



The NSB UPS Battery® delivers superior performance at high discharge rates down to <15 mins.

- Performance excels at high rates of discharge and recharge
- 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)
- High modulus Polyphenylene Oxide (PPO) plastic materials designed to withstand extended elevated operating temperatures and maintain high battery compression essential for reliable operation

- Flame retardant (UL 94 VO) and LOI of at least 28%
- High energy density
- 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
- Non-halogenated thermally sealed plastic casing
- Approved as non-hazardous cargo for ground, sea and air transport DOT 49CFR173.159(d), (i) and (ii)



NSB 12-310

Technical Specifications

Electrical

| Terminal | Female M6 x 1.0 | Terminal torque | 8.0 Nm (71 in-lbs) |
|------------------------------|-------------------------------|-----------------------|--------------------|
| 4C (15min) power to 1.67 VPC | 310 Watts/Cell | Float voltage | 2.28 VPC |
| Shelf life | up to 24 months | Conductance | 1760 S |
| Impedance (1Khz) | 2.61 m Ω @ 25°C (77°F) | Short circuit current | 3000 A |
| Operation temperature range | -40°C to +65°C | Nominal voltage | 12 V |
| Silver equilvalent | 12-300 | Capacity | W/cell (15 min) |

Dimensions (Nominal)

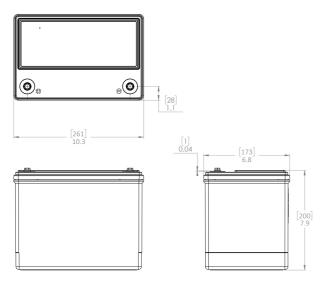
| Height | 200 mm | Width | 173 mm |
|--------|--------|--------|--------|
| Length | 261 mm | Weight | 26 kg |

Constant Power Discharge Ratings (WPC @ 25°C/77°F)

Duration (minutes) (watts/cell @ 25°C/77°F)

| End of discharge (Volts) | 2 min | 5 min | 10 min | 15 min | 20 min | 30 min | 45 min | 60 min | 120 min |
|--------------------------|-------|-------|--------|--------|--------|--------|--------|--------|---------|
| 1.75 | 760 | 547 | 379 | 294 | 242 | 180 | 131 | 103 | 57 |
| 1.70 | 829 | 581 | 396 | 304 | 249 | 184 | 133 | 105 | 57 |
| 1.67 | 867 | 599 | 405 | 310 | 252 | 186 | 134 | 106 | 57 |
| 1.65 | 891 | 610 | 410 | 313 | 255 | 187 | 135 | 106 | 57 |
| 1.60 | 943 | 633 | 420 | 320 | 259 | 190 | 136 | 107 | 58 |

Technical Drawing



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.

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