

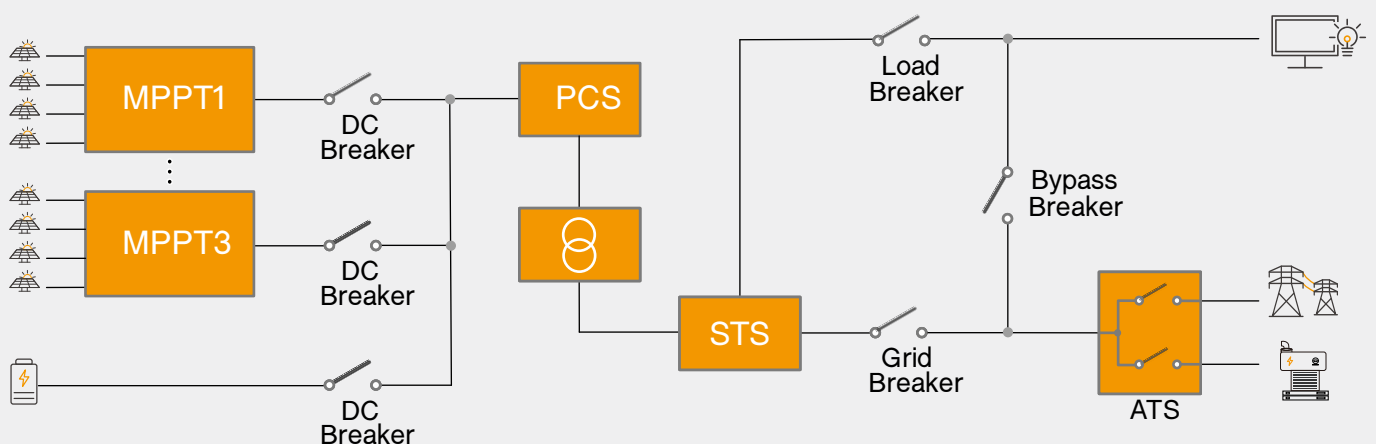
Neptune 125K-H/250K-H

Neptune Microgrid Hybrid inverter



— Features

- Multiple power integration All-in-one
- Seamless on/off grid transfer within 10ms
- DC-coupled with PV and battery
- Support AC coupling input (PV or wind power)
- Multiple battery inputs to solve the battery circulation
- Built-in isolation transformer
- Modular design for easy maintenance



	Neptune-125K-HA1-3	Neptune-250K-HA1	Neptune-250K-HB1
DC(PV Input)			
Input voltage range	150-Vbat,min	150-Vbat,min	150-Vbat,min
Full load MPPT voltage range	340-Vbat,min	340-Vbat,min	340-Vbat,min
Max. Input voltage	1000V	1000V	1000V
Max. Num. of module	3	6(with Neptune-360K-MA*)	6(with Neptune-360K-MA*)
Max. PV power	180kW(60kW*3)	360kW(60kW*6)	360kW(60kW*6)
Num. of MPPTs per module	4	4	4
Max. Num. of strings per MPPT	1	1	1
Rated current per MPPT	45A	45A	45A
Rated power per MPPT	15kW	15kW	15kW
DC(BAT Input)			
Battery voltage range	600-1000V	600-1000V	600-1000V
Max. Num. of battery Input	1	2	2
Max. charge/discharge current	216A	216A*2	216A*2
Max. charge/discharge power	125kW	125kW*2	125kW*2
AC(on-grid)			
Max. Input apparent power	250kVA	250kVA	500kVA
Rated output apparent power	125kVA	250kVA	250kVA
Rated voltage	400V	400V	400V
Voltage range	300-460V	300-460V	300-460V
Rated frequency	50/60Hz	50/60Hz	50/60Hz
Frequency range	45-55Hz/55-65Hz	45-55Hz/55-65Hz	45-55Hz/55-65Hz
Rated output current	182A	364A	364A
Max. AC input current	364A	364A	728A
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(off-grid)			
Rated Output Power	125kW(@Resistive load)	250kW(@Resistive load)	250kW(@Resistive load)
Rated Output Voltage	400V	400V	400V
Rated Output Current	182A	364A	364A
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	Yes		
Diesel engine interface	Yes		
IP level	IP20		
Transfer between on/off grid with STS	<10ms		
Cooling method	Intelligent air cooling		
Operating temperature range	-25~60℃ (45~60℃ derating, derating factor 5%/℃)		
Storage temperature range	-25~70℃ (no condensation)		
Relative humidity	0~95% (no condensation)		
Noise	<75dB(A) @1m		
Maximum operating altitude	4000m (derating above 3000m, derating factor 1%/100m)		
AC lightning protection	Type II		
PV 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*1000*1960mm	1200*1000*2060mm	1200*1000*2060mm
Weight	1060kg	1500kg	1560kg
Certificate			
IEC 62109-1、IEC 62109-2、IEC 62477-1、IEC 61000-6-2、IEC 61000-6-4、NRS 097-2-1			
Expand models			
The product functions are optional, please contact the manufacturer for the corresponding model			

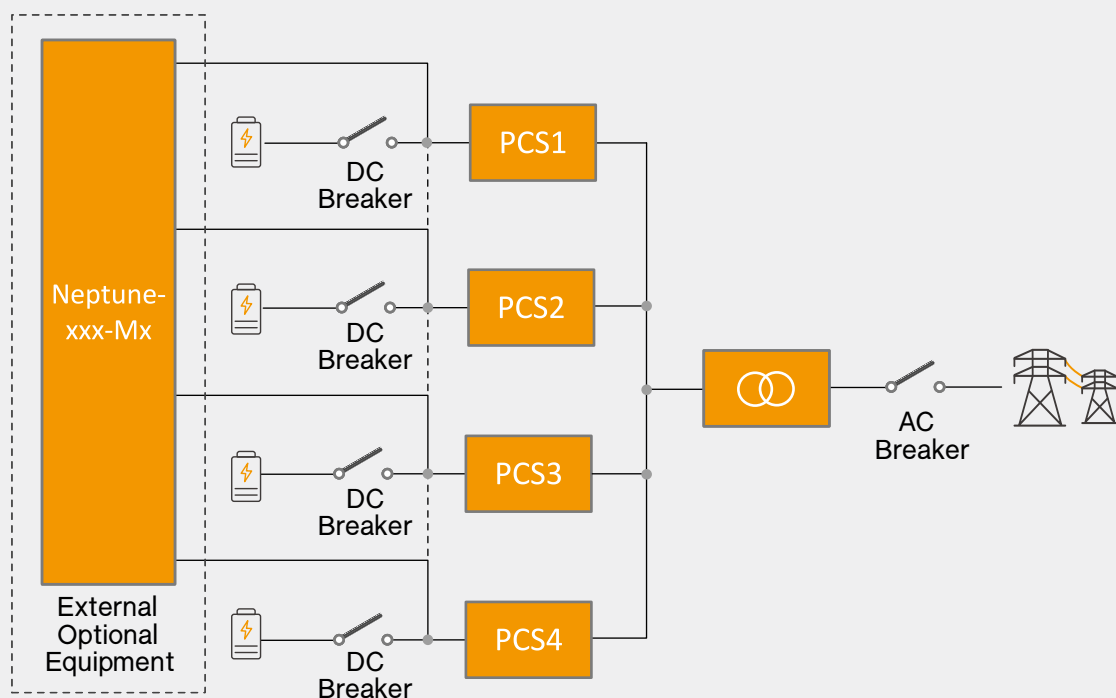
Neptune 375K-P/500K-P

Neptune Microgrid PCS inverter



Features

- DC-coupled with PV and battery
- Multiple battery inputs to solve the battery circulation
- Built-in isolation transformer
- Modular design for easy maintenance



Neptune-375K-PA1

Neptune-500K-PA1

DC(PV Input)		
DC Voltage range	600–1000V	600–1000V
Max Num. of Battery Input	3	4
Max charge/discharge current	216A*3	216A*4
Max charge/discharge power	125kW*3	125kW*4

AC(on-grid)		
Max. input apparent power	375kVA	500kVA
Rated output apparent power	375kVA	500kVA
Rated voltage	400V	400V
Voltage range	300–460V	300–460V
Rated frequency	50/60Hz	50/60Hz
Frequency range	45–55Hz/55–65Hz	45–55Hz/55–65Hz
Rated output current	546A	728A
Max. AC input current	546A	728A
PF	>0.99 (–0.8~0.8)	>0.99 (–0.8~0.8)
THDi	<3%(@rated power)	<3%(@rated power)
AC connection	3W+N+PE	3W+N+PE

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

System Data		
Build-in transformer	Yes	
IP level	IP20	
Cooling method	Intelligent air cooling	
Operating temperature range	–25–60℃ (45–60℃ derating, derating factor 5%/℃)	
Storage temperature range	–25–70℃ (no condensation)	
Relative humidity	0–95% (no condensation)	
Noise	<75dB(A) @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)	1200*1000*2060mm	1200*1000*2060mm
Weight	1900kg	2100kg

Certificate		
IEC 62109–1、IEC 62109–2、IEC 62477–1、IEC 61000–6–2、IEC 61000–6–4、NRS 097–2–1		

Expand models		
The product functions are optional, please contact the manufacturer for the corresponding model		

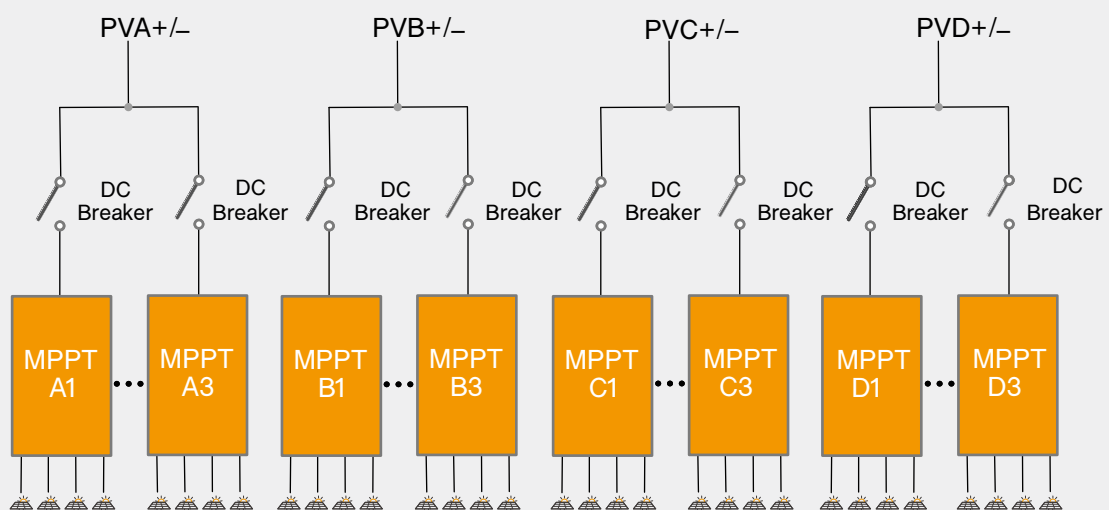
Neptune 720K-M

Neptune Microgrid MPPT converter



Features

- SiC-MOS in the MPPT module
- Four independent MPPTs in one module
- Compatible with 3-12 modules
- Each module has a output circuit breaker
- Modular design for easy maintenance



PV Input					
Input voltage range	150–1000V	150–1000V	150–1000V	150–1000V	150–1000V
Full load MPPT voltage range	340–950V	340–950V	340–950V	340–950V	340–950V
Max. Num. of modular	3	4	5	6	7
Max. PV power	180kW(60kW*3)	240kW(60kW*4)	300kW(60kW*5)	360kW(60kW*6)	420kW(60kW*7)
Num. of MPPTs per modular	4	4	4	4	4
Max. Num. of strings per MPPT	1	1	1	1	1
Rated current per MPPT	45A	45A	45A	45A	45A
Rated power per MPPT	15kW	15kW	15kW	15kW	15kW

DC Output					
Output voltage range	350–1000V	350–1000V	350–1000V	350–1000V	350–1000V
Rated output voltage	600–950V	600–950V	600–950V	600–950V	600–950V
Max. output total current	300A(100A*3)	400A(100A*4)	500A(100A*5)	600A(100A*6)	700A(100A*7)
Rated output total power	180kW(60kW*3)	240kW(60kW*4)	300kW(60kW*5)	360kW(60kW*6)	420kW(60kW*7)

System Data					
DC reverse polarity protection	Yes				
DC output fuse protection	Yes				
DC output breaker protection	Yes				
PV input switch	Yes				
Over current protection	Yes				
Over/Under voltage protection	Yes				
Insulation monitoring	Yes				
Over-heat protection	Yes				
Overvoltage category	Type II				
IP level	IP20				
Max. efficiency	>99.2%				
Cooling method	Intelligent air cooling				
Operating temperature range	–25~60℃ (45~60℃ derating, derating factor 5%/℃)				
Storage temperature range	–25~70℃ (no condensation)				
Relative humidity	0~95% (no condensation)				
Noise	<75dB(A) @1m				
Maximum operating altitude	4000m (derating above 3000m, derating factor 1%/100m)				
PV lightning protection	Tyle II				
Communication	Ethernet、RS485、CAN				
Display	LED				
Dimensions(W*D*H)	1100*900*2060mm				
Weight	455kg	480kg	505kg	530kg	555kg

Certificate					
IEC 62109-1、IEC 62109-2、IEC 61000-6-2、IEC 61000-6-4					

Expand models					
The product functions are optional, please contact the manufacturer for the corresponding model					

PV Input					
Input voltage range	150–1000V	150–1000V	150–1000V	150–1000V	150–1000V
Full load MPPT voltage range	340–950V	340–950V	340–950V	340–950V	340–950V
Max. Num. of modular	8	9	10	11	12
Max. PV power	480kW(60kW*8)	540kW(60kW*9)	600kW(60kW*10)	660kW(60kW*11)	720kW(60kW*12)
Num. of MPPTs per modular	4	4	4	4	4
Max. Num. of strings per MPPT	1	1	1	1	1
Rated current per MPPT	45A	45A	45A	45A	45A
Rated power per MPPT	15kW	15kW	15kW	15kW	15kW

DC Output					
Output voltage range	350–1000V	350–1000V	350–1000V	350–1000V	350–1000V
Rated output voltage	600–950V	600–950V	600–950V	600–950V	600–950V
Max. output total current	800A(100A*8)	900A(100A*9)	1000A(100A*10)	1100A(100A*11)	1200A(100A*12)
Rated output total power	480kW(60kW*8)	540kW(60kW*9)	600kW(60kW*10)	660kW(60kW*11)	720kW(60kW*12)

System Data					
DC reverse polarity protection	Yes				
DC output fuse protection	Yes				
DC output breaker protection	Yes				
PV input switch	Yes				
Over current protection	Yes				
Over/Under voltage protection	Yes				
Insulation monitoring	Yes				
Over-heat protection	Yes				
Overvoltage category	Type II				
IP level	IP20				
Max. efficiency	>99.2%				
Cooling method	Intelligent air cooling				
Operating temperature range	–25~60℃ (45~60℃ derating, derating factor 5%/℃)				
Storage temperature range	–25~70℃ (no condensation)				
Relative humidity	0~95% (no condensation)				
Noise	<75dB(A) @1m				
Maximum operating altitude	4000m (derating above 3000m, derating factor 1%/100m)				
PV lightning protection	Tyle II				
Communication	Ethernet、RS485、CAN				
Display	LED				
Dimensions(W*D*H)	1100*900*2060mm				
Weight	580kg	605kg	630kg	655kg	680kg

Certificate					
IEC 62109-1、IEC 62109-2、IEC 61000-6-2、IEC 61000-6-4					

Expand models					
The product functions are optional, please contact the manufacturer for the corresponding model					

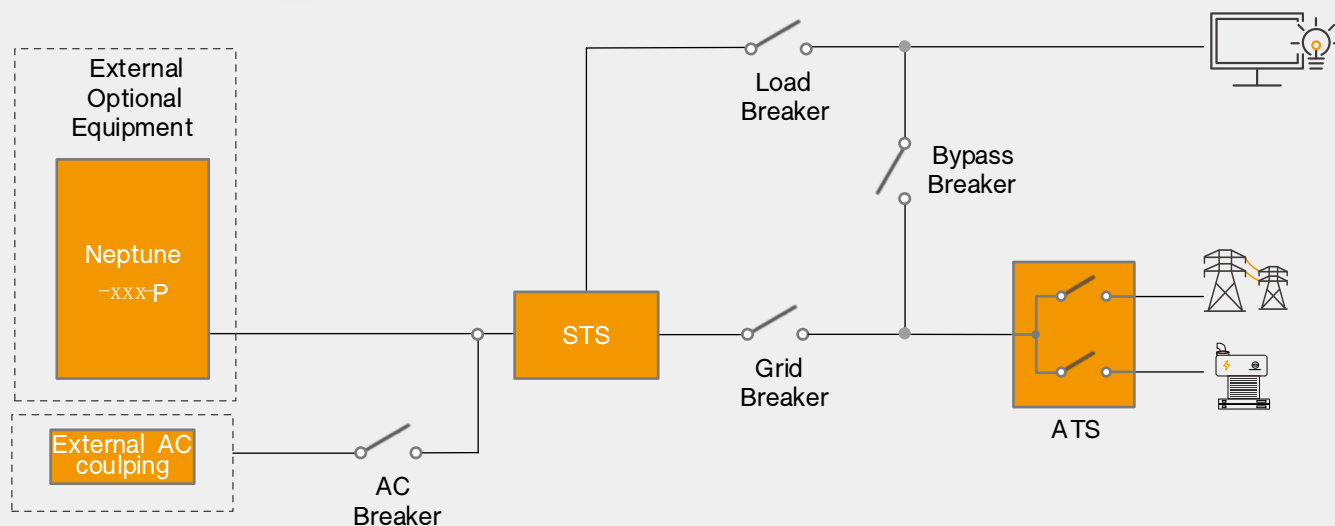
Neptune 500K-S/1000K-S

Neptune Microgrid STS&ATS cabinet



Features

- Seamless on/off grid transfer within 10ms
- ATS adopts TUV certified switch
- Support AC coupling input (PV or wind power)
- Modular design for easy maintenance



Electrical Parameters				
Rated AC voltage	400V	400V	400V	400V
Rated AC current	546A	728A	1092A	1456A
Rated AC frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Rated apparent power	375kVA	500kVA	750kVA	1000kVA
Max. Load output apparent power	375kVA	500kVA	750kVA	1000kVA
Max. Load output current	546A	728A	1092A	1456A
Max. PCS apparent power	375kVA	500kVA	750kVA	1000kVA
Max. PCS current	546A	728A	1092A	1456A
Max. DG apparent Power	375kVA	500kVA	750kVA	1000kVA
Max. DG current	546A	728A	1092A	1456A
Max. PV Apparent Power(AC coupling)	375kVA	500kVA	750kVA	1000kVA
Max. PV current(AC coupling)	546A	728A	1092A	1456A

System Data				
IP level	IP20			
Transfer between on/off grid with STS	<10ms			
Cooling method	Intelligent air cooling			
Operating temperature Range	-25~60℃ (45~60℃ derating, derating factor 5%/℃)			
Storage temperature Range	-25~70℃ (no condensation)			
Relative humidity	0~95% (no condensation)			
Noise	<75dB(A) @1m			
Maximum operating altitude	4000m (derating above 3000m, derating factor 1%/100m)			
AC lightning protection	Type II			
Communication	RS485			
Dimensions(W*D*H)	800*1000*2060mm	800*1000*2060mm	800*1000*2060mm	800*1000*2060mm
Weight	400kg	415kg	475kg	525kg

Certificate				
IEC 62310-1、IEC 62310-2、IEC 62310-3				

Expand models				
The product functions are optional, please contact the manufacturer for the corresponding model				