



# 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 12-540

### Nominal Technical Specifications

#### Electrical

Terminal	Female M6 x 1.0	Terminal torque	8.0 Nm (71 in-lbs)
4C (15min) power to 1.67 VPC	540 Watts/Cell	Float voltage	2.27 VPC
Shelf life	up to 24 months	Conductance	1952 S
Impedance (1Khz)	2.37 m <b>Ω</b> @ 25°C (77°F)	Short circuit current	5000 A
Operation temperature range	-40°C to +65°C	Nominal voltage	12 V
Silver equilvalent	NSB 12-540	Capacity	W/cell (15 min)

#### **Dimensions**

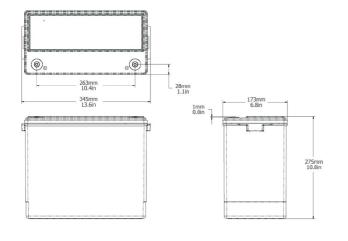
Height	10.8 in	Width	6.8 in
Length	13.6 in	Weight	99 lbs

#### 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	1083	858	630	502	420	319	236	189	106
1.70	1197	925	667	527	438	329	242	193	107
1.67	1259	961	687	540	447	335	245	194	107
1.65	1298	984	699	548	452	338	247	195	108
1.60	1381	1032	775	564	464	345	251	198	108

#### 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.

NorthStar Americas PARTIAL NorthStar Battery Company LLC 4000 Continental Way Springfield, MO, 65803, United States of America info@northstarbattery.com Tel: +1 417 575 8250 Fax: +1 417 575 8250 NorthStar Europe SiteTel Sweden AB Haukadalsgatan 8A SE-164 40 Kista, Stockholm, Sweden europe@northstartbattery.com Tel: +468 410 102 00 Fax: +468 638 06 00 NorthStar Middle East, Africa NorthStar Battery DMCC Office 702, Saba 1 Tower Jumeirah Lake Towers, Dubai United Arab Emirates mea@northstarbattery.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@northstarsitetel.com Tel: +60 3 6419 0711