

HYBRID SERIES

GEN3-LB-EU 3-8K (Single-Phase)

- Next-generation internal structure optimization for easier handling and installation.
- Supports up to 12kW PV input with 2 independent MPPTs for enhanced energy generation efficiency.
- Up to 180A charge/discharge current to maximize battery potential.
- IP66 protection rating for reliable performance in outdoor environments.
- Built-in Type II AC/DC surge protection for enhanced system safety.
- Supports up to 16 units in parallel.



Model	GEN3-LB-EU 3K	GEN3-LB-EU 3.6K	GEN3-LB-EU 4K	GEN3-LB-EU 4.6K	GEN3-LB-EU 5K	GEN3-LB-EU 6K	GEN3-LB-EU 6.5K	GEN3-LB-EU 7K	GEN3-LB-EU 8K
Input (PV DC)									
Max. PV input power (W)	6600	7000	7000	8000	8000	12000			
Rated PV input voltage (V)	360								
Number of independent MPPT inputs	2 / (1:1)								
Max. PV input voltage (V)	530								
MPPT voltage range (V)	150 ~ 425								
Start-up voltage (V)	140								
Max. PV input current per MPPT (A)	20 / 20								
Max. PV short-circuit current input per MPPT (A)	32 / 32								
Battery									
Compatible battery type	Lithium-ion / Lead-Acid								
Rated battery voltage (V)	48								
Battery voltage range (V)	40 ~ 60								
Max. charge / discharge current (A)	80	80	80	95	120	125	135	147	180
Max. charge / discharge power (W)	3600	3600	4000	4600	5000	6000	6500	7000	8000
Force wake up battery from PV and GEN function	YES								
Grid									
Rated AC voltage (V)	230								
Rated AC frequency (Hz)	50 / 60								
Rated AC output current (A)	13	16	17.5	20	21.7	26	28.2	30.5	34.7
Rated AC output power (W)	3000	3600	4000	4600	5000	6000	6500	7000	8000
Max. AC input current (A)	52								
Max. AC input power (W)	12000								
PF	0.99 (Adjustable from 0.8 leading to 0.8 lagging)								
THDI	< 3%								
Max continuous AC passthrough current (A)	52								
GEN									
Rated GEN voltage (V)	230								
Rated GEN frequency (Hz)	50 / 60								
Rated GEN input current (A)	52								
Rated GEN input power (W)	12000								
UPS									
Rated output power (W)	3000	3600	4000	4600	5000	6000	6500	7000	8000
Rated output voltage (V)	230								
Rated output current (A)	13	16	17.5	20	21.7	26	28.2	30.5	34.7
Rated output frequency (Hz)	50 / 60								
Surge power, duration	2 × rated power for 1s								
Switching time	7ms								
Wave form	Sine wave								
THDV	< 3%								
Efficiency									
MPPT efficiency	99.9%								
Max. efficiency	97.0%								
Max. charge / discharge efficiency	95.0%								
Protection									
Over current / voltage protection	YES								
Anti-islanding protection	YES								
AC short-circuit current protection	YES								
Leakage current protection	YES								
AFCI	Optional								
Ground fault monitoring	YES								
Grid monitoring	YES								
DC switch	YES								
AC / DC surge protection	Type II								
General									
Dimensions (W × H × D)	416 × 538.5 × 229.5 mm / 16.38 × 21.2 × 9.04 in								
Weight	22.5 kg / 49.6 lbs								
Ingress protection rating	IP66								
Relative humidity	0 ~ 100%								
Operating environment temperature range (°C)	-25 ~ 60 °C , > 45 °C Derating								
Storage temperature range (°C)	-40 ~ 65								
Display & Communication interface	LCD, RS485, Wifi, CAN								
Warranty	5 years								
Cooling method	Smart cooling								
Topology on AC / battery side	Transformer								
Max. operating altitude (m)	2000, > 2000 Derating								
Noise emission (dB)	30							50	
Standard & Certification									
EN62109-1/-2, EN61000, EN50549-1/-10, UNE27001/UNE27002, G99, G100									