

# NSB 13TT Red Battery®

Long float life at elevated temperatures



*Red Star Technology®* uses pure lead plates to deliver **exceptionally long float life even at elevated temperatures.**

- Pure lead AGM technology delivers long float life for telecom applications even at elevated temperatures
- 15 year float life 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
- Advanced 3 stage terminal design to ensure leak-free operation - female M6 brass terminals provide maximum performance
- 2 year shelf life at 25°C (77°F)
- 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%
- Top 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)



# NSB 13TT Red Battery®

## Nominal Technical Specifications\*

### Electrical

	International Standard 20 °C (68°F)	North America Standard 25°C (77 °F)
8 hour capacity to 1.75 VPC	13 Ah	13 Ah
10 hour capacity to 1.80 VPC	13 Ah	14 Ah
Float Voltage	2.29 +/- 0.02 VPC	2.27 +/- 0.02 VPC
Nominal Voltage	12 V	
Impedance (1kHz)	13.5 mΩ @ 25°C (77°F)	
Conductance	315 S	
Short Circuit Current	425	

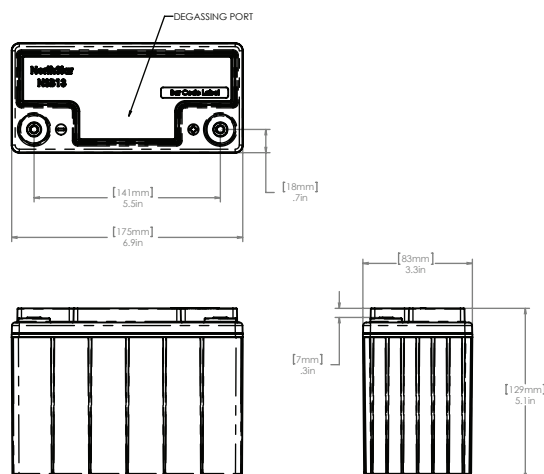
### Dimensions

Height	129 mm (5.1 in)	Weight	4.775 kg (10.53 lbs)
Width	175 mm (6.9 in)	Terminal	Female M6 x 1.0
Depth	82 mm (3.2 in)	Terminal Torque	6.0 Nm (53 in-lbs)

### Ah Capacity Ratings @ 25°C (77°F)

Capacity Discharge / hours	1	2	4	8	10
Capacity @ 25°C / Ah	11	12	13	13	14
End of Discharge / VPC	1.70	1.75	1.75	1.75	1.80

### Drawings



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

#### 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

#### Netsphere in Thailand

919/431, 36/F, Jewelry Trade Center  
Silom Road, Silom Bangrak,  
Bangkok 10500 Thailand  
sales@netsphere.co.th  
Tel: +66 2 630 3368  
Fax: +66 2 630 3367

#### Netsphere in Hongkong

Rm 1203, 12/F, Kwong Sang Hong Centre  
No.151-153 Hoi Bun Road  
Kwun Tong, Hong Kong  
sales@netsphere.com.hk  
Tel: +852 2344 3728  
Fax: +852 2344 3778