

EP-5000/6250/6800-HA-UD/20~35

MV Turnkey Solution for 1500V Utility PV Plant



More power generation

Inverter Max. efficiency 99%, Euro efficiency 98.7%
1500Vdc PV system reduce power loss



Low system cost

Convenient for large block size PV plant
Integrated MV transformer and switchgear
High DC/AC ratio up to 1.8



High reliability

Capacitor life prediction technology
Key components at front side, easy for maintenance
Current sensor for each DC input, more reliable for monitoring and control

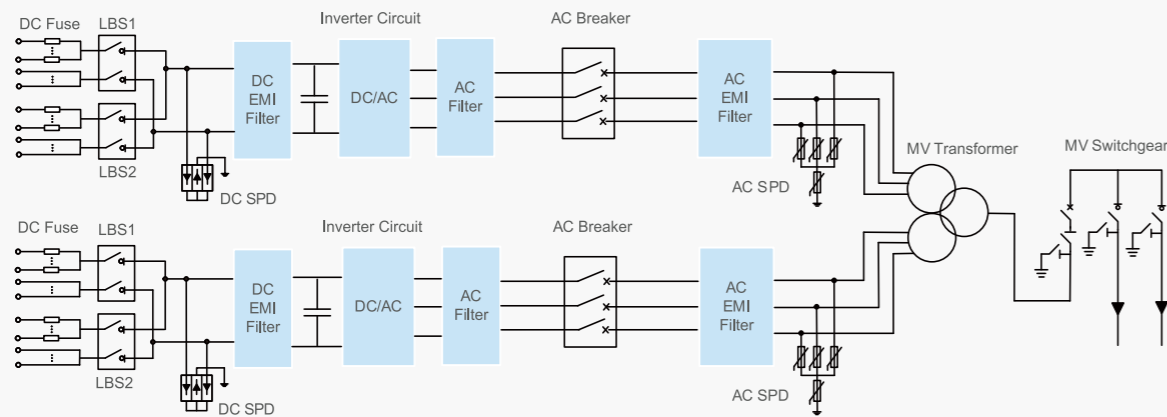


Grid friendly

Adjustable reactive power
Low harmonics and fast response for grid regulation



Circuit



Input (DC)	EP-5000-HA-UD/20~35	EP-6250-HA-UD/20~35	EP-6800-HA-UD/20~35
Max. PV input voltage	1500V	1500V	1500V
Max. input current	3260A*2	4075A*2	4075A*2
MPP voltage range for nominal power	900~1300V	900~1300V	900~1300V
Number of MPPT trackers	2	2	2
Number of DC inputs	(14~20)*2	(16~22)*2	(16~22)*2
Output (AC)			
Rated AC output power	2*2500kVA@50 C	2*3125kVA@50 C	2*3400kVA@45 C
Max. AC output power	2*2875kVA@25 C	2*3594kVA@25 C	2*3594kVA@25 C
AC voltage range	20~35kV	20~35kV	20~35kV
Rated grid frequency/range	50 Hz/ 45~55 Hz, 60Hz/ 55~65 Hz	50 Hz/ 45~55 Hz, 60Hz/ 55~65 Hz	50 Hz/ 45~55 Hz, 60Hz/ 55~65Hz
Output current harmonic(at nominal power)	< 3 %	< 3 %	< 3 %
DC current injection	< 0.5% In	< 0.5% In	< 0.5% In
Power factor at nominal power/range	>0.99/ 0.8 lagging to 0.8 leading	>0.99/ 0.8 lagging to 0.8 leading	>0.99/ 0.8 lagging to 0.8 leading
Protection			
DC input protection		Load break switch+fuse	
AC output protection		Circuit breaker	
AC MV output protection		Circuit breaker	
Overvoltage protection		DC Type II / AC Type II	
Leakage current monitoring		Yes	
Grid monitoring/ground fault monitoring		Yes/Yes	
Insulation monitoring		Yes	
Overheat protection		Yes	
Night SVG function		Optional	
Anti-PID function		Optional	
Efficiency			
Max. efficiency		99.00%	
EU efficiency		98.70%	
Transformer			
Transformer Rated power	5000 kVA	6250 kVA	6800kVA
Transformer Max. power	5750 kVA	7188 kVA	7188 kVA
LV / MV Voltage	0.63-0.63/20~35kV	0.63-0.63/20~35kV	0.63-0.63/20~35kV
Transformer Vector	Dy11y11	Dy11y11	Dy11y11
Transformer cooling type	ONAN (Oil Natural Air Natural)	ONAN (Oil Natural Air Natural)	ONAN (Oil Natural Air Natural)
Transformer			
Weight	25t	25t	25t
Protection level	Inverter:IP65, Others:IP54	Inverter:IP65, Others:IP54	Inverter:IP65, Others:IP54
Auxiliary power supply	Standard:5kVA, Optional: max.40kVA	Standard:5kVA, Optional: max.40kVA	Standard:5kVA, Optional: max.40kVA
Temperature	-30~+60 C (>50 C derating)	-30~+60 C (>50 C derating)	-30~+60 C (>45 C derating)
Allowed humidity(non condensing)	0 - 95 %	0 - 95 %	0 - 95 %
Cooling mode	Temperature controlled forced air cooling	Temperature controlled forced air cooling	Temperature controlled forced air cooling
Max.operating altitude	2000m(standard) / > 2000m(optional)	2000m(standard) / > 2000m (optional)	2000m(standard) / > 2000m (optional)
Display	LCD	LCD	LCD
Communication port	RS485/Ethernet	RS485/Ethernet	RS485/Ethernet