



# Grid Tied Inverter

Three Phase: GT3-5K/6K/10K/12K/15K/20K/25K D1

The LIVOLTEK GT3-5/10/12/15/20/25K-D1 PV inverter is developed for residential or commercial customers who need a three-phase rooftop model. The Shade Fix integrated shading management system ensures that the inverter maximizes energy production even when the PV panels are lightly shaded. The machine has a built-in optional AFCI module to prevent electrical fires caused by abnormal arc faults in the electrical wiring, with a high safety factor. With 160V ultra-low start-up voltage, ultra-long working time, it's surely an ideal choice for large commercial and industrial power plants.



## Features

- 150% DC/AC ratio
- Export limitation (optional)
- Smart APP to monitor & optimize
- AFCI (optional)
- Plug-and-play installation saves time
- 110% AC output for efficient power generation



Max Efficiency 98.6%



Support Export Limitation



IP65 C5 Anti-corrosion



SPD II Protection

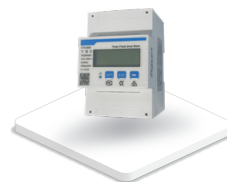
## Compatible Products



LCD Screen



PSD200-FI Dongle



Smart Meter



Monitoring System

# Specifications

| Model  | GT3-5KD1   | GT3-6KD1 | GT3-10KD1 | GT3-12KD1                       | GT3-15KD1 | GT3-20KD1 | GT3-25KD1 |
|--|--|----------|-----------|---------------------------------|-----------|-----------|-----------|
| <b>Input(PV)</b>                               |  |          |           |                                 |           |           |           |
| Max. DC Input Power                            | 7500Wp   | 9000Wp   | 15000Wp   | 18000Wp                         | 22500Wp   | 30000Wp   | 37500Wp   |
| Max. DC Input Voltage                          | 1100V  |          |           |                                 |           |           |           |
| Min PV Input Voltage                           | 140V   |          |           |                                 |           |           |           |
| Start-up DC Input Voltage                      | 160V   |          |           |                                 |           |           |           |
| Nominal DC Input Voltage                       | 650V   |          |           |                                 |           |           |           |
| MPPT Operating Range                           | 140V-1000V   |          |           |                                 |           |           |           |
| Max. DC Input Current                          | 16A+16A  |          |           | 40A+20A                         |           | 40A+40A   |           |
| Max. Short Circuit Current                     | 21A+21A  |          |           | 52A+26A                         |           | 52A+52A   |           |
| No. of MPPTs                                   | 2  |          |           | 2                               |           | 2         |           |
| No. of Strings per MPP Tackers                 | 1/1  |          |           | 2/1                             |           | 2/2       |           |
| <b>Output (AC)</b>                             |  |          |           |                                 |           |           |           |
| Nominal Output Power                           | 5000W  | 6000W    | 10000W    | 12000W                          | 15000W    | 20000W    | 25000W    |
| Max. Apparent Power                            | 5500VA   | 6600VA   | 11000VA   | 13200VA                         | 16500VA   | 22000VA   | 27500VA   |
| Rated AC Grid Output Current                   | 7.2A   | 8.7A     | 14.4A     | 17.3A                           | 21.7A     | 28.9A     | 36.1A     |
| Max. AC Output Current                         | 7.9A   | 9.5A     | 15.9A     | 19.1A                           | 23.8A     | 31.8A     | 39.7A     |
| Rated AC Grid Voltage                          | 3/N/PE, 220V/380V, 230V/400V                             |          |           |                                 |           |           |           |
| AC Grid Voltage Range                          | 270V-480V  |          |           |                                 |           |           |           |
| Rated Grid Frequency                           | 50Hz/60Hz  |          |           |                                 |           |           |           |
| Grid Frequency Range                           | 45Hz-55Hz/55Hz-66Hz                                      |          |           |                                 |           |           |           |
| Power Factor                                   | > 0.99 Rated Power (Adjustable 0.8 Leading - 0.8Lagging) |          |           |                                 |           |           |           |
| Output THDi (@Nominal Output)                  | <3%  |          |           |                                 |           |           |           |
| <b>Efficiency</b>                              |  |          |           |                                 |           |           |           |
| Max. Efficiency                                | 98.50%   | 98.50%   | 98.60%    | 98.60%                          | 98.50%    | 98.60%    | 98.60%    |
| Euro Efficiency                                | 98.10%   | 98.10%   | 98.20%    | 98.20%                          | 98.10%    | 98.20%    | 98.20%    |
| MPPT Efficiency                                | >99%   |          |           |                                 |           |           |           |
| <b>Protection</b>                              |  |          |           |                                 |           |           |           |
| Surge Arrester                                 | Type II  |          |           |                                 |           |           |           |
| PV Current Detection                           | Support  |          |           |                                 |           |           |           |
| Over Current Protection                        | Support  |          |           |                                 |           |           |           |
| AC Short Circuit Protection                    | Support  |          |           |                                 |           |           |           |
| Over Voltage Protection                        | Support  |          |           |                                 |           |           |           |
| Anti-islanding Protection                      | Support  |          |           |                                 |           |           |           |
| Residual Current Monitoring Unit               | Support  |          |           |                                 |           |           |           |
| Integrated AFCI (Arc-Fault Circuit Protection) | Optional   |          |           |                                 |           |           |           |
| <b>General Data</b>                            |  |          |           |                                 |           |           |           |
| Dimension (W*H*D)                              | 520*420*193mm  |          |           |                                 |           |           |           |
| Weight   | 22kg   |          |           | 24.5kg                          |           |           |           |
| Protection Degree                              | IP65   |          |           | IP65                            |           |           |           |
| Cooling  | Natural Cooling  |          |           | Fan Cooling                     |           |           |           |
| Operating Temperature Range                    | -30°C ~ 60°C (Derating at 45°C)                          |          |           | -30°C ~ 60°C (Derating at 45°C) |           |           |           |
| Typical Noise Emission                         | <30dB  |          |           | <40dB                           |           |           |           |
| Night Self Consumption                         | <1W  |          |           |                                 |           |           |           |
| Display  | LED+APP  |          |           |                                 |           |           |           |
| Communication                                  | RS485(Meter), 4G/Wi-Fi+Bluetooth, DRM                    |          |           |                                 |           |           |           |
| <b>Certifications and Standards</b>            |  |          |           |                                 |           |           |           |
| Grid Regulation                                | IEC61727, IEC62116, CQC ABNT NBR 16149, ABNT NBR 16150   |          |           |                                 |           |           |           |
| Safety/EMC                                     | IEC62109-1/2, EN61000-6-1/2/3/4                          |          |           |                                 |           |           |           |
| Standard Warranty                              | 5 Years/10 Years (Optional)                              |          |           |                                 |           |           |           |