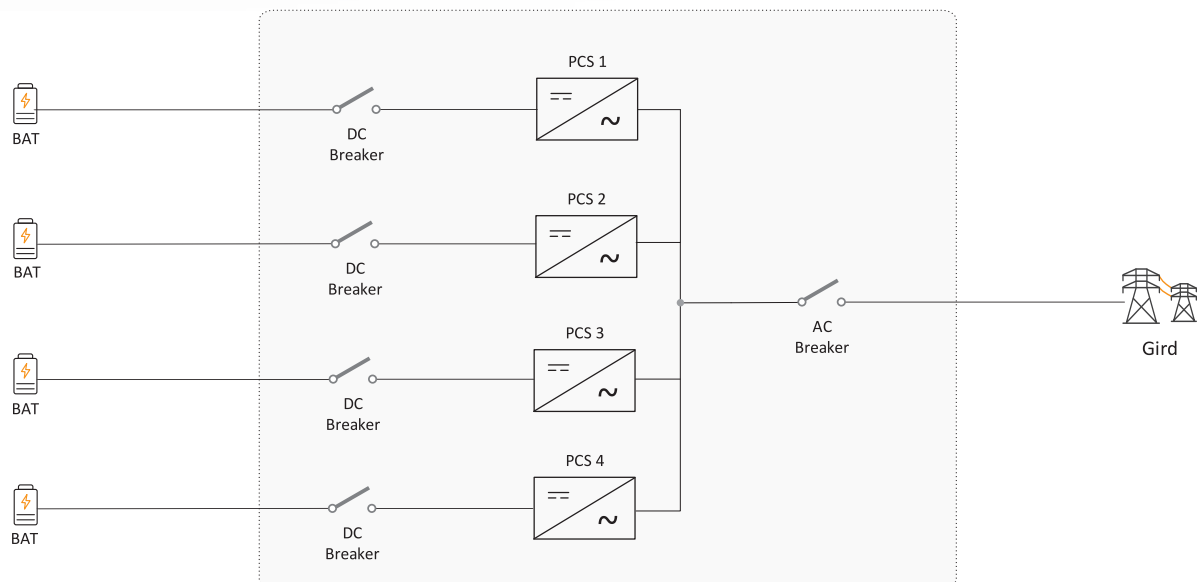
Neptune-P250/P375/P500

Bidirectional PCS cabinet without transformer from 250kW to 500kW, can be used alone as inverter /rectifier or with solar MPPT cabinet and STS/ATS cabinet for engineering customized photovoltaic and energy storage systems.



Features

- Supports DC-coupled with PV and battery DC coupling
- Supports battery cluster access to extend battery cycle life
- Modular design for easy maintenance
- IP54 design



	Neptune-P250	Neptune-P375	Neptune-P500
DC(BAT input)			
DC voltage range	600-1000V(Min.680V for off-grid)	600-1000V(Min.680V for off-grid)	600-1000V(Min.680V for off-grid)
Max. Num. of battery input	2	3	4
Max. charge/discharge current	216A*2	216A*3	216A*4
Max. charge/discharge power	125kW*2	125kW*3	125kW*4

AC side(on-grid)			
Rated output apparent power	250kVA	375kVA	500kVA
Rated output current	364A	546A	728A
Max. input apparent power	250kVA	375kVA	500kVA
Max. AC input current	364A	546A	728A
Rated voltage	400V	400V	400V
AC voltage range	360-440V	360-440V	360-440V
Rated frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Frequency range	45-55Hz/55-65Hz	45-55Hz/55-65Hz	45-55Hz/55-65Hz
PF	>0.99 (-0.8~0.8)	>0.99 (-0.8~0.8)	>0.99 (-0.8~0.8)
THDi	<3%(@rated power)	<3%(@rated power)	<3%(@rated power)
AC connection	3W+N+PE	3W+N+PE	3W+N+PE

AC side(off-grid)			
Rated output power	250kW(@resistive load)	375kW(@resistive load)	500kW(@resistive load)
Rated output voltage	400V	400V	400V
Rated output current	364A	546A	728A
Rated frequency	50/60Hz	50/60Hz	50/60Hz
THDu	<3%(@linear load)	<3%(@linear load)	<3%(@linear load)
Overload capability	120%-1min	120%-1min	120%-1min

System data			
Build-in transformer	No		
IP level	IP54		
Cooling method	Intelligent air cooling		
Operating temperature range	-40~60℃ (45~60℃ derating, derating factor 5%/℃)		
Storage temperature range	-40~70℃ (no condensation)		
Relative humidity	0~95% (no condensation)		
Noise	<75dB @1m		
Maximum operating altitude	4000m (derating above 3000m,derating factor 1%/100m)		
AC lightning protection	Type II		
BMS communication	RS485/CAN		
Meter communication	RS485		
Remote communication	WLAN/4G/Ethernet		
Display	LED+LCD+APP		
Dimensions(W*D*H)	1000*1100*2100mm	1000*1100*2100mm	1000*1100*2100mm
Weight	890kg	945kg	1000kg

Certificate			
IEC 62477-1、IEC 61000-6-2、IEC 61000-6-4、NRS 097-2-1			

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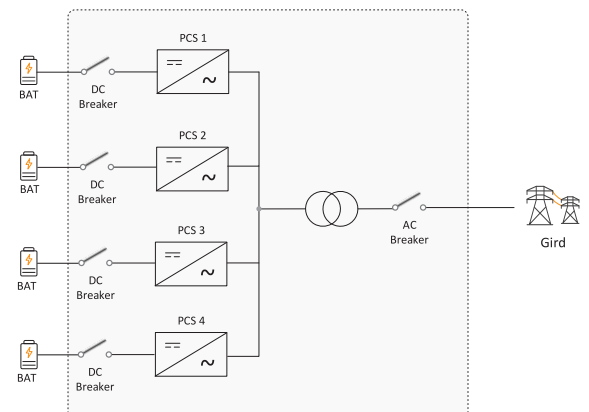
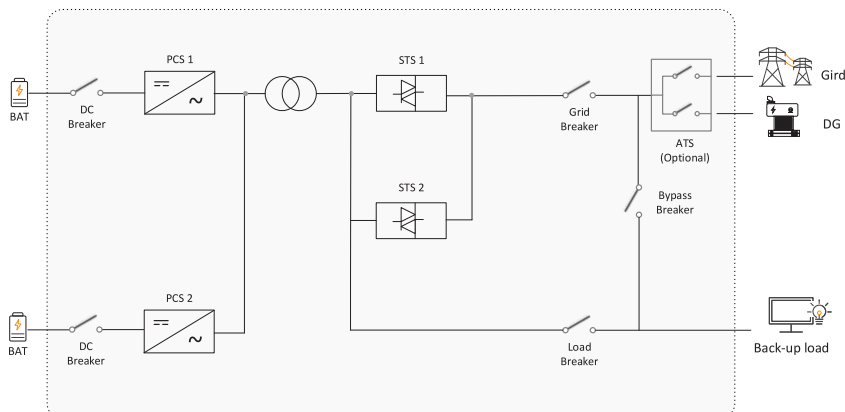
Neptune-P125T/P250T/P375T/P500T

PCS cabinet from 125kW to 500kW, can be used alone or with solar MPPT cabinet and STS/ATS cabinet for customized photovoltaic and energy storage systems.



Features

- Supports PV-storage DC coupling
- Supports battery cluster access to extend battery cycle life
- Built-in isolation Transformer
- Modular design for easy maintenance
- IP54 design



DC(BAT input)				
DC voltage range	600-1000V(Min.680V for off-grid)			
Max. Num. of battery input	1	2	3	4
Max. charge/discharge current	216A	216A*2	216A*3	216A*4
Max. charge/discharge power	125kW	125kW*2	125kW*3	125kW*4
AC(on-grid)				
Rated output apparent power	125kVA	250kVA	375kVA	500kVA
Rated output current	182A	364A	546A	728A
Max. input apparent power	250kVA	250kVA/500kVA	375kVA	500kVA
Max. AC input current	364A	364A/728A	546A	728A
Rated voltage	400V	400V	400V	400V
Rated frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
PF	>0.99 (-0.8~0.8)	>0.99 (-0.8~0.8)	>0.99 (-0.8~0.8)	>0.99 (-0.8~0.8)
THDi	<3%(@rated power)	<3%(@rated power)	<3%(@rated power)	<3%(@rated power)
AC connection	3W+N+PE	3W+N+PE	3W+N+PE	3W+N+PE
AC(off-grid)				
Rated output power	125kW(@resistive load)	250kW(@resistive load)	375kW(@resistive load)	500kW(@resistive load)
Rated output voltage	400V	400V	400V	400V
Rated output current	182A	364A	546A	728A
Rated frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
THDu	<3%(@linear load)	<3%(@linear load)	<3%(@linear load)	<3%(@linear load)
Overload capability	120%-1min	120%-1min	120%-1min	120%-1min
System data				
Build-in transformer	Yes	Yes	Yes	Yes
Build-in STS	Yes	Yes	No	No
Transfer between on/off grid with STS	<10ms	<10ms	/	/
IP level	IP54			
Cooling method	Intelligent air cooling			
Operating temperature range	-40~60℃ (45~60℃ derating, derating factor 5%/℃)			
Relative humidity	0~95% (no condensation)			
Noise	<75dB @1m			
Maximum operating altitude	4000m (derating above 3000m,derating factor 1%/100m)			
AC lightning protection	Type II			
Communication	RS485/CAN for BMS, RS485 for meter			
Remote communication	WLAN/4G/Ethernet			
Display	LED+LCD+APP			
Dimensions(W*D*H)	1200*1100*2100mm	1300*1100*2100mm	1300*1100*2100mm	1300*1100*2100mm
Weight	1350kg	1700kg/1730kg	2450kg	2500kg
Certificate				
IEC 62477-1、IEC 61000-6-2、IEC 61000-6-4、NRS 097-2-1				
Expand models				
Expand models	Neptune-P125T-SA2	Neptune-P250T-SA1 Neptune-P250T-SA2	/	/
	Neptune-P125T-A2	Neptune-P250T-A1 Neptune-P250T-A2		
	Neptune-P125T	Neptune-P250T		