

HYBRID SERIES

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

- Next-generation internal structure optimization for easier handling and installation.
- Supports up to 12 kW PV input with 2 independent MPPTs for enhanced energy generation efficiency.
- Up to 180 A 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.



Technical Data

Model	GEN3-LB-EU 8K	
Input (PV DC)		
Max. PV input power (W)	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	
Max. PV short-circuit current input per MPPT (A)	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)	180	
Max. charge / discharge power (W)	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)	34.7	
Rated AC output power (W)	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)	8000	
Rated output voltage (V)	230	
Rated output current (A)	34.7	
Rated output frequency (Hz)	50 / 60	
Surge power, duration	2 × rated power for 10s	
Switching time	7ms	
Wave form	Sine wave	
THDV	< 3%	
Efficiency		
MPPT efficiency	99.9%	
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)	412 × 534.5 × 229.5 mm / 16.22 × 21.04 × 9.04 in	
Weight	TBD	
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	Natural Cooling	Smart cooling
Topology on AC / Battery side	Transformer	
Max. Operating Altitude (m)	2000, > 2000 Derating	
Noise emission (dB)	50	
Standard & Certification		

