



DONNERGY



G8K/10K/12K-P3LA 3 Phase Inverter On-grid/Off-grid Hybrid Energy Storage



Main Features

- ⊕ Maximum charge/discharge current: 240A.
- Ⓥ 48V low-voltage battery with integrated transformer for safety isolation.
- ⚡ Frequency droop control, supporting parallel operation of up to 10 units.
- ⚡ AC-coupled compatibility for retrofitting existing solar systems.
- ⊞ 100% three-phase unbalanced output, with each phase capable of delivering up to 50% of rated power.
- 👍 Direct support for diesel generators without the need for external converters.
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Parametri Tecnici / Model	G8K-P3LA	G10K-P3LA	G12K-P3LA
PV Input			
Max. DC Input Power (W)	10400	13000	15600
Rated DC Input Power(V)	550 (160-800)		
Start-up Voltage(V)	160		
MPPT Voltage Range(V)	200-650		
MPPT Voltage Range (V)	350-650		
Max. DC Input Current per String (A)	13+13	26+13	26+13
Max. DC Short-circuit Current (A)	17+17	34+17	34+17
Number of MPPTS	2		
Number of Strings per MPPT	1+1	2+1	2+1
Efficiency			
Maximum Efficiency	97.6%		
European Efficiency	97.0%		
MPPT Efficiency	99.0%		
AC Output			
Rated AC Output Power(W)	8000	10000	12000
Max. AC Output Power (W)	8800	11000	13200
Peak Power (Off-grid)	2 times rated power, 10 seconds		
Rated AC Output Current (A)	12.1	16.7	18.2
Max. AC Current(A)	13.4	18.4	20
Maximum Output Short-circuit Current (A)	75		
Maximum Continuous AC Output Current (A)	45		
Power Factor	0.8 (leading) to 0.8 (lagging)		
AC Output Frequency and Voltage	50/60Hz; 220/380Vac, 230/400Vac (three-phase)		
Grid Type	Three-phase four-wire		
Current Harmonics	<3% (of nominal power)		
Grid DC component	<0.5% In		
Battery			
Battery Type	Lead-acid or Lithium Battery		
Battery Voltage Range (V)	40-60		
Maximum Charging Current (A)	160	200	240
Maximum Discharge Current (A)	160	200	240
Charging Curve	Three-stage Charging/Equalization Charging		
External Temperature Sensor	Available		
Battery Management System	Adaptive BMS System		
Protection			
PV Input Lightning Protection	Available		
Island Protection	Available		
Reverse Polarity Protection for DC	Available		
Insulation Impedance Detection	Available		
Leakage Current Monitoring Protection	Available		
Output Overcurrent Protection	Available		
Output Short-circuit Protection	Available		
Output Overvoltage Protection	Available		
Surge Protection	Two-stage lightning protection on DC side, two-stage lightning protection on AC side		
Overvoltage Protection	Two-stage lightning protection on DC side, three-stage lightning protection on AC side		
Certifications and Standards			
Grid Certification	IEC61727/ 62116,EN50549-1		
Safety/EMC Standards	IEC/ EN 61000-6-1/ 2/ 3/ 4, IEC/ EN 62109-1, IEC/ EN 62109-2		
Other			
Operating Temperature Range (°C)	-40~60°C, >45°C Derating		
Cooling Method	Smart Cooling		
Noise Level (dB)	≤50 dB		
BMS Communication Port	RS485; CAN		
Smart Monitoring	WIFI+APP		
Weight (kg)	37.5		
Dimensions (Height x Width x Thickness mm)	702×422×281 (Excluding Connectors And Brackets)		
Protection Level	IP65		
Installation Method	Wall-mounted		
Warranty	5 Years (10 Years Optional)		