

Grid Tied Inverter

Single Phase: GT1-7K/8K T1

The LIVOLTEK GT1-7.0/8.0K-T1 PV inverters are developed for customers using high-power single-phase household models. This inverter is not only compatible with PV systems required for complex roofs, such as private homes or villas, but also powerful in small commercial and industrial scenarios. With an input current of 16A, it is suitable for high-efficiency large modules to enhance power generation in all aspects. The optional built-in SPD II module can effectively reduce external installation labor and wiring costs. Local bluetooth APP and remote dual monitoring provide users with the best inverter performance and maximum convenience and comfort.

Features

- 7*24 hours monitoring and maintenance
- Triple MPPT & Maximum efficiency of 97.5%
- 150% oversizing and 110% overloading
- Plug-and-play installation saves time
- Integrated AFCI module (optional)
- Export limitation (optional)



Specifications

Model	GT1-7KT1	GT1-8KT1
PV Input		
Max. PV Input Power	10500Wp	12000Wp
Max. PV Input Voltage	550V	
Min PV Input Voltage	120V	
Start-up Input Voltage	90V	
Nominal Input Voltage	360V	
MPPT Voltage Range	70-545V	
Max. PV Current	16A+16A+20A	
Max. Short Circuit Current	25A+25A+30A	
No. of MPPTs/Strings per MPPT	3/1	
AC Output		
Nominal AC Power	7000W	8000W
Max. Apparent Power	7700VA	8800VA
Rated AC Grid Output Current	30.4A	34.8A
Max. AC Output Current	33.5A	38.3A
Rated AC Grid Voltage	220V/230V/240V, L+N+PE	
AC Grid Voltage Range	160-300V (Adjustable)	
Rated Grid Frequency	50Hz/60Hz	
Grid Frequency Range	45Hz-55Hz/55Hz-65Hz (Adjustable)	
Power Factor	> 0.99 Rated Power (Adjustable 0.8 Leading - 0.8Lagging)	
THDi, Rated Power[%]	<3%	
Efficiency		
Max. Efficiency	98.20%	
Euro Efficiency	97.50%	97.50%
MPPT Efficiency	99.99%	99.99%
Protection		
Surge Arrester	Type III/Type II (Optional)	
AC Short Circuit Protection	Support	
Anti-islanding Protection	Support	
Ground Fault Monitoring	Support	
DC Reverse Polarity Monitoring	Support	
Residual Current Monitoring Unit	Support	
General Data		
Dimension (W*H*D)	410*345*186 mm	
Weight	16.8kg	
Protection Degree	IP65	
Cooling	Natural Cooling	
Operating Temperature Range	-30 °C~ +60 °C (Derating at 45°C)	
Typical Noise Emission	<25dB	
Night Self Consumption	<1W	
Display	APP+LED	
Communication	RS485 (Metre), Wi-Fi+Buletooth, DRM	
Topology	Transformerless	
Certifications and Standards		
Grid Regulation	IEC61727, IEC62116, ABNT NBR 16149, ABNT NBR 16150	
Safety	IEC62109-1/-2	
EMC	IEC1000-6-1, IEC61000-6-2, IEC61000-6-3, IEC61000-6-4	
Standard Warranty	5 Years/10 Years (Optional)	