

GRID-TIED INVERTER

THREE PHASE:
GT3-90/95/99K-11, GT3- 90/95/99K-1

The Livoltek GT3-75 / 100 / 110 / 125K series of inverters is extensively utilized in commercial and industrial ground-mounted power stations. These inverters feature an innovative intelligent fan cleaning design, making them well-suited for harsh desert environments and significantly enhancing the product's service life. With exceptional compatibility, they support a maximum input current of 40A, allowing them to accommodate 210+ high-current modules. Equipped with up to 10 Maximum Power Point Trackers (MPPTs) and precision algorithms, they can flexibly adapt to complex installation environments, thereby increasing power generation. Additionally, they support global MPPT scanning, built-in Power Factor Correction (PFC), night SVG (Static Var Generator), and remote monitoring capabilities, ensuring customers receive continuous, stable long-term service and maximizing power generation benefits.

Product Benefits

-  Global maximum power point tracking scan
-  String current up to 20A
-  AFCI function (optional)
-  Night SVG function
-  Remote and local dual monitoring, high stability
-  Built-in PID recovery function

GRID-TIED INVERTER

INVERTER

THREE-PHASE: GT3-90/95/99K-11, GT3- 90/95/99K-1

| Model | GT3-90K-11 | GT3-95K-11 | GT3-99K-11 | GT3-90K-1 | GT3-95K-1 | GT3-99K-1 |
|-------------------------------------|--|------------|------------|-----------|-----------|-----------|
| PV Input | | | | | | |
| Max. DC Input Power [Wp] | 135000 | 142500 | 148500 | 135000 | 142500 | 148500 |
| Max. DC Input Voltage[V] | 1100 | | | | | |
| Min. PV Input Voltage[V] | 180 | | | | | |
| Start-up DC Input Voltage[V] | 200 | | | | | |
| Nominal DC Input Voltage[V] | 600 | | | | | |
| MPPT Operating Range[V] | 180 - 1000 | | | | | |
| Max. DC Input Current[A] | 8*40 | | 10*40 | | | |
| Max. Short Circuit current[A] | 8*52 | | 10*52 | | | |
| No. of MPPTs | 8 | | 10 | | | |
| No. of Strings per MPP Trackers | 8*2 | | 10*2 | | | |
| AC Output | | | | | | |
| Nominal Output Power [W] | 90000 | 95000 | 99000 | 90000 | 95000 | 99000 |
| Max. Apparent Power [VA] | 99000 | 104500 | 108900 | 99000 | 104500 | 108900 |
| Rated AC Grid Output Current[A] | 136.7 | 144.3 | 150.4 | 136.7 | 144.3 | 150.4 |
| Max. AC Output Current[A] | 150.4 | 158.8 | 165.5 | 150.4 | 158.8 | 165.5 |
| Rated AC Grid Voltage[V] | 3L / N / PE, 3L / PE, 380 / 400 / 415 | | | | | |
| AC Grid Voltage Range[V] | 320 - 480 | | | | | |
| Rated Grid Frequency [Hz] | 50 / 60 | | | | | |
| Grid Frequency Range[Hz] | 45-55 / 55-65 | | | | | |
| Power Factor | > 0.99 at rated power (Adjustable 0.8 Leading - 0.8 Lagging) | | | | | |
| THDi | <3% at rated power | | | | | |
| Efficiency | | | | | | |
| Max. Efficiency[%] | 98.50% | 98.50% | 98.50% | 98.50% | 98.50% | 98.50% |
| Euro Efficiency[%] | 98.30% | 98.30% | 98.30% | 98.30% | 98.30% | 98.30% |
| MPPT Efficiency[%] | >99% | | | | | |
| Protection | | | | | | |
| Integrated DC Switch | Support | | | | | |
| DC Reverse Polarity Protection | Support | | | | | |
| Surge Protection | Type II | | | | | |
| PV Current Detection | Support | | | | | |
| Insulation Resistor Detection | Support | | | | | |
| Output Over Current Protection | Support | | | | | |
| AC Short Circuit Protection | Support | | | | | |
| Output Over Voltage Protection | Support | | | | | |
| Anti-islanding Protection | Support | | | | | |
| Temperature Protection | Support | | | | | |
| Ground Fault Monitoring | Support | | | | | |
| Internal Over Voltage Protection | Support | | | | | |
| Input Over Current Protection | Support | | | | | |
| Grid Monitoring | Support | | | | | |
| Integrated PID Recovery | Support | | | | | |
| Residual Current Monitoring Unit | Support | | | | | |
| AFCI Protection | Optional | | | | | |
| General Data | | | | | | |
| Dimensions(W*H*D) [mm] | 960*725*369 mm | | | | | |
| Weight [kg] | 87 kg | | | | | |
| Mounting Information | Wall Mounting | | | | | |
| Protection Degree | IP66 | | | | | |
| Operating Temperature Range [°C] | -30°C to +60°C (Derating at 45°C) | | | | | |
| Relative Humidity | 0 - 100% | | | | | |
| Max. Operating Altitude[m] | 4000(≥3000) derating | | | | | |
| Night Self Consumption [W] | <5 W | | | | | |
| Display | LED + APP | | | | | |
| Communication | RS485, Wi-Fi | | | | | |
| Topology | Transformerless | | | | | |
| Certifications and Standards | | | | | | |
| Grid Regulation | IEC61727, IEC62116 | | | | | |
| Safety | IEC62109-1 / -2 | | | | | |
| EMC | EN61000-6-1 / 2 / 3 / 4 | | | | | |