

Single Phase Inverter Second Generation

Omniksol-3k/4k/5k-TL2



Product Features

Features

- Standard 10years warranty, 5-25 years optional
- Built-in GPRS as option
- Built-in Wifi as option
- External Inductor
- Smaller and lighter, only 16.5kg
- High performance DSP for algorithm control
- VDE-AR-N 4105 certification
- New topology design
- Dual MPPT design
- Multi-button touch interface
- LCD screen visible at night
- Have anti-shading function

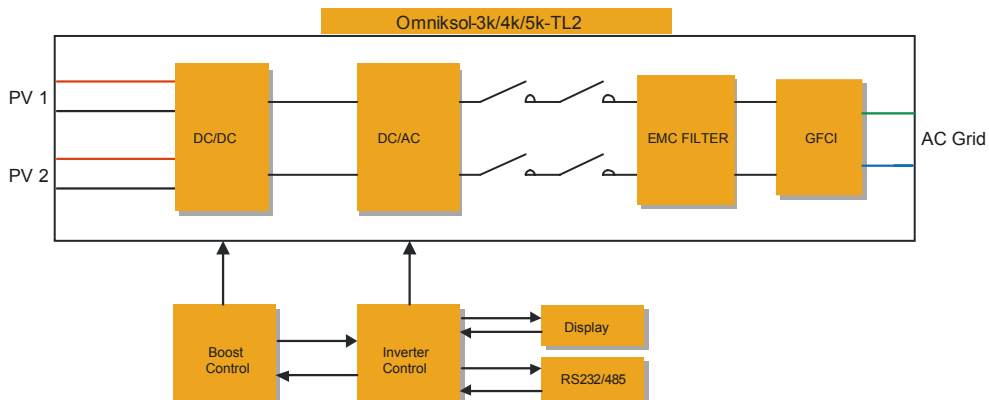
Advantages

- Longer life cycle
- Plug and play
- Free monitoring through our webportal
- Very lower internal temperature
- Easy transportation and installation
- Faster CPU speed
- Adjustable active and reactive power
- Maximum conversion efficiency up to 98.2%, Euro up to 97.5%
- More flexible system design
- User friendly operation
- Real-time data readable at night
- Suitable to complex installation environment

Benefits

- more stable and reliable
- No commissioning work to get real-time remote monitoring
- More convenient monitoring solution without any charge
- Longer life cycle
- Saving storage and installation space
- Higher inverter control accuracy
- Meet the latest certification and regulations
- Increase system payback
- Fit in various installation environments
- Easy to operate
- Real-time operating condition accessible
- Increase the electricity generation of the system in shading environment

Block Diagram



Technical Data

Omniksol-3k/4k/5k-TL2

Type	Omniksol-3k-TL2	Omniksol-4k-TL2	Omniksol-5k-TL2
Input (DC)			
Max. PV Power	3400W	4500W	5200W
Max. DC Voltage	590V	590V	590V
Nominal DC Voltage	360V	360V	360V
Operating MPPT Voltage Range	120 - 550V	120 - 550V	120 - 550V
MPPT Voltage Range at Nominal Power	150 - 500V	200 - 500V	200 - 500V
Start up DC Voltage	150V	150V	150V
Turn off DC Voltage	120V	120V	120V
Max. DC Current	12A/12A	16A/16A	18A/18A
Max. Short Circuit Current for each MPPT	16A/16A	20A/20A	20A/20A
Number of MPP trackers	2	2	2
Max. Input Power for each MPPT	2000W	2600W	3000W
Number of DC Connection for each MPPT	A:1/B:1	A:1/B:1	A:1/B:1
DC Connection Type	MC4 connector	MC4 connector	MC4 connector
Output (AC)			
Max. AC Apparent Power	3300VA	4400VA	5000VA**
Nominal AC Power(cos phi = 1)	3000W	4000W	4600W**
Nominal Grid Voltage	220V/230V/240V	220V/230V/240V	220V/230V/240V
Nominal Grid Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Max. AC Current	14.4A	19.0A	22.0A
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	0.9 capacitive...0.9 inductive	0.9 capacitive...0.9 inductive	0.9 capacitive...0.9 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)	98.2%	98.2%	98.2%
Euro Efficiency (at 360Vdc)	97.3%	97.5%	97.5%
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, EN61000-3-11, EN61000-3-12	
Grid Standard	VDE-AR-N-4105, VDE 0126-1-1, CEI0-21, C10/11, G83/2, G59/3, UTE C15-712-1, EN50438, AS4777, CQC		
Physical Structure			
Dimensions (WxHxD)		352x421x162.5mm	
Weight		16.5kg	
Environmental Protection Rating		IP 65 (According to IEC 60529)	
Cooling Concept		Internal fan convection	
Mounting Information		Wall bracket	
General Data			
Operating Temperature Range		-25°C to +60°C(derating above 45°C)	
Relative Humidity		0% to 98%, no condensation	
Max. Altitude (above sea level)		2000m	
Noise Level		< 40dB	
Isolation Type		Transformerless	
Display		3 LED, Backlight, 20 x 4 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
 **4600VA, 4600W with VDE-AR-N 4105

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