



LITHIUM IRON PHOSPHATE BATTERY DATA SHEET

SE-G27-120XDP (12.8 Vdc/120 Ah)



PERFORMANCE: Long Cycle Life
 High Energy Density
 High Discharge Current
 Fast Charging
 Maintenance Free
 Low Weight

FEATURES: Certified compliant to UL 1973 with grade A UL Recognized cells
 360-degree mounting with tie-down system accessories
 Integrated Battery Management System (BMS) for safety and reliability
 Oversized terminal connection pads
 Premium fiberglass reinforced ABS plastic case

Electrical Parameters	
Nominal Voltage	12.8 Vdc
Rated Capacity	120 Ah
Energy	1536 Wh
Resistance	<5 mΩ
Efficiency	>99 %
Cycle Life	>3500 cycles at 1C, 100 % DoD
Cell Self-Discharge	<2 % per month
Cells in Series/Parallel	4S/30P

Mechanical Parameters	
Dimensions	11.9 in x 6.8 in x 8.6 in (303 mm x 173 mm x 218 mm)
Weight	30 lb (14.0 kg)
Terminal Thread	M 8 x 1.25
Battery Housing	ABS Plastic Case
Housing Protection	IP66
Housing Flammability Rating	UL-94 V-0
Cell Type (Chemistry)	Cylindrical (LiFePO ₄)

Discharge Parameters	
Continuous Discharge Current	100 A
Max. Discharge Current	120 A
Pulse Discharge Current	150 A (1 s)
Recommended Volt. Disconnect	10.5 Vdc
BMS Discharge Cut-off Voltage	9.2 Vdc
Short Circuit Protection	200 μs to 600 μs

Charge Parameters	
Charge Method	CC-CV
Recommended Charge Voltage	14.2 Vdc to 14.4 Vdc
Recommended Float Voltage	13.6 Vdc
Recommended Charge Current	30 A
Maximum Charge Current	60 A
BMS Charge Cut-off Voltage	14.6 Vdc

Compliance	
Certifications	Certified compliant to UL 1973 by TEi Listing Services, File no. 22D01
	UL 1642 For Cells, File no. MH64383
	UN3480, Class 9, UN38.3

Temperature Parameters	
Discharge Temperature	-4 °F to 140 °F (-20 °C to 60 °C)
Charge Temperature	32 °F to 140 °F (0 °C to 60 °C)
Storage Temperature	-4 °F to 113 °F (-20 °C to 45 °C)

NOTE: Do not mix with lead-acid batteries when recycling. See SES user manual for proper operation.

DISCLAIMER: While every precaution has been taken to ensure the accuracy of the contents within this document, SES assumes no responsibility for errors or omissions. Specifications and product functionality may change without notice.

STORAGE: One discharge-recharge cycle every 6 months.

