



GRID-TIED INVERTER

THREE PHASE:
GT3-4/5/6/8/10/12/15/17/20/22/25KD1
GT3-10/12KDL1

The LIVOLTEK GT3-4~25K D1 Grid-tied inverter, designed for both residential and commercial users, is perfect for three-phase rooftop installations. The inverter includes an integrated shadow optimization management system, ensuring maximum energy production even in partially shaded conditions. It includes an optional AFCI module to enhance safety by preventing electrical fires from arc faults in the wiring. With its 160V ultra-low start-up voltage and extended operational duration, this inverter is an excellent choice for residential and small commercial projects.

Product Benefits

- 150% DC/AC ratio
- Export limitation (optional)
- Smart APP for monitoring and optimization
- Integrated arc fault circuit interrupter (optional)
- Plug-and-play design for quick installation
- 110% AC output for enhanced efficiency

GRID-TIED INVERTER

THREE PHASE: GT3-4K/5K/6K/8K/10K/12K/15K/17K/20K/22K/25KD1

INVERTER

Model	GT3-4KD1	GT3-5KD1	GT3-6KD1	GT3-8KD1	GT3-10KD1	GT3-12KD1	GT3-15KD1	GT3-17KD1	GT3-20KD1	GT3-22KD1	GT3-25KD1
PV Input											
Max. PV Input Power	6000Wp	7500Wp	9000Wp	12000Wp	15000Wp	18000Wp	22500Wp	25500Wp	30000Wp	33000Wp	37500Wp
Max. PV Input Voltage	1100V										
Min. PV Input Voltage	140V										
Start-up Input Voltage	160V										
Nominal Input Voltage	650V										
MPPT Voltage Range	140V - 1000V										
Max. PV 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 MPPT	1 / 1					2 / 1		2 / 2			
AC Output											
Nominal AC Power	4000W	5000W	6000W	8000W	10000W	12000W	15000W	17000W	20000W	22000W	25000W
Max. Apparent Power	4400VA	5500VA	6600VA	8800VA	11000VA	13200VA	16500VA	18700VA	22000VA	24200VA	27500VA
Rated AC Grid Output Current	5.8A	7.2A	8.7A	11.5A	14.4A	17.3A	21.7A	24.5A	28.9A	31.8A	36.1A
Max. AC Output Current	6.4A	7.9A	9.5A	12.7A	15.9A	19.1A	23.8A	27.0A	31.8A	34.9A	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)										
THDi	<3% at rated power										
Efficiency											
Max. Efficiency	98.50%	98.50%	98.50%	98.60%	98.60%	98.60%	98.50%	98.50%	98.60%	98.60%	98.60%
Euro Efficiency	98.10%	98.10%	98.10%	98.20%	98.20%	98.20%	98.10%	98.10%	98.20%	98.20%	98.20%
MPPT Efficiency	> 99%										
Protection											
Surge Arrester	Type II										
PV Current Detection	Support										
AC Short Circuit Protection	Support										
Anti-islanding Protection	Support										
Residual Current Monitoring Unit	Support										
Integrated AFCI (Arc-Fault Circuit Protection)	Optional										
General Data											
Dimension (W*H*D)	520*420*193 mm										
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	< 1 W										
Display	LED + APP										
Communication	RS485 (Meter), Wi-Fi + Bluetooth, DRM										
Certifications and Standards											
Grid Regulation	IEC61727, IEC62116, EN50549, CQC(NB/T32004)										
Safety/EMC	IEC62109-1/2, EN61000-6-1/2/3/4										

GRID-TIED INVERTER

THREE PHASE: GT3-10K/12KDL1

INVERTER

Model	GT3-10KDL1	GT3-12KDL1
Input(PV)		
Max. DC Input Power	15000Wp	18000Wp
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 – 600V	
Max. DC Input Current	40A / 40A	
Max. Short Circuit Current	52A / 52A	
No. of MPPTs	2	
No. of Strings per MPP Tackers	2 / 2	
Output (AC)		
Nominal Output Power	10000W	12000W
Max. Apparent Power	11000VA	13200VA
Rated AC Grid Output Current	26.2 A	31.5 A
Max. AC Output Current	28.9 A	34.6 A
Rated AC Grid Voltage	3 / N / PE, 127V / 220V	
AC Grid Voltage Range	127V – 300V	
Rated Grid Frequency	50Hz / 60Hz	
Grid Frequency Range	45Hz – 55Hz / 55Hz – 65Hz	
Power Factor	> 0.99 at rated power (Adjustable 0.8 Leading – 0.8 Lagging)	
THDi	< 3% at rated power	
Efficiency		
Max. Efficiency	98.60%	98.60%
Euro Efficiency	98.20%	98.20%
MPPT Efficiency	> 99%	
Certifications and Standards		
Dimensions (W*H*D)	520*420*193 mm	
Weight	24.5kg	
Protection Degree	IP65	
Cooling	Fan cooling	
Operating Temperature Range	–30°C ~ 60°C (Derating at 45°C)	
Typical Noise Emission	< 40dB	
Night Self Consumption	< 1W	
Display	LED + APP	
Communication	RS485 (LCD / Meter), 4G / Wi-Fi + Bluetooth, DRM	
Certifications and Standards		
Grid Regulation	IEC61727, IEC62116	
Safety/EMC	IEC62109-1/2, EN61000-6-1/2/3/4	