



NSB BLUE+ Battery[®]

Thin Plate Lead Carbon



The NSB BLUE+ Battery[®] delivers ultra fast recharge and exceptional PSoC cycling performance.





The NSB BLUE+ Battery[®] is ideal for use in applications such as telecom backup, electric vehicles, energy storage, renewable energy, and hybrid gensets.

- Exceptional PSoC cyclic performance
2050 cycles @50% DoD
- Design life 12+ years at 20°C (68°F)
- EUROBAT design life definition: Very Long Life (12+ years)
- Ultra fast recharge
- Shelf life of up to 24 months
- Lead carbon added to negative electrodes increases power and reduces sulfation
- High potential fuel savings when used with hybrid genset applications
- Operating temperature range -40°C to +65°C (-40°F to 149°F)
- State-of-the-art automated manufacturing ensures consistency and reliability
- Advanced 3 stage terminal design to ensure leak-free operation - brass terminals provide maximum performance
- High modulus Polyphenylene Oxide (PPO) plastic materials designed to withstand extended elevated operating temperatures and maintain high battery compression essential for reliable operation
 - Non-halogenated, thermally sealed plastic casing
 - Flame retardant (UL 94 VO) and LOI of at least 28%
- Integral handles and front access terminals ensure ease of installation and maintenance
- Approved as non-hazardous cargo for ground, sea, and air transport - DOT 49CFR173.159(d), (i) and (ii)

NorthStar advanced manufacturing

NorthStar products are designed to be ultra-high performance and premium quality, with a much longer lifetime than standard products. But to build batteries to such a high standard requires the latest robotic processing and manufacturing technology. That's why we built the industry's most technologically advanced battery manufacturing facilities in Missouri, USA.

All NorthStar BLUE+ Batteries are proudly made in the USA. Our facilities are also built and run to meet the toughest possible environmental requirements, to prevent lead poisoning of the surrounding air, ground and water.





NSB 40FT BLUE+



NSB 92FT BLUE+



NSB 100FT BLUE+

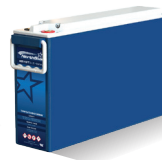
Height	208 mm (8.2 in)	264 mm (10.4 in)	287 mm (11.3 in)
Width	97 mm (3.8 in)	108 mm (4.2 in)	108 mm (4.2 in)
Length	250 mm (9.8 in)	396 mm (15.6 in)	396 mm (15.6 in)
Weight	14 kg (31 lbs)	31 kg (68 lbs)	34 kg (75 lbs)
Terminal	Female M6 x 1.0	Female M8 x 1.25	Female M8 x 1.25
Terminal Torque	8.0 Nm (71 in-lbs)	8.0 Nm (71 in-lbs)	8.0 Nm (71 in-lbs)
10 hr Capacity to 1.80VPC @ 25°C (77°F)	37 Ah	86 Ah	100 Ah
8 hr Capacity to 1.75VPC @ 25°C (77°F)	37 Ah	85 Ah	100 Ah
Float Voltage at 20°C (68°F) / 25°C (77°F)	2.28 / 2.27 VPC	2.28 / 2.27 VPC	2.28 / 2.27 VPC
Impedance (1 kHz)	3.9	2.8	2.6
Conductance	1,114 S	1,669 S	1,846 S
Short Circuit Current	1500 A	3,500 A	3,500 A
Maximum Charge Current	No Limit	No Limit	No Limit
Nominal Voltage	12 V	12 V	12 V



NSB 155FT BLUE+



NSB 170FT BLUE+



NSB 190FT BLUE+



NSB 210FT BLUE+

Height	280 mm (11.0 in)	320 mm (12.6 in)	320 mm (12.6 in)	328 mm (12.9 in)
Width	125 mm (4.9 in)	125 mm (4.9 in)	125 mm (4.9 in)	126 mm (4.96 in)
Length	560 mm (22.0 in)	560 mm (22.0 in)	560 mm (22.0 in)	560 mm (22.0 in)
Weight	55 kg (121 lbs)	60 kg (132 lbs)	62 kg (136 lbs)	69 kg (152 lbs)
Terminal	Female M8 x 1.25	Female M8 x 1.25	Female M8 x 1.25	Female M8 x 1.25
Terminal Torque	8.0 Nm (71 in-lbs)	8.0 Nm (71 in-lbs)	8.0 Nm (71 in-lbs)	8.0 Nm (71 in-lbs)
10 hr Capacity to 1.80VPC @ 25°C (77°F)	150 Ah	170 Ah	183 Ah	200 Ah
8 hr Capacity to 1.75VPC @ 25°C (77°F)	148 Ah	168 Ah	180 Ah	198 Ah
Float Voltage at 20°C (68°F) / 25°C (77°F)	2.28 / 2.27 VPC	2.28 / 2.27 VPC	2.28 / 2.27 VPC	2.28 / 2.27 VPC
Impedance (1 kHz)	2.2	2.8	2.3	2.6
Conductance	2,390 S	1,995 S	2,240 S	2,211 S
Short Circuit Current	5,000 A	6,000 A	6,000 A	6,000 A
Maximum Charge Current	No Limit	No Limit	No Limit	No Limit
Nominal Voltage	12 V	12 V	12 V	12 V



All NorthStar batteries are compliant with: Telcordia SR4228, IEC 60896; Bellcore GR-63-Core, Issue 1; British, German, and Russian telecom standards; UL approved and UN2800 certified. NorthStar is registered to ISO 9001 and ISO 14001.