

# NEPCSH-4000-MV NEPCSH-3200-MV Power Conversion System



## Applications

- Renewable Power Plant Integration (Ramp rate control, energy shifting),
- Grid Ancillary Control (Frequency regulation, peak shaving)
- Distributed Network and Micro-grid (Peak shaving, autonomous operation)

## Grid Support

- Compliant with UL1741, IEEE1547, UL1741 SB, and Rule 21
- L/HVRT, L/HFRT, specified power factor control and reactive power support

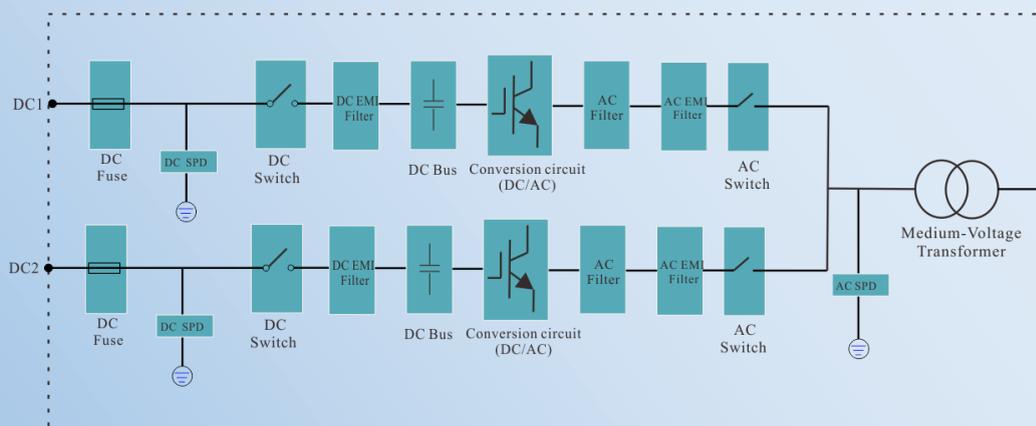
## Great Performance

- Advanced three-level technology, max. efficiency reaches 98.8%
- Effective forced air cooling
- High DC voltage up to 1500V
- Battery charge & dis-charge management and black start function integrated

## Easy O&M

- Integrated monitoring function and fast trouble shooting
- Integrated auxiliary power supply panels for external devices
- Low transportation and installation cost

## Circuit Diagram.



Type Designation	NEPCSH-3200-MV UL	NEPCSH-4000-MV UL
<b>PCS DC-side</b>		
Max. DC Voltage	1500V	
Min. DC Voltage	1000V	
DC Voltage Range	1000~1500V	
Max. DC Current	1967A*2	2030A*2
No. of DC Inputs	2	
<b>PCS AC-side</b>		
Nominal AC Power(at 45°C)	1600kVA*2	2000kVA*2
Max. AC Current	1617A*2	1674A*2
Nominal AC Voltage	630V	690V
Grid Frequency Range	55Hz~65Hz	
Max. THD of Current	< 3%(at nominal power)	
DC Current Injection	< 0.5%In	
Power Factor at Nominal Power / Adjustable Power Factor	> 0.99/0.99 leading-0.99 lagging	
Adjustable Reactive Power	-100%~100%	
Number of Phases	3Ø	
<b>Step-up Transformer</b>		
Nominal Power	3200kVA	4000kVA
MV/LV	11~35kV/0.69kV	
Transformer vector	YNd11, Dy11, or Dy1 on request	
Transformer cooling type	ONAN/KNAN on request	
Oil type	Mineral oil (PCB free) or degradable oil on request	
<b>Protection</b>		
DC Input Protection	Load break switch + fuse	
AC Output Protection	Circuit breaker	
Over Voltage Category	II(DC)/ III (AC Main)	
Grid Monitoring / Ground Fault Monitoring	Yes/Yes	
Insulation Monitoring	Yes	
Overheat Protection	Yes	
<b>General Parameters</b>		
Dimensions (W*H*D)	6058mm *2896mm *2438mm	
Weight	18000kg	
Degree of Protection	Type 3R	
Operating Ambient Temperature Range	-35 to 60°C (> 45°C derating)	
Allowable Relative Humidity Range	0~95 %, No condensing	
Cooling Method	Temperature controlled forced air cooling	
Max. Operating Altitude	4000m (>2000m derating)	
Communication	RS485, CAN, Ethernet	
Compliance	UL1741, UL1741 SB, IEEE 1547, Rule 21, CSA C22.2 No.107.1-16	
Grid Support	L/HVRT, FRT, active & reactive power control and power ramprate control, Volt-var, Volt-watt, Frequency-watt	