Single Phase Inverter Second Generation

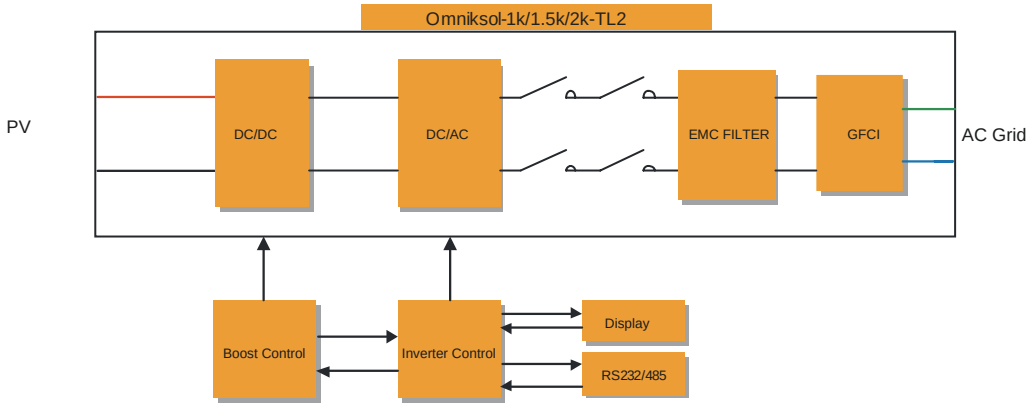
Omniksol-1k/1.5k/2k-TL2

Omnik New Energy

product features

Features	Advantages	Benefits
Standard 10 years warranty, 5-25 years optional	Longer life cycle	More stable and reliable
Built-in GPRS as option	Plug and play	No commissioning work to get real-time remote monitoring
Built-in Wifi as option	Free monitoring fee for data transmission	More convenient monitoring solution without any charge
External Inductor	Very lower internal temperature	Longer life cycle
Smaller and lighter, 2kW only 9.6kg	Easy transportation and installation	Saving storage and installation space
High performance DSP for algorithm control	Faster CPU speed	Higher inverter control accuracy
VDE-AR-N 4105 certification	Adjustable active and reactive power	Meet the latest certification and regulations
New topology design	Maximum conversion efficiency up to 97.7%, Euro up to 96.9%	Increase system payback ability
Multi-button touch interface	User friendly operation	Easy to operate
LCD screen visible at night	Real-time data readable at night	Real-time operating condition accessible
Have anti-shading function	Suitable to complex installation environment	Increase the electricity generation of the system in shading environment

Block Diagram



Technical Data

Omniksol-1k/1.5k/2k-TL2

Type	Omniksol-1k-TL2	Omniksol-1.5k-TL2	Omniksol-2k-TL2
Input(DC)			
Max. PV Power	1300W	1750W	2300W
Max. DC Voltage	500V	500V	500V
Nominal DC Voltage	360V	360V	360V
Operating MPPT Voltage Range	80-360V	120-450V	120-450V
MPPT Voltage Range at Nominal Power	150-360V	150-450V	150-450V
Start up DC Voltage	90V	150V	150V
Turn off DC Voltage	80V	120V	120V
Max. DC Current	16A	18A	18A
Max. Short Circuit Current for each MPPT	20A	20A	20A
Number of MPP trackers	1	1	1
Number of DC Connection for each MPPT	1	1	1
DC Connection Type	MC4 Connector	MC4 Connector	MC4 Connector
Output (AC)			
Max. AC Apparent Power	1100VA	1650VA	2200VA
Nominal AC Power(cos phi = 1)	1000W	1500W	2000W
Nominal Grid Voltage	220V/230V/240V	220V/230V/240V	220V/230V/240V
Nominal Grid Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Max. AC Current	5.8A	9.0A	11.0A
Grid Voltage Range*	185-276V	185-276V	185-276V
Grid Frequency Range*	45-55Hz/55-65Hz	45-55Hz/55-65Hz	45-55Hz/55-65Hz
Power Factor	0.95 capacitive…0.95 inductive	0.95 capacitive…0.95 inductive	0.95 capacitive…0.95 inductive
Total Harmonic Distortion (THD)	<2%	<2%	<2%
Feed in Starting Power	30W	30W	30W
Night time Power Consumption	<1W	<1W	<1W
Standby Consumption	6W	6W	6W
AC Connection Type	Plug-in connector	Plug-in connector	Plug-in connector
Efficiency			
Max. Efficiency (at 360Vdc)	97.7%	97.7%	97.7%
Euro Efficiency (at 360Vdc)	96.7%	96.8%	96.9%
MPPT Efficiency	99.9%	99.9%	99.9%
Safety and Protection			
DC Insulation Monitoring	Yes		
DC Switch	Optional		
Residual Current Monitoring Unit (RCMU)	Integrated		
Grid Monitoring with Anti-islanding	Yes		
Protection Class	I (According to IEC 62103)		
Overvoltage Category	PV II / Mains III (According to IEC 62109-1)		
Reference Standard			
Safety Standard	EN 62109, AS/NZS 3100		
EMC Standard	EN 61000-6-1, EN 61000-6-3, EN 61000-6-2, EN 61000-6-4, EN61000-3-2, EN61000-3-3		
Grid Standard	VDE-AR-N-4105,VDE 0126-1-1, RD1699, C10/11, G83/2, UTE C15-712-1, AS4777, CEI 0-21, EN50438		
Physical Structure			
Dimensions (WxHxD)	343x281x150mm		
Weight	9.6kg		
Environmental Protection Rating	IP 65 (According to IEC 60529)		
Cooling Concept	Natural convection		
Mounting Information	Wall bracket		
General Data			
Operating Temperature	-20°C to +60°C(derating above 45°C)		
RangeRelative Humidity	0% to 98%, no condensation		
Max. Altitude (above sea level)	2000m		
Noise Level	< 40dB		
Isolation Type	Transformerless		
Display	3 LED, Backlight, 4 x 20 Character LCD		
Data Communication Interfaces	RS485(WiFi, GPRS integrated)		
Computer Communication	USB		
Standard Warranty	10 Years (5-25 years optional)		

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

Address: XingHu Rd. Nr. 218 bioBAY Park A4-414,
215123, SuZhou, China
Tel: +86-512-6956-8216
Fax: +86-512-6295-6682
E-mail: sales@omnik-solar.com
Website: http://www.omnik-solar.com

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Omnik New Energy Co., Ltd.