

LU  POWER<sup>TEK</sup>

**HYBRID SERIES //**

**GEN-LB-US**

**5-13K**

(Split-Phase)



**18kW**

Max. PV input power



**208A**

Max. charge/discharge current



**10**

Units parallel

- Peak shaving function
- Auto start/stop, works with battery and PV for load support
- Remote monitoring & AI optimization
- AC coupling function to retrofit the existing grid-tied system

## SPECIFICATIONS

| Model                                            | GEN-LB-US 5K                               | GEN-LB-US 8K              | GEN-LB-US 10K           | GEN-LB-US 13K           |
|--------------------------------------------------|--------------------------------------------|---------------------------|-------------------------|-------------------------|
| Input (PV DC)                                    |                                            |                           |                         |                         |
| Max. PV array power (W)                          | 12000                                      | 19000                     | 21000                   | 21000                   |
| Max. PV input power (W)                          | 10000                                      | 16000                     | 18000                   | 18000                   |
| Rated PV input voltage (V)                       | 360                                        |                           |                         |                         |
| Number of independent MPPT inputs                | 2 / (2:2)                                  |                           |                         |                         |
| Max. PV input voltage (V)                        | 550                                        |                           |                         |                         |
| MPPT voltage range (V)                           | 120 ~ 440                                  |                           |                         |                         |
| Start-up voltage (V)                             | 140                                        |                           |                         |                         |
| Max. PV input current per MPPT (A)               | 26 / 26                                    |                           |                         |                         |
| Max. PV short-circuit current input per MPPT (A) | 31 / 31                                    |                           |                         |                         |
| Battery                                          |                                            |                           |                         |                         |
| Compatible battery type                          | Lithium-ion / Lead-Acid                    |                           |                         |                         |
| Rated battery voltage (V)                        | 48                                         |                           |                         |                         |
| Battery voltage range (V)                        | 40 ~ 60                                    |                           |                         |                         |
| Max. charging / discharging current (A)          | 104                                        | 167                       | 208                     | 208                     |
| Max. charging / discharging power (W)            | 5000                                       | 8000                      | 10000                   | 10000                   |
| Force wake up battery from PV function           | YES                                        |                           |                         |                         |
| Grid                                             |                                            |                           |                         |                         |
| Rated AC voltage (V)                             | 120 / 240 ; 120 / 208                      |                           |                         |                         |
| Rated AC frequency (Hz)                          | 50 / 60                                    |                           |                         |                         |
| Rated AC output current with PV (A)              | 20.8A@240V/<br>24A@208V                    | 33.3A@240V/<br>38.5A@208V | 41.6A@240V/<br>48A@208V | 54                      |
| Rated AC output power with PV (W)                | 5000                                       | 8000                      | 10000                   | 13000@240V/11200@208V   |
| Max. AC input current (A)                        | 63                                         |                           |                         |                         |
| THDI                                             | < 3%                                       |                           |                         |                         |
| Max. continuous AC passthrough current (A)       | 90                                         |                           |                         |                         |
| GEN                                              |                                            |                           |                         |                         |
| Rated GEN voltage (V)                            | 120 / 240 ; 120 / 208                      |                           |                         |                         |
| Rated GEN frequency (Hz)                         | 50 / 60                                    |                           |                         |                         |
| Rated GEN input current (A)                      | 62.5                                       |                           |                         |                         |
| Max. GEN input current (A)                       | 80                                         |                           |                         |                         |
| Rated GEN input power (W)                        | 15000                                      |                           |                         |                         |
| UPS                                              |                                            |                           |                         |                         |
| Rated output power (W)                           | 5000                                       | 8000                      | 10000                   | 10000                   |
| Rated output voltage (V)                         | 120 / 240 ; 120 / 208                      |                           |                         |                         |
| Rated output current (A)                         | 20.8A@240V/<br>24A@208V                    | 33.3A@240V/<br>38.5A@208V | 41.6A@240V/<br>48A@208V | 41.6A@240V/<br>48A@208V |
| Rated output frequency (Hz)                      | 50 / 60                                    |                           |                         |                         |
| Surge power, duration                            | 2 × rated power for 0.5s                   |                           |                         |                         |
| Switching time                                   | 20ms                                       |                           |                         |                         |
| Wave form                                        | Sine wave                                  |                           |                         |                         |
| THDV                                             | < 3%                                       |                           |                         |                         |
| Efficiency                                       |                                            |                           |                         |                         |
| Max. MPPT efficiency                             | 99.9%                                      |                           |                         |                         |
| Max. efficiency                                  | 97.5%                                      |                           |                         |                         |
| Battery charge / discharge efficiency            | 94.0%                                      |                           |                         |                         |
| CEC efficiency                                   | 96.6%                                      |                           |                         |                         |
| Protection                                       |                                            |                           |                         |                         |
| PV reverse polarity protection                   | YES                                        |                           |                         |                         |
| Over current / voltage protection                | YES                                        |                           |                         |                         |
| Anti-islanding protection                        | YES                                        |                           |                         |                         |
| AC short-circuit protection                      | YES                                        |                           |                         |                         |
| Leakage current protecion                        | YES                                        |                           |                         |                         |
| DC switch                                        | YES                                        |                           |                         |                         |
| AC / DC surge protection                         | Type III                                   |                           |                         |                         |
| Rapid shut down                                  | YES                                        |                           |                         |                         |
| Grid / AFCI / RSD monitoring                     | YES                                        |                           |                         |                         |
| Load breaker                                     | 80A                                        |                           |                         |                         |
| Battery breaker                                  | 250A / 80V                                 |                           |                         |                         |
| General                                          |                                            |                           |                         |                         |
| Dimensions (W × H × D)                           | 566 × 773 × 285 mm / 22.3 × 30.4 × 11.2 in |                           |                         |                         |
| Weight                                           | 55 kg / 121.3 lbs                          |                           |                         |                         |
| Ingress protection rating                        | IP66 / NEMA 4X                             |                           |                         |                         |
| Relative humidity                                | 0 ~ 100%                                   |                           |                         |                         |
| Operating environment temperature range (°C)     | -25 ~ 60°C, > 45°C Derating                |                           |                         |                         |
| Storage temperature range (°C)                   | -25 ~ 60                                   |                           |                         |                         |
| Display & Communication interface                | Touch color screen, RS485 / Wi-Fi / CAN    |                           |                         |                         |
| Warranty                                         | 5 / 10 years                               |                           |                         |                         |
| Cooling method                                   | Smart Cooling                              |                           |                         |                         |
| Topology on AC / Battery side                    | Transformerless / Transformer              |                           |                         |                         |
| Max. operating altitude (m)                      | 4000, > 2000 Derating                      |                           |                         |                         |
| Standards & Certification                        |                                            |                           |                         |                         |

UL 1741SA, UL 1741SB, CSA C22.2, CEC, FCC Part15B, IEEE 1547.1, HECO SRD V2.0, INMETRO Portaria 140/515