BLUE NUVA energy

Datasheet: 13V Mobile Power Series

BN13V-108-1.4k

LiFePO₄ performance in highly applicable sizes

Designed for seamless replacement of existing
12V 100Ah lead acid batteries in most applications.

Ultra-efficient recharge capability

- Absorbs >96% of total charge energy supplied (max. 4% lost) every time, even at C1 rates.
- Resilient against erratic charge & immune to associated lead acid vulnerabilities such as sulfation-induced capacity degradation.

Compatible with more than just 12V systems

- Up to 4 x batteries can be connected in series for installation in compatible 48V systems.
- 3 year product warranty.



GENERAL SPECIFICATIONS	
Battery chemistry	Lithium Iron Phosphate (LiFePO ₄)
Nominal voltage	13VDC
Usable capacity	1404Wh @C10, 25°C
Operating voltage range	11.6V ~ 14.2V
Operating temperature range	Charge: 0°C ~ 45°C Discharge: -20°C ~ 65°C
Cycle life @100% DoD, C10, 25°C	> 2000 cycles (1404Wh)
Cycle life @80% DoD, C10, 25°C	> 3000 cycles (1123Wh)
Cycle life @50% DoD, C10, 25°C	> 5000 cycles (702Wh)
Dimensions	330 x 173 x 220mm (W x D x H)
Net weight (unboxed)	14kg
Warranty period	3 years
Terminal size & type	M8 (female)

VOLTAGE & CURRENT	
Bulk voltage (max. operating voltage)	14.2V
Float voltage (continuous charge voltage)	13.9V
Low voltage (min. operating voltage)	11.6V
Charge current	52.5A max. (±C2)
Discharge current	110A continuous (±C1)
	160A peak (for max. 30 seconds)
Self-discharge rate	< 3% per month
Charge & discharge efficiency	96 ~ 99% @C1

SAFETY FEATURES	
Ingress protection rating	IP56
Current over-charge protection range	110A
Voltage over-charge protection	< 15.6V (auto cut-off at first VceII ≥ 3.9V)
Voltage over-discharge protection	> 10V (auto cut-off at first Vcell ≤ 2.5V)

