

Single Phase Inverter

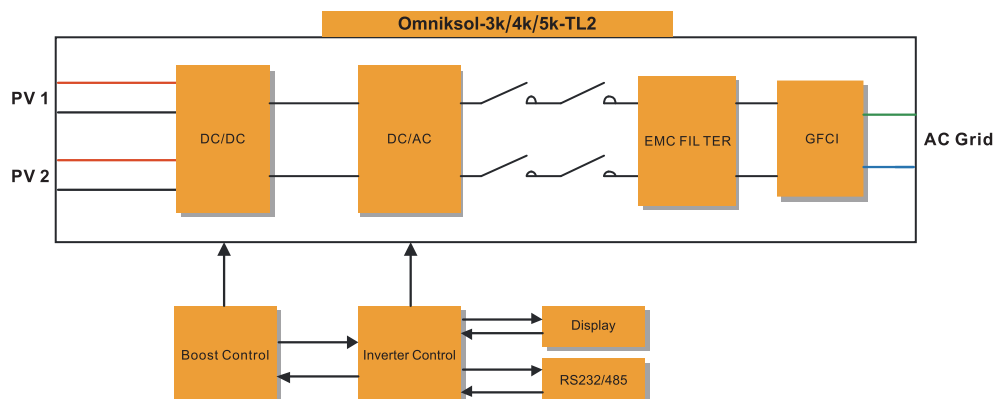
Omniksol-3k/4k/5k-TL2



Product Features

| 【Features】 | 【Advantages】 | 【Benefits】 |
|---|--|---|
| ·5-25 years warranty as optional | ·Guaranteed product quality | ·High ROI |
| ·Built-in GPRS module as optional | ·Plug and play | ·Remote monitoring without setting |
| ·Built-in WiFi module as optional | ·Free monitoring fee for data transmission | ·Remote monitoring without any charge |
| ·External inductor | ·Lower internal temperature | ·Longer life cycle |
| ·Smaller and lighter | ·Easy transportation and installation | ·Saving storage and installation space |
| ·Meet VDE AR-N-4105 certification | ·Adjustable active and reactive power | ·Meet the latest regulations |
| ·High performance DSP for algorithm control | ·Faster CPU speed | ·Higher inverter control accuracy |
| ·Dual MPPT design | ·More flexible system design | ·Fit in various installation environments |
| ·New topology design | ·Max. efficiency 98.2%, Euro efficiency 97.5% | ·Increase system payback ability |
| ·Multi-button interface | ·User friendly operation | ·Easy to operate |
| ·Power supply from AC side | ·Query the state of inverter at night | ·Real-time data readable for 24 hours |
| ·Anti-shadow function | ·Suitable to complex installation environment | ·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 Module Power [W] | 3600 | 4800 | 6000 |
| Max. DC Voltage [V] | 590 | 590 | 590 |
| Nominal DC Voltage [V] | 360 | 360 | 360 |
| Operating MPPT Voltage Range [V] | 120 – 550 | 120 – 550 | 120 – 550 |
| MPPT Voltage Range at Nominal | 150 – 500 | 200 – 500 | 200 – 500 |
| Start up DC Voltage [V] | 150 | 150 | 150 |
| Turn off DC Voltage [V] | 120 | 120 | 120 |
| Max. DC Current [A] | A: 12 / B: 12 | A: 16 / B: 16 | A: 18 / B: 18 |
| Max. Short Circuit Current [A] | A: 16 / B: 16 | A: 20 / B: 20 | A: 20 / B: 20 |
| Number of MPP trackers | A: 1 / B: 1 | A: 1 / B: 1 | A: 1 / B: 1 |
| Number of DC Connection | A: 1 / B: 1 | A: 1 / B: 1 | A: 1 / B: 1 |
| DC Connection Type | Amphenol Connector | Amphenol Connector | Amphenol Connector |
| Output(AC) | | | |
| Max. AC Appaeent Power [VA] | 3000 | 4000 | 5000 |
| Nominal AC Power [W] | 3000 | 4000 | 4600 |
| Nominal Grid Voltage [V] | 220 / 230 / 240 | 220 / 230 / 240 | 220 / 230 / 240 |
| Nominal Grid Frequency [Hz] | 50 / 60 | 50 / 60 | 50 / 60 |
| Max. AC Current [A] | 14. 4 | 19 | 23 |
| Grid Voltage Range [V]* | 185 – 276 | 185 – 276 | 185 – 276 |
| Grid Frequency Range [Hz]* | 45 – 55 / 55 – 65 | 45 – 55 / 55 – 65 | 45 – 55 / 55 – 65 |
| Power Factor | 0.8i - 0.8c | 0.8i - 0.8c | 0.8i - 0.8c |
| Total Harmonic Distortion (THD) | <2% | <2% | <2% |
| Night time Power Consumption [W] | <1 | <1 | <1 |
| AC Connection Type | Plug-in connector | Plug-in connector | Plug-in connector |
| Efficiency | | | |
| Max. Efficiency | 98. 2% | 98. 2% | 98. 2% |
| Euro Efficiency | 97. 3% | 97. 5% | 97. 5% |
| MPPT Efficiency | 99. 9% | 99. 9% | 99. 9% |
| Safety and Protection | | | |
| Protection Functions | Array ground insulation resistance monitoring | Output over current protection | Residual current monitoring |
| | Array polarity reverse protection | Output over/under voltage protection | Surge protection |
| | Array over voltage protection | Output over/under frequency protection | Anti-island protection |
| | Array over current protection | Output short circuit protection | Over temperature protection |
| Protection Class | I (According to IEC 62103) | | |
| Overvoltage Category | PV II / Mains III (According to IEC 62109-1) | | |
| Reference Standard | | | |
| Safety Standard | IEC/EN 62109 | | |
| EMC Standard | EN 61000-6-1, EN61000-6-3, EN 61000-6-2, EN61000-6-4, EN61000-3-11, EN 61000-3-12 | | |
| Grid Standard | VDE-AR-N 4105, VDE 0126-1-1, C10/11, G59/3, UTE C 15-721-1, AS4777, CEI 0-21, EN50438, NB/T32004 | | |
| Physical Structure | | | |
| Dimensions (WxHxD) [mm] | 352 * 421 * 162. 5 | | |
| Weight [kg] | 16. 5 | | |
| Environmental Protection Rating | IP 65 (According to IEC 60529) | | |
| Cooling Concept | Natural convection | | |
| Mounting Information | Wall bracket | | |
| General Data | | | |
| Operating Temperature Range [°C] | -25 to +60 (derating above 45°C) | | |
| Relative Humidity | 0% to 100%,no condensation | | |
| Max. Altitude (above sea level) [m] | 2000 | | |
| Noise Level [dB] | <40 | | |
| Isolation Type | Transformerless | | |
| Display | 3 LED,Backlight,4 * 20 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.