

Portable LiFePO4 3600 Wh/100 Ah 36 VDC broadband battery generator

technetix

LEON[®] SB LBBG-3600

Technetix' LBBG-3600 is a powerful, portable broadband battery generator that acts as an additional external energy dense 36 VDC 100 Ah (3840 Wh) standby power source for use with any standby power supply configuration, to extend plant run-time in critical situations. In extended utility outages the unit can be rapidly deployed where needed, and using the optional "Y" cable terminated in an Anderson SB[®]175 connector and any of the optional extension cables, can be quickly and easily plugged into the existing broadband standby power supply's 36 VDC LiFePO4 or valve-regulated lead-acid (VRLA) battery configuration. The LBBG-3600 utilizes our ANSI/CAN/UL 1973 and CE certified LiFePO4 battery with an advanced battery management system (BMS) and offers 3840 Wh of stored energy. This green/silent/clean/safe device eliminates the audible and electrical noise, carbon monoxide (CO) and carbon dioxide (CO2) emissions, mechanical problems, and the need for fresh fuel associated with fossil gas-powered generators. This portable, tough, weather-resistant, hard shell-cased unit has wheels, three folding/fixed handles, one extendible handle for rolling the unit, and can be easily transported in a vehicle trunk or the bed of a pickup truck. Multiple LBBG-3600s can be parallel connected for even longer run-times. Charge from zero to a full battery charge in 3 hours via the optional AC rapid charger or from an MPPT charge controller. The LBBG-3600 is an anti-idling solution that can be rapidly deployed where needed with no fuel requirements, no maintenance, and a low carbon footprint.



LBBG-3600
(front view)

FEATURES

- Using the optional "Y" cable terminated in an Anderson SB175 connector and any of the optional extension cables, the LBBG-3600 quickly and easily plugs into an existing broadband standby power supply's battery configuration
- The parallel connection port allows up to four LBBG-3600s to be paralleled together using the optional parallel connection cable for a massive 15.3 kWh of additional standby power energy storage
- All connections can be made externally so that the case can remain in the closed/locked position
- Can be discharged down to 90% of its capacity as usable energy which significantly extends plant run-time in critical situations
- Housed in a mold injected, glass fiber reinforced, polypropylene UL 94 (V-1) compliant flame retardant, lightweight, tough, weather resistant, Pelican[™]-style hard shell case with three fixed and one retractable handle, plus wheels, it fits into a vehicle trunk or pickup truck bed
- Lack of any reapplication use due to battery voltage and form-factor or recycling value and the ability to lock to any permanent fixture provides a significant theft deterrent
- Can be charged from the Technetix LBUPS standby power supply, optional external 30 A, 1500 W AC rapid charger and/or solar MPPT charge controller
- Safe - no corrosive substances, no outgassing of toxic vapors, no special technician flammability hazard training required as needed with fossil fuel-powered generators

OPTIONAL

LBBG-3600-YCAB: 29" (73.7 cm) #6AWG "Y" connection cable for connection to standby power supply

- Locates in the LPME or other external outside plant (OSP) enclosure for quick and easy connection to the LBBG-3600 in critical situations
- Terminations: Standby power supply (Anderson PP75 Powerpole[®])
Permanent LiFePO4 or VRLA battery string(s) (5/16" stud ring terminals)
LBBG-3600-xxCABx connection cable (Anderson SB175)



LBBG-3600-YCAB

LBBG-3600-xxCABx: LBBG-3600 extension cables (NOTE: see ordering information for xx and x info)

- Heavy duty siamese connection cables with polarized Anderson SB175 connectors quickly and easily connects the LBBG-3600 to the standby power supply LBBG-3600-YCAB "Y" cable for instant, extra, standby power when needed
- Available in different lengths and wire gauges



LBBG-3600-xxCABx

LBBG-3600-PCAB: 36" (91.4 cm) parallel connection cable for 2x LBBG-3600s

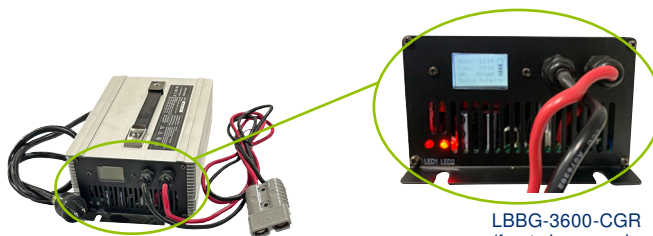
- Heavy duty siamese connection cable with polarized Anderson SB175 connectors quickly and easily connects 2x LBBG-3600s to double the energy storage capacity and increase standby run-time

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OPTIONAL CONT'D.

LBBG-3600-CGR: AC rapid charger

- 120 VAC 60 Hz input, 36 VDC, 30 A, 1500 W external AC rapid charger charges the LBBG-3600 in less than 3 hours from 10% charge to a full battery charge
- Backlight LCD display indicates voltage, current, present Ah capacity and state of charge (SoC)



LBBG-3600-CGR
(front close-up view)

SPECIFICATIONS

Parameter	Specification
Electrical	
Nominal Voltage	38.4 VDC
Rated Capacity	Typ. 100 Ah, min. 95 Ah
Energy Storage	3840 Wh
Continuous Output Current	50 ADC max.
Cells	12 series connected 3.2 VDC prismatic LiFePO4
Internal Resistance	≤ 10 mΩ @ 50% SoC
Efficiency	≥ 99%
Output Port	SB [®] 175
Parallel/Charge Port	SB175
Parallel Connectivity	4 (max.) LBBG-3600
Charging	
Charging Mode	Bulk (CC) + Absorption (CV)
Continuous Charge Current	1C (100 ADC) max., 0.2C (20 ADC) recommended
End of Charge Voltage	43.8 VDC
Charging Cut-Off Current	0.02C (2 ADC)
Discharging	
Continuous Discharge Current	1C (100 ADC) max., 0.5C (50 ADC) recommended
BMS	
Type	Internal
Self-Consumption Current	≤ 20 mA (running), 200 μA (sleep mode)
Overcharge Protection - Cut-Off Voltage	44.4 VDC
Overcharge Protection - Delay	1.0 s
Overcharge Protection - Reconnect Voltage	42.0 VDC
Overdischarge Protection - Cut-Off Voltage	31.2 VDC
Overdischarge Protection - Delay	10 s
Overdischarge Protection - Reconnect Voltage	32.4 VDC
Overdischarge Protection - Cut-Off Current	130 ADC
Overdischarge Protection - Reconnect Conditions	Disconnect load & charge
Short Circuit Protection	1500 A (2 s)
Short Circuit Protection - Delay	400 μs
Short Circuit Protection - Reconnect Condition	Disconnect load
Balancing/Equalization Turn-On Voltage	40.8 VDC
Balance/Equalization Current	50 mA



LBBG-3600
(open view)



LBBG-3600
(side close-up view)

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SPECIFICATIONS CONT'D.

Parameter	Specification	
BMS		
High Temperature Operation Protection - Cut-Off	+75 °C (+167 °F)	
High Temperature Operation Protection - Reconnect	+50 °C (+122 °F)	
Low Temperature Charge Protection	-5 °C (+23 °F)	
Low Temperature Charge Protection Reconnect	-2 °C (+29 °F)	
Low Temperature Discharge Protection	-20 °C (-4 °F)	
Low Temperature Discharge Protection Reconnect	-10 °C (+14 °F)	
Certifications		
Certifications	ANSI/CAN/UL 1973	
	UN38.3	
	CE	
Environmental & Physical		
External Case	Glass fiber reinforced polypropylene	
Operating Temperature	Charge	0 °C to +55 °C (+32 °F to +131 °F)
	Discharge	-20 °C to +60 °C (-4 °F to +140 °F)
Storage Temperature	-5 °C to +35 °C (+23 °F to +95 °F)	
Storage Humidity	< 95%	
Dimensions (H x W x D)	25.0"H x 20.0"W x 11.0"D (63.5H x 50.8W x 27.9D cm)	
Dimensions with Handle Extended (H x W x D)	38.0"H x 20.0"W x 11.0"D (96.5H x 50.8W x 27.9D cm)	
Weight	88.0 lb (39.9 kg)	

ORDERING INFORMATION

Part #	Description
LBBG-3600	Portable LiFePO4 3600 Wh/100 Ah 36 VDC broadband battery generator
Optional Accessories	
LBBG-3600-CGR	120 VAC 60 Hz input, 36 VDC, 30 A, 1500 W external AC rapid charger
LBBG-3600-YCAB	29" (73.7 cm) #6AWG "Y" connection cable
LBBG-3600-30CAB6	#6AWG 30' (9.1 m) extension cable
LBBG-3600-40CAB6	#6AWG 40' (12.2 m) extension cable
LBBG-3600-30CAB4	#4AWG 30' (9.1 m) extension cable
LBBG-3600-40CAB4	#4AWG 40' (12.2 m) extension cable
LBBG-3600-PCAB	36" (91.4 cm) parallel connection cable for 2x LBBG-3600s, #6AWG, Anderson SB175 connectors

Technetix Group Limited

e: sales@technetix.com w: technetix.com

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