

URB121000

Technical Datasheet



LITHIUMPOWER®

Li-Ion LFP Benefits Over SLA

- Uniform voltage during discharge
- No need to provide trickle charging to retain battery's charge
- Significantly lighter weight for the same amount of energy
- Battery does not become gaseous during use
- Nominal voltage is maintained over a wider temperature range

Features

- Integrated carry handles
- Can be properly charged using a 2 phase SLA charger
- IEC62133, 2nd edition compliant

Applications

- Scooters / wheelchairs
- UPS replacement
- Solar battery

Technical Specifications

Part No	URB121000	
Chemistry	Lithium Iron Phosphate (LFP)	
IEC Designation	4IFR27/66-27	
Average Voltage	12.8V	
Nominal Capacity ¹	102.6Ah	
Voltage Range	10.0V - 14.4V	
Max. Continuous Discharge	80.0A	
Max. Pulse Discharge ²	250 ± 30A	
Energy ¹	1313Wh	
Energy Density	97Wh/kg, 108Wh/l	
Weight	Approx. 13.5 ± 0.1kg	
Cycle Life ³	>1500 cycles	
Operating Temperature	-20°C to 60°C discharging 0°C to 45°C charging	
Storage Temperature	0°C to 40°C	
Internal Resistance	≤20mΩ	
Self-Discharge @ 23°C	<5% per month	
Memory Effect	None	
Exterior/Housing	Hard plastic, ABS	
Terminals/Connector	M8 Screw Terminals	
Size	Length:	342 ± 3mm (13.46in)
	Width:	173 ± 2mm (6.81in)
	Height:	212 ± 2mm (8.35in)
Communications	None	
State of Charge Indicator	None	
Protection	Overcharge:	3.90V (per cell)
	Over Discharge	2.00V (per cell)
	Over Current:	250 ± 30A (5-20ms)
	Over Temperature:	65 ± 5°C
	Short Circuit	
Charging	Cell Imbalance	
	Connect the battery to a DC power source using correct polarity and apply a maximum voltage of 14.4V. Limit the current to the recommended rate of 20.0A and hold 14.4V until the current declines to 2.0A. Maximum charge rate is 100.0A. Alternatively, you may apply a maximum charge voltage of 13.6V (limiting the current to 20.0A) and hold indefinitely to maintain the battery in a continuous standby state-of-charge of between 70-90%.	
Safety	Material Safety Datasheet - MSDS00152 Refer also to Safety Guide UBM-5112	
Certification	CB Scheme ID: JPTUV-140767	
Transportation	Class 9 International and within U.S.4 Excepted when shipped by motorcar or rail within U.S.	
Harmonized Tariff Schedule	8507.60.0000	

Notes

1. Using a C/5 discharge rate at 25°C.
2. Maximum pulse width of between 5ms and 20ms.
3. Number of consecutive C/5 rate discharges and recommended charges at 25°±5°C until the battery reaches 80% of initial capacity.
4. Transportation regulations, classifications and lithium content are available on the Ultralife website

Constant Voltage Charge at 23°C	Voltage Regulation	Initial Current	Maximum Current
Standby Use	13.6V	50A	80A
Cycle Use	14.4V	50A	80A

