

Datasheet: Single Box Battery

BN52V-280-14.5k SBB

Premium quality LiFePO4 technology

- Built with A-grade cells & integrated smart battery management system.
- Stackable modular design
 - Designed for seamless expansion of capacity in increments of 14.5kWh.
- Operational lifespan of 10 years
 - Guaranteed to retain >80% of original capacity at end-of-life (at 1 cycle/day).
- Serial / CAN compatible with leading inverters & other relevant peripherals.
- 10 year product warranty.



GENERAL SPECIFICATIONS	
Battery chemistry	Lithium Iron Phosphate (LiFePO4)
Nominal voltage	52VDC
Usable capacity	14 560Wh @C2, 25°C
Operating voltage range	48V ~ 55.2V
Operating temperature range	Charge: 0°C ~ 50°C Discharge: -10°C ~ 50°C
Cycle life @100% DoD, C2, 25°C	>3600 cycles (<20% fade) 7000 cycles (<40% fade)
Cycle life @ 80% DoD, C2, 25°C	>5000 cycles (<20% fade) 9000 cycles (<40% fade)
Cycle life @70% DoD, C2, 25°C	>7000 cycles (<20% fade) 12000 cycles (<40% fade)
Dimensions	$370 \times 262 \times 870$ mm (W × H × D) incl. mounting extrusions.
Net weight (unboxed)	±104kg

VOLTAGE & CURRENT	
Bulk voltage (operational max.)	55.2V
Low voltage (min).	48V
Charge current (max.)	240A continuous
Disharge current (max.)	240A continuous 300A burst (for < 1 minute)
	750A peak (for < 2 seconds)
Charge power (max.)	Maximum: 7 280W (C2) Recommended: 3 640W (C4)
Discharge power	Maximum: 7 280W (C2) Recommended: 1 248W (C10)
Self-discharge rate	< 2% per month
Charge/discharge efficiency	96% @C2 98% @C10

SAFETY FEATURES	
Isolator	400A
Inline fuse	500A
Current over-charge protection	250A
Voltage over-charge protection	< 58.4V (auto cut-off at first Vcell ≥ 3.65V)
Voltage over-discharge protection	> 45.6V (auto cut-off at first Vcell ≤ 2.85V)

