



# 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: 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 - 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
- Approved as non-hazardous cargo for ground sea and air transport DOT 49CFR173.159(d), (i) and (ii)



## NSB 12-650RT

### Nominal Technical Specifications

#### Electrical

Terminal torque	8.0 Nm (71 in-lbs)	4C (15min) power to 1.67 VPC	649 Watts/Cell
Float voltage	2.28 VPC	Shelf life	2 years
Conductance	2240 S	Impedance (1Khz)	2.3 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 12-590FT

#### **Dimensions**

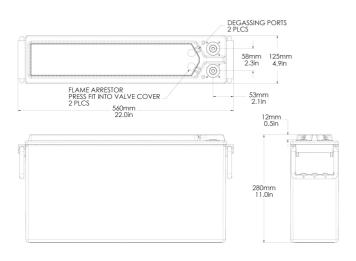
Height	280 mm	Width	125 mm
Length	560 mm	Weight	53 kg

#### 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	1238	1019	757	604	505	383	283	225	125
1.70	1384	1104	803	634	526	395	289	229	126
1.67	1468	1151	827	649	536	401	292	231	127
1.65	1521	1179	841	658	543	404	294	232	127
1.60	1643	1240	871	676	555	411	298	234	128

#### 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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