# Single Phase Inverter

Omniksol-3k/3.68k/4k-TL3

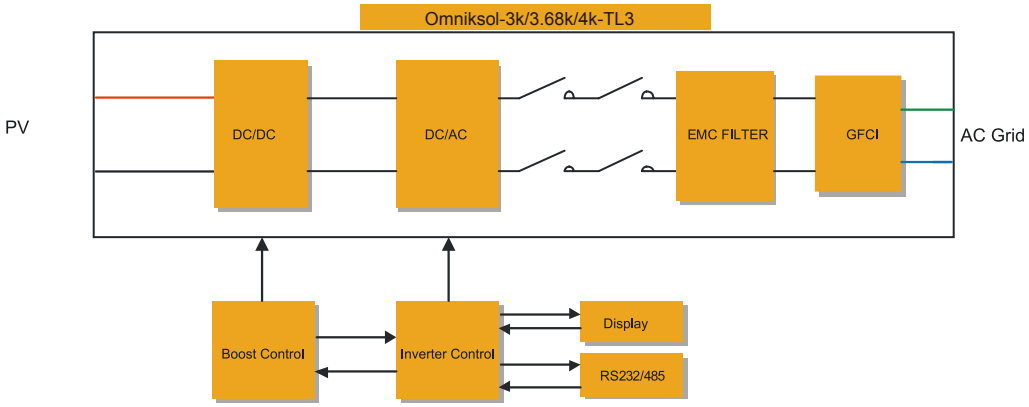
Omnik New Energy

10 year Warranty

## product features

| Features | Advantages | Benefits |
|---|---|---|
| 5-25 years guarantee (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 |
| Circuit design based on temperature gradient | Excellent heat dissipation | Longer life cycle |
| Smaller and lighter, only 11.5 kg | 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 97.3%, Euro up to 96.7% | Increase system payback ability |
| TF card update | User friendly interface | Easy to operate |
| LCD screen visible at night | Real-time data visible 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 Date

## Omniksol-3k/3.68k/4k-TL3

| Type | Omniksol-3k-TL3 | Omniksol-3.68k-TL3 | Omniksol-4k-TL3 |
|---|---|---|---|
| **Input(DC)** | | | |
| Max. PV Power | 3200W | 3900W | 4200W |
| Max. DC Voltage | 580V | 580V | 580V |
| Operating MPPT Voltage Range | 120-500V | 120-500V | 120-500V |
| Start up DC Voltage | 150V | 150V | 150V |
| Turn off DC Voltage | 120V | 120V | 120V |
| Max. DC Current | 10A | 10A | 10A |
| Max. Short Circuit Current for each MPPT | 14A | 14A | 14A |
| Number of MPP trackers | 2 | 2 | 2 |
| Number of DC Connection for each MPPT | 1 | 1 | 1 |
| DC Connection Type | MC4 Connector | MC4 Connector | MC4 Connector |
| **Output (AC)** | | | |
| Nominal AC Power(cos phi = 1) | 3000W | 3680W | 4000W |
| Nominal Grid Voltage | 220V/230V/240V | 220V/230V/240V | 220V/230V/240V |
| Nominal Grid Frequency | 50Hz/60Hz | 50Hz/60Hz | 50Hz/60Hz |
| Max. AC Current | 15A | 16A | 20A |
| 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 | 0.9i_1_0.9c | 0.9i_1_0.9c | 0.9i_1_0.9c |
| Total Harmonic Distortion (THD) | <3% | <3% | <3% |
| Night time Power Consumption | <1W | <1W | <1W |
| AC Connection Type | Plug-in connector | Plug-in connector | Plug-in connector |
| **Efficiency** | | | |
| Max. Efficiency (at 360Vdc) | 97.3% | 97.3% | 97.3% |
| Euro Efficiency (at 360Vdc) | 96.7% | 96.7% | 96.7% |
| 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 0126-1-1，RD1663，C10/11，G83/2，UTE C15-712-1，AS4777，CQC,CEI0-21，EN50438 | | |
| **Physical Structure** | | | |
| Dimensions (WxHxD) | 288x380x130mm | | |
| Weight | 11.5kg | | |
| Environmental Protection Rating | IP 65 | | |
| Cooling Concept | Natural convection | | |
| Mounting Information | Wall bracket | | |
| **General Data** | | | |
| Operating Temperature | -25°C to +60°C(derating above 45°C) | | |
| RangeRelative Humidity | 0% to 100%, no condensation | | |
| Max. Altitude (above sea level) | 2000m | | |
| Noise Level | < 40dB | | |
| Isolation Type | Transformerless | | |
| Display | 2 LED, Backlight, 16 x 2 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

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