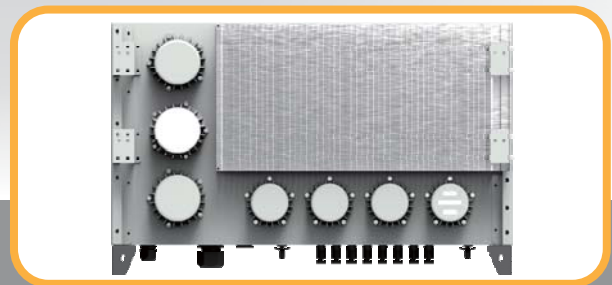


Three Phase Inverter

Omniksol-50k-TL3-H



Product Features

【High Efficiency】

- 4 MPPT's , suitable for various environment
- Wide MPPT voltage range, multi-level inverters + soft-switching technology, maximized system efficiency

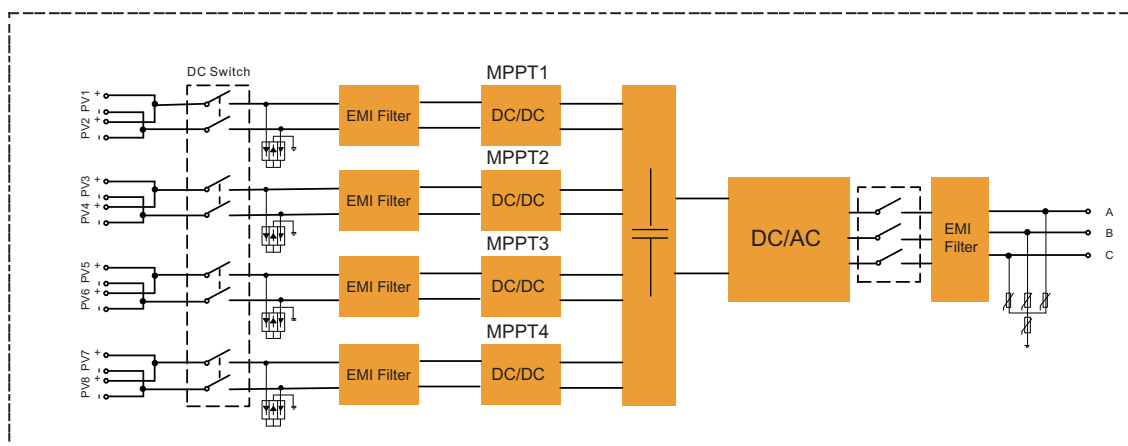
【Safety and reliability】

- No external fan, IP65 protection grade
- Standard connector, easy and quick installation

【Smart and User-friendly】

- Timely monitoring on the condition of each string branch, online analyzing and allocating fault
- PLC communication supported, less cable used
- Wireless Bluetooth communication, easier and quicker to operate

Block Diagram



Technical Data

Omniksol-50k-TL3-H

Type	Omniksol-50k-TL3-H		
Input(DC)			
Max. PV Module Power [kW]	53.5		
Max. DC Voltage [V]	1100		
Nominal DC Voltage [V]	760		
Operating MPPT Voltage Range [V]	200 – 1000		
MPPT Voltage Range at Nominal	550 – 850		
Start up DC Voltage [V]	260		
Turn off DC Voltage [V]	200		
Max. DC Current [A]	A: 22 / B: 22 / C: 22 / D: 22		
Max. Short Circuit Current [A]	A: 30 / B: 30 / C: 30 / D: 30		
Number of MPP trackers	A: 1 / B: 1 / C: 1 / D: 1		
Number of DC Connection	A: 2 / B: 2 / C: 2 / D: 2		
DC Connection Type	Amphenol Connector		
Output(AC)			
Max. AC Power [kW]	52.5		
Nominal AC Power [kW]	47.5		
Nominal Grid Voltage [V]	500		
Nominal Grid Frequency [Hz]	50 / 60		
Max. AC Current [A]	60.8		
Grid Voltage Range [V]*	425 – 550		
Grid Frequency Range [Hz]*	45 – 55 / 55 – 65		
Power Factor	>0.99		
Total Harmonic Distortion (THD)	<3%		
Night time Power Consumption [W]	<1		
AC Connection Type	Terminal Blocks		
Efficiency			
Max. Efficiency	99.0%		
Euro Efficiency	98.6%		
MPPT Efficiency	99.99%		
Safety and Protection			
Protection Functions	Array ground insulation resistance monitoring	Output over current protection	Residual current monitoring
	Array polarity reverse monitoring	Output over/under voltage protection	Surge protection
	Array over voltage protection	Output over/under frequency protection	Anti-island protection
	Array over current protection	Output short circuit protection	Over temperature protection
Protection Class	I (According to IEC 62103)		
Overvoltage Category	PV I / Mains III (According to IEC 62109-1)		
Reference Standard			
Safety Standard	IEC/EN 62109		
EMC Standard	EN 61000-6-1, EN61000-6-3, EN 61000-6-2, EN61000-6-4, EN61000-3-11, EN 61000-3-12		
Grid Standard	VDE-AR-N 4105, VDE 0126-1-1, CEI 0-21, EN50438		
Physical Structure			
Dimensions (WxHxD) [mm]	910 * 572 * 285		
Weight [kg]	58.5		
Environmental Protection Rating	IP 65		
Cooling Concept	Natural convection		
Mounting Information	Wall bracket		
General Data			
Operating Temperature Range [°C]	-30 to +60		
Relative Humidity	0% to 100%, no condensation		
Max. Altitude (above sea level) [m]	3000		
Noise Level [dB]	<30		
Isolation Type	Transformerless		
Display	1 LED, LCD Display		
Data Communication Interfaces	RS485 / PLC / Wireless optional		
Guarantee	5 / 10 / 15 years optional		

*The AC voltage and frequency range may vary depending on specific country grid