

# Three Phase Inverter

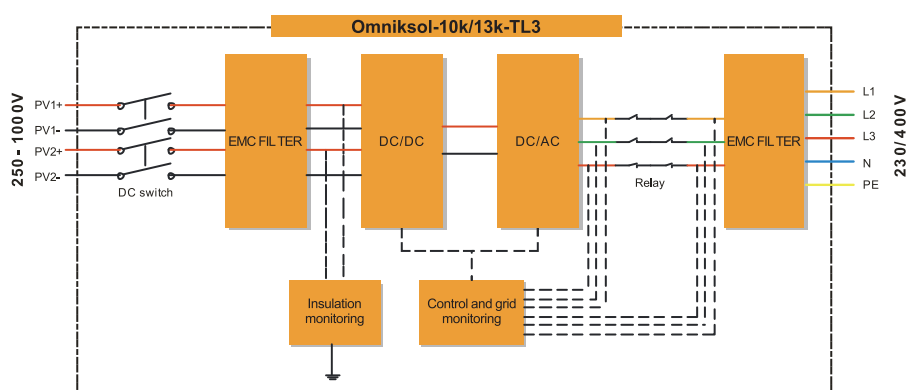
Omniksol-10k/13k-TL3



## Product Features

【Features】	【Advantages】	【Benefits】
·5-25 years warranty as optional	·Guaranteed product quality	·High ROI
·Built-in GPRS module as optional	·Plug and play	·Remote monitoring without setting
·Built-in WiFi module as optional	·Free monitoring fee for data transmission	·Remote monitoring without any charge
·Circuit design based on temperature gradient	·Lower internal temperature	·Longer life cycle
·Smaller and lighter, only 27 kg	·Easy transportation and installation	·Saving storage and installation space
·Meet VDE AR-N-4105 certification	·Adjustable active and reactive power	·Meet the latest regulations
·High performance DSP for algorithm control	·Faster CPU speed	·Higher inverter control accuracy
·Dual MPPT design	·More flexible system design	·Fit in various installation environments
·New topology design	·Max. efficiency 98.0%, Euro efficiency 97.5%	·Increase system payback ability
·Multi-button interface	·User friendly operation	·Easy to operate
·Power supply from AC side	·Query the state of inverter at night	·Real-time data readable for 24 hours
·Anti-shadow function	·Suitable to complex installation environment	·Increase the electricity generation of the system in shading environment

## Block Diagram



# Technical Data

## Omniksol-10k/13k-TL3

Type	Omniksol-10k-TL3	Omniksol-13k-TL3	
<b>Input(DC)</b>			
Max. PV Module Power [W]	12000	15600	
Max. DC Voltage [V]	1000	1000	
Nominal DC Voltage [V]	640	640	
Operating MPPT Voltage Range [V]	150 - 800	150 - 800	
MPPT Voltage Range at Nominal	520 - 800	450 - 800	
Start up DC Voltage [V]	220	220	
Turn off DC Voltage [V]	100	100	
Max. DC Current [A]	A:10 / B:10	A:20 / B:10	
Max. Short Circuit Current [A]	A:12 / B:12	A:24 / B:12	
Number of MPP trackers	A:1 / B:1	A:1 / B:1	
Number of DC Connection	A:1 / B:1	A:2 / B:1	
DC Connection Type	Amphenol Connector	Amphenol Connector	
<b>Output(AC)</b>			
Max. AC Apparent Power [VA]	10000	13000	
Nominal AC Power [W]	10000	13000	
Nominal Grid Voltage [V]	3/N/PE;220/380	3/N/PE;220/380	
	3/N/PE;230/400	3/N/PE;230/400	
	3/N/PE;240/415	3/N/PE;240/415	
Nominal Grid Frequency [Hz]	50 / 60	50 / 60	
Max. AC Current [A]	17	22	
Grid Voltage Range [V]*	185 - 276	185 - 276	
Grid Frequency Range [Hz]*	45 - 55 / 55 - 65	45 - 55 / 55 - 65	
Power Factor	0.9i - 0.9c	0.9i - 0.9c	
Total Harmonic Distortion (THD)	< 3%	< 3%	
Night time Power Consumption [W]	< 1	< 1	
AC Connection Type	Plug-in connector	Plug-in connector	
<b>Efficiency</b>			
Max. Efficiency	98.0%	98.0%	
Euro Efficiency	97.5%	97.5%	
MPPT Efficiency	99.9%	99.9%	
<b>Safety and Protection</b>			
Protection Functions	Array ground insulation resistance monitoring	Output over current protection	Residual current monitoring
	Array polarity reverse protection	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 II / 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, C10/11, G59/3, UTE C 15-721-1, AS4777, CEI 0-21, EN50438, NB/T32004		
<b>Physical Structure</b>			
Dimensions (WxHxD) [mm]	428 * 430 * 187		
Weight [kg]	27		
Environmental Protection Rating	IP 65 (According to IEC 60529)		
Cooling Concept	Natural convection		
Mounting Information	Wall bracket		
<b>General Data</b>			
Operating Temperature Range [°C]	-25 to +60 (derating above 45°C)		
Relative Humidity	0% to 100%, no condensation		
Max. Altitude (above sea level) [m]	2000		
Noise Level [dB]	< 40		
Isolation Type	Transformerless		
Display	3 LED, Backlight, 4 * 20 Character LCD		
Data Communication Interfaces	RS485 / WiFi / GPRS optional		
Guarantee	5 - 25 years optional		

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