

# 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

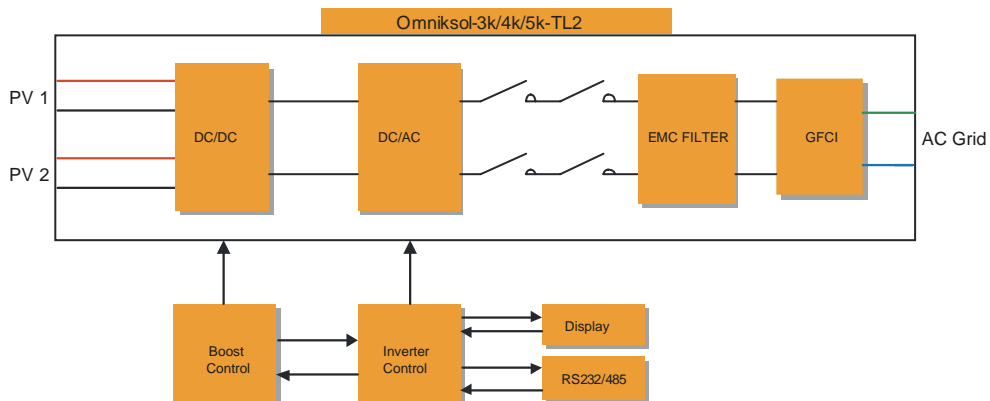
### Advantages

- 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
<b>Input (DC)</b>			
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
<b>Output (AC)</b>			
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	0.95 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
<b>Efficiency</b>			
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%
<b>Safety and Protection</b>			
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)	
<b>Reference Standard</b>			
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, RD1699, CEI0-21, C10/11, G83/2, UTE C15-712-1, EN50438, AS4777, CQC		
<b>Physical Structure</b>			
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	
<b>General Data</b>			
Operating Temperature Range		-20°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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