

Grid Tied Inverter

Three Phase: GT3-75/100/110/125K-1^[1] **Upcoming**

Livolttek GT3-75/100/110/125K-1 series inverters are widely deployed in commercial and industrial ground-mounted power stations. Featuring a brand-new intelligent fan cleaning design, they are well-suited for harsh desert conditions while also enhancing the product's service life. These inverters also boast exceptional compatibility, with a maximum input current of 40A, enabling them to work with 210+ high-current modules. Equipped with up to 10 MPPT precision algorithms, they can flexibly adapt to complex installation environments, thereby increasing power generation. Additionally, they support global MPPT scanning, built-in PID recovery, night SVG, and remote monitoring capabilities, providing customers with continuous, stable long-term service and maximised power generation benefits.

Features

- Global MPPT scan function
- String current up to 40A
- AFCI function (optional)
- Night SVG function
- Remote and local dual monitoring, high stability
- Built-in PID recovery function



[1]: Will be launched in 2024.10.

Specifications

Technical Data	GT3 -36KL1	GT3 -40KL1	GT3 -50KL1	GT3 -60KL1	GT3 -75KL1	GT3 -75K-1	GT3 -100K-1	GT3 -110K-1	GT3 -125K-1	GT3 -125KH1	GT3 -150KH1	
PV Input Data												
Max. DC Input Power [Wp]	150%											
Max. DC Input Voltage[V]	1100				1100				1100			
Min PV input voltage[V]	180				180				180			
Start-up DC Input Voltage[V]	200				200				200			
Nominal DC Input Voltage[V]	370				620				720			
MPPT Operating Range[V]	180-800					180-1000					180-1000	
Max. DC Input Current[A]	8*40	8*40	10*40	10*40	10*40	8*40	10*40	10*40	10*40	10*40	10*40	
Max. Short Circuit current[A]	8*52	8*52	10*52	10*52	10*52	8*52	10*52	10*52	10*52	10*52	10*52	
No. of MPPTs	8	8	10	10	10	8	10	10	10	10	10	
No. of Strings per MPP Trackers	8*2	8*2	10*2	10*2	10*2	8*2	10*2	10*2	10*2	10*2	10*2	
AC Output Data												
Nominal Output Power [W]	36000	40000	50000	60000	75000	75000	110000	110000	125000	125000	150000	
Max. Apparent Power [VA]	39600	44000	55000	66000	82500	82500	110000	121000	137500	39600	165000	
Rated AC Grid Output Current[A]	94.5	105.0	131.2	157.5	196.8	114.0	151.9	167.1	189.9	150.4	180.4	
Max. AC Output Current[A]	103.9	115.5	144.3	173.2	216.5	125.3	167.1	183.8	208.9	165.4	198.5	
Rated AC Grid Voltage[V]	3/ (N) /PE,220					3L/N/PE, 3L/PE, 380/400/415					3/ (N) /PE,277/480	
AC Grid Voltage Range①[V]	176-242					310-480					408-528	
Rated Grid Frequency [Hz]	50/60					50/60					50/60	
Grid Frequency Range②[Hz]	45-55/54-66					45-55/55-65					45-55/54-66	
Power Factor	> 0.99 Rated power (Adjustable 0.8 Leading - 0.8Lagging)											
Output THDi (@Nominal Output)	<3%											
Efficiency												
Max. Efficiency[%]	98.80%	98.80%	98.80%	98.80%	98.80%	98.50%	98.50%	98.50%	98.50%	98.80%	98.80%	
Euro Efficiency[%]	98.40%	98.40%	98.40%	98.40%	98.40%	98.30%	98.30%	98.30%	98.30%	98.40%	98.40%	
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											
Weight [kg]	87											
Mounting Information	Wall Mounting											
Protection Degree	IP65											
Operating Temperature Range [°C]	-30 °C ... +60 °C (derating at 45°C)											
Relative Humidity	0-100%											
Max. Operating Altitude[m]	4000(≥3000)											
Night Self Consumption [W]	<1					<5					<1	
Display	LED+APP											
Communication	RS485 (Meter/GEN) ,Wi-Fi											
Topology	Transformerless											
Certifications and Standards												
Grid Regulation	IEC61727, IEC62116					IEC61727, IEC62116, NRS 097, EN50549, NO.140					IEC61727, IEC62116	
Safety	IEC62109-1/-2											
EMC	EN61000-6-1/2/3/4											
Standard Warranty[years]	5 Years (10 years optional)											