

NSB UPS Battery®

Pure Lead - High Rate



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

99.9%
PURE LEAD

15+ YRS
DESIGN LIFE

PROUDLY
MADE IN THE
USA



The NSB UPS Battery[®] is ideal for use in a range of applications, including datacenters, industrial, energy storage, and UPS applications.

- 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: Long Life (12+ years)
- 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
- Unmatched quality control and construction techniques ensures long life and optimal performance
- 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%
- 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)

Our solutions multiply battery lifetime and reduces energy consumption, delivering significant savings in operator OPEX and CAPEX due to fewer battery replacements and maintenance visits. Other benefits include:

- Reduced environmental impact
- Premium construction materials
- Integrated data com available
- High safety standards
- Integrated BMS platform standard
- Wide range of cabinet colors
- Low maintenance design
- Integrated breakers and fuses

Below is a front terminal sizing example, compared to a monoblock system.

| Number of strings | Number of cabinets | UPS kVA | | | Overall dimensions of string | | | Weight (lbs/kg) |
|-------------------|--------------------|---------|------|------|------------------------------|---------------|----------------|-----------------|
| | | 250 | 500 | 750 | Width (in/cm) | Depth (in/cm) | Height (in/cm) | |
| | | UPS kW | | | | | | |
| | | 240 | 480 | 720 | | | | |
| 1 | 1 | 6.9 | | | 48/122 | 35/89 | 82/208 | 6240/2824 |
| 2 | 2 | 25.7 | 6.9 | | 96/244 | 35/89 | 82/208 | 12480/5647 |
| 3 | 3 | 44 | 16 | 6.9 | 144/366 | 35/89 | 82/208 | 18720/8471 |
| 4 | 4 | 65.5 | 23.3 | 13 | 192/488 | 35/89 | 82/208 | 24960/11294 |
| 5 | 5 | 87.5 | 33.5 | 19.2 | 240/610 | 35/89 | 82/208 | 31200/14118 |



NSB12-310



NSB12-425



NSB12-540



NSB12-170RT



NSB12-245RT

| | | | | | |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Height | 200 mm (7.9 in) | 213 mm (8.4 in) | 275 mm (10.8 in) | 208 mm (8.2 in) | 263 mm (10.4 in) |
| Width | 173 mm (6.8 in) | 173 mm (6.8 in) | 173 mm (6.8 in) | 97 mm (3.8 in) | 108 mm (4.2 in) |
| Length | 261 mm (10.3 in) | 341 mm (13.4 in) | 345 mm (13.6 in) | 250 mm (9.8 in) | 287 mm (11.3 in) |
| Weight | 26 kg (57 lbs) | 34 kg (75 lbs) | 45 kg (99 lbs) | 15 kg (33 lbs) | 22 kg (49 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) |
| 4C (15 min) power to 1.67 VPC* | 291 / 310 Watts | 397 / 423 Watts | 506 / 540 Watts | 154 / 164 Watts | 233 / 248 Watts |
| 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 |
| Conductance | 1760 S | 1875 S | 1,952 S | 1005 S | 1588 S |
| Impedance (1kHz) | 2.61 mΩ | 2.40 mΩ | 2.37 mΩ | 4.1 mΩ | 2.82 mΩ |
| Short Circuit Current | 3,000 A | 3,900 | 3,600 A | 1,500 A | 2,100 A |
| Operating Temp Range | -40°C to +65°C | -40°C to +65°C | -40°C to +65°C | -40°C to +65°C | -40°C to +65°C |
| Nominal Voltage | 12 V | 12 V | 12 V | 12 V | 12 V |
| Silver Equivalent | 12-300 | NSB 12-400 | NSB 12-540 | NSB 12-150FT | NSB 12-225FT |



NSB12-365RT



NSB12-425RT



NSB12-450RT



NSB12-650RT



NSB12-730RT

| | | | | | |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Height | 264 mm (10.4 in) | 287 mm (11.3 in) | 227 mm (8.9 in) | 280 mm (11.0 in) | 320 mm (12.6 in) |
| Width | 108 mm (4.2 in) | 108 mm (4.2 in) | 125 mm (4.9 in) | 125 mm (4.9 in) | 125 mm (4.9 in) |
| Length | 396 mm (15.6 in) | 396 mm (15.6 in) | 560 mm (22.0 in) | 560 mm (22.0 in) | 560 mm (22.0 in) |
| Weight | 33 kg (73 lbs) | 35 kg (77 lbs) | 40 kg (88 lbs) | 54 kg (119 lbs) | 62 kg (137 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) |
| 4C (15 min) power to 1.67 VPC* | 342 / 365 Watts | 385 / 410 Watts | 454 / 484 Watts | 608 / 649 Watts | 682/728 Watts |
| 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 |
| Conductance | 1808 S | 1921 S | 2091 S | 2300 S | 2386 S |
| Impedance (1kHz) | 2.63 mΩ | 2.60 mΩ | 2.40 mΩ | 2.3 mΩ | 2.25 mΩ |
| Short Circuit Current | 3,200 A | 3,500 A | 3,800 A | 5,000 A | 6,000 A |
| Operating Temp Range | -40°C to +65°C | -40°C to +65°C | -40°C to +65°C | -40°C to +65°C | -40°C to +65°C |
| Nominal Voltage | 12 V | 12 V | 12 V | 12 V | 12 V |
| Silver Equivalent | N/A | NSB 12-420FT | NSB 12-450FT | NSB 12-590FT | N/A |

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

NorthStar Americas

NorthStar Battery Company LLC
4000 Continental Way
Springfield, MO, 65803,
United States of America
info@northstarbattery.com
Tel: +1 417 575 8200
Fax: +1 417 575 8250

NorthStar Europe

SiteTel Sweden AB
Haukadalsgatan 8A
164 40 Kista
Stockholm, Sweden
europe@northstarsitetel.com
Tel: +46 8 410 102 00
Fax: +46 8 638 06 00

NorthStar Middle East, Africa

NorthStar Battery DMCC
Office 702, Saba 1 Tower
Jumeirah Lake Towers, Dubai
United Arab Emirates
mea@northstarsitetel.com
Tel: +971 4 423 8060
Fax: +971 4 423 8061

NorthStar Asia-Pacific

NS Asia Pacific Sdn. Bhd.
B2-3A-13A, Solaris Dutamas
No. 1, Jalan Dutamas 1, 50480
Kuala Lumpur, Malaysia
asia@northstarbattery.com
Tel: +60 3 6419 0711

NorthStar China

Sitetel Sweden AB Shenzhen
International Chamber of Commerce Tower
Fuhua 3rd Road, Futian District
Shenzhen, 518017, China
china@northstarsitetel.com
Tel: +86 755 23832313

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.