



From



# NSB RED Battery®

Pure Lead – Long Life



The NSB RED Battery® delivers long life for reliable and unreliable grid conditions.

99.9%  
PURE LEAD

15+ YRS  
DESIGN LIFE

PROUDLY  
MADE IN THE  
USA



The NSB RED Battery<sup>®</sup> is ideal for use in a range of applications, including telecom backup, cable TV, emergency lighting, railway, oil and gas and more.

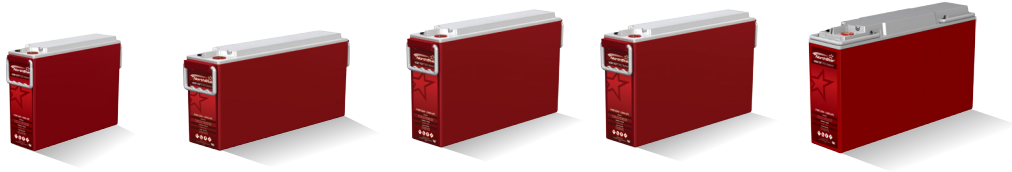
- Pure lead electrochemistry greatly increases temp and corrosion resistance, while reducing component aging
- Thin plates deliver large surface area, high power density and low resistance
- Design life 15+ years at 20°C (68°F)
- EUROBAT design life definition: Very Long Life (12+ years)
- Fast recharging
- Operating temperature range -40°C to +65°C (-40°F to 149°F)
- State-of-the-art automated manufacturing ensures consistency and reliability
- Shelf life of up to 24 months
- 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%
- 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 RED 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.



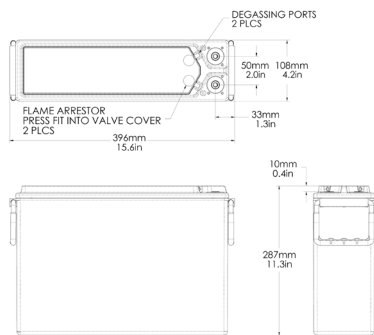


	NSB 100FT RED	NSB 155FT RED	NSB 170FT RED	NSB 190FT RED	NSB 210FT RED
Height	287 mm (11.3 in)	280 mm (11.0 in)	320 mm (12.6 in)	320 mm (12.6 in)	328 mm (12.9 in)
Width	108 mm (4.2 in)	125 mm (4.9 in)	125 mm (4.9 in)	125 mm (4.9 in)	126 mm (4.96 in)
Length	396 mm (15.6 in)	560 mm (22.0 in)	560 mm (22.0 in)	560 mm (22.0 in)	560 mm (22.0 in)
Weight	30 kg (67 lbs)	46 kg (101 lbs)	52 kg (115 lbs)	56 kg (123 lbs)	60 kg (132 lbs)
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)	8.0 Nm (71 in-lbs)
1 hr capacity to 1.70 VPC*	67 / 70 Ah	106 / 110 Ah	114 / 119 Ah	123 / 129 Ah	142 / 148 Ah
3 hr capacity to 1.75 VPC*	85 / 87 Ah	133 / 137 Ah	144 / 148 Ah	160 / 164 Ah	177 / 182 Ah
8 hr capacity to 1.75 VPC*	97 / 99 Ah	150 / 153 Ah	165 / 167 Ah	183 / 186 Ah	200 / 204 Ah
10 hr capacity to 1.80 VPC*	99 / 100 Ah	153 / 155 Ah	168 / 170 Ah	187 / 190 Ah	205 / 208 Ah
Float voltage*	2.28 / 2.27 VPC	2.28 / 2.27 VPC	2.28 / 2.27 VPC	2.28 / 2.27 VPC	2.28 / 2.27 VPC
Impedance (1 KHz)	4.3 mΩ	3.1 mΩ	3.0 mΩ	2.8 mΩ	2.8 mΩ
Conductance	1,193 S	1,648 S	1,695 S	1,900 S	1,920 S
Short circuit current	2,800 A	4,200 A	4,650 A	5,000 A	5,400 A
Nominal voltage	12 V	12 V	12 V	12 V	12 V

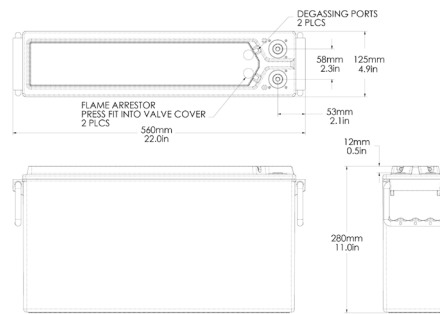
\* Capacities and float voltages given at 20°C (68°F) and 25°C (77°F)

# Technical drawings

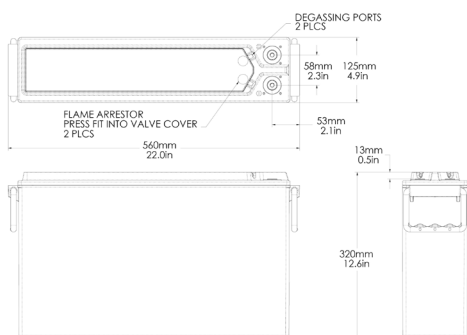
NSB 100FT RED



NSB 155FT RED



NSB 170FT and 190FT RED



NSB 210FT RED

