

## Three Phase Inverter

Omnisol-5k/6k-TH/8k/10k/13k/16k-TL3-NS



### Product Features

#### 【Compact and Robust】

- Aluminum alloy die casting enclosure, permanently anti-rust
- IP65, ensuring waterproof and dustproof during the 25-year service life
- Integrated streamlined case design with elegant appearance
- Light weight, only 25kg for 16kW inverter
- Industrial-grade high quality components, obtaining a 25-year design life

#### 【High Conversion Efficiency, More Power Generation Benefit】

- High conversion efficiency up to 98.65%
- Internal without electrolytic capacitor in main circuit, long design life, low failure rate, ensuring long-term continuous power generation of the inverter
- Self-adaptive to the weak grid conservative mechanism, ride-through in harsh environment
- 1000V withstand voltage, 120-950V wide MPPT range, supporting input over 30%

#### 【Easy Operation, Intelligent Monitoring, Running Cost Reduction】

- Remote wireless transmission and cloud storage of power generation and operation data
- One-click APP configuration, real-time query via smart phone, convenient and efficient
- Support meter communication interface, more accurate power generation data, ensuring the profits
- Remote software upgrade, parameter setting and troubleshooting query, greatly reducing the cost of operation and maintenance
- Provided with the functions of grid remote power control

# Technical Data

Omniksol-5k/6k-TH/8k/10k/13k/16k-TL3-NS

Type	Omniksol-5k-TH-TL3-NS	Omniksol-6k-TH-TL3-NS	Omniksol-8k-TL3-NS	Omniksol-10k-TL3-NS	Omniksol-13k-TL3-NS	Omniksol-16k-TL3-NS
<b>Input (DC)</b>						
Max. PV Module Power [W]	6500	7800	10400	13000	16900	20800
Max. DC Voltage [V]	1000	1000	1000	1000	1000	1000
Start up DC Voltage [V]	180	180	180	180	250	250
MPPT Voltage Range @ Nominal Power [V]	120 - 950	120 - 950	120 - 950	200 - 950	200 - 950	200 - 950
MPPT Voltage Range @ Full Load [V]	250 - 850	280 - 850	380 - 850	470 - 850	410 - 850	500 - 850
Max. DC Current [A]	11/11	11/11	11/11	11/11	11 * 2 / 11	11 * 2 / 11
Max. Short Circuit Current [A]	12/12	12/12	12/12	12/12	12 * 2 / 12	12 * 2 / 12
Number of MPP trackers	2	2	2	2	2	2
Number of DC Connection	A:1 / B:1	A:1 / B:1	A:1 / B:1	A:1 / B:1	A:2 / B:1	A:2 / B:1
<b>Output (AC)</b>						
Nominal AC Power [W]	5000	6000	8000	10000	13000	16000
Max. active power [W]	5000	6000	8000	10000	13000	16000
Max. apparent power [VA]	5000	6000	8000	10000	13000	16000
Max. AC Current [A]	7.3	8.7	11.6	14.5	18.9	23.2
Nominal Grid Voltage [V]	230 / 4000, 3W+N+PE					
Grid Voltage Range [V]*	176 - 276 / 304 - 480					
Nominal Grid Frequency [Hz]	50 / 60					
Grid Frequency Range [Hz]*	45 - 55 / 55 - 65					
Total Harmonic Distortion (THD)	<3% (rated power)					
Output current DC component	<0.5% <sub>n</sub>					
Power Factor	>0.99 (rated power)					
Adjustable range of power factor	0.8i - 0.8c					
<b>Efficiency</b>						
Max. Efficiency	98.7%					
Euro Efficiency	98.2%					
<b>Protection Functions</b>						
DC switch	Available					
DC reverse polarity protection	Available					
Array ground insulation resistance mon	Available					
Leakage current protection	Available					
Output over current protection	Available					
Output overvoltage protection	Available					
Anti-island protection	Available					
DC surge protection	Class III lightning protection					
AC surge protection	Class III lightning protection					
PID protection and repair	Optional					
<b>General data</b>						
Night time Power Consumption [W]	<1					
Isolation Type	Transformerless					
Environmental Protection Rating	IP65					
Operating Temperature Range [°C]	-25°C + 60°C (> 45°C downgrading)					
Relative Humidity	0% to 100%, no condensation					
Cooling Concept	Natural convection					
Max. Altitude (above sea level) [m]	4000m (>2000m downgrading)					
Dimensions (W*H*D) [mm]	515 × 435 × 166.5					
Weight [kg]	25					
Display	LED, BlueTooth (Optional)					
Data Communication Interfaces	RS485,WiFi,GPRS					
<b>Reference Standard</b>						
Safety Standard	NB/T 32004, IEC62109-1, IEC62109-2					
Grid Standards	NB/T 32004,VDE0126-1-1, VDE-AR-N 4105					

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

Address: Weixin Rd. 63, SIP, Suzhou, China

Tel: +86-512-69568216

E-Mail: sales@omnik-solar.com

Website: <https://www.omnik-solar.com>

Product data updates continuously. Any data change will not be informed exclusively.  
Omnik Reserves the rights of final interpretation of product technical data and copyrights.

