

TELECOM



ALL NORTHSTAR PRODUCTS ARE COMPLIANT WITH:

- ✦ Telcordia SR4228
- ✦ Bellcore GR-63-Core, Issue 1
- ✦ DOT 49CFR173.159(d) (i) and (ii)
- ✦ UL Approval
- ✦ British and German telecom standards

Northstar Battery Company is proud to be registered to ISO-9001:2000 and ISO-14001 standards.

NSB 100 FT

KEY FEATURES

- Specifically designed for mission-critical applications. Excels at high-rate discharge and recharge, extreme temperature range, deep or shallow cyclic applications.
- High cyclic life capability +500 C/3 @ 80% DOD.
- 10 year float life at 25°C (77°F) — 15 year float life at 20°C (68°F).
- Flame retardant (UL 94 VO) PC-ABS plastic case and cover.
- 3 step terminal seal design to ensure leak-free operation. Female M8 brass terminals provide maximum high rate performance and no annual retightening.
- Integral handles ensure ease of handling.
- Approved as non-hazardous cargo for ground, sea and air transportation.

ELECTRICAL CHARACTERISTICS

Refer to the NSB detailed performance tables for additional current, capacity and power information.

	Int'l Standards @ 20°C □	NA Standards @ 77°F
8 hour capacity to 1.75 VPC □	98.6 amp-hours □	100.5 amp-hours □
10 hour capacity to 1.80 VPC □	100 amp-hours □	101.4 amp-hours
Float voltage □	2.29 +/- .02 volts per cell □	2.27 +/- .02 volts per cell
Cyclic Recharge □	2.45 VPC — no current limit	
Shelf life □	2 years	
Impedance (1KHz) □	2.5 m□ □	
Short Circuit Current □	3,500 Amps □	
Voltage □	12 Volts □	

MECHANICAL CHARACTERISTICS

	SI Units □	English Units
Height □	287.0 mm □	11.30 inches □
Width □	107.6 mm □	4.24 inches
Length □	396.0 mm □	15.59 inches
Weight □	35.6 kilograms □	78.5 pounds
Terminal Torque □	8.0 Newton-meters □	71 inch-pounds



NOTHING IS MORE RELIABLE

NSB+100+FT

PERFORMANCE TABLES @ 77°F

Current / A

Duration		End of Discharge Voltage								
Mins	Hours	1.85	1.80	1.75	1.70	1.67	1.65	1.60	1.55	1.50
2	0.03	478.0	529.8	580.7	629.4	657.1	674.8	715.4	750.1	777.7
5	0.08	323.6	355.6	386.0	413.8	428.9	438.3	458.5	473.8	483.6
10	0.17	224.8	244.3	262.4	278.5	287.0	292.1	302.8	310.1	313.9
15	0.25	177.1	191.0	203.7	214.8	220.6	224.0	231.0	235.6	237.6
20	0.33	147.9	158.6	168.3	176.6	180.9	183.5	188.6	191.8	193.0
30	0.50	113.1	120.2	126.6	132.1	134.8	136.4	139.6	141.5	142.1
45	0.75	85.1	89.7	93.7	97.1	98.8	99.8	101.7	102.8	103.1
60	1	68.9	72.2	75.0	77.4	78.6	79.3	80.6	81.3	81.4
120	2	40.2	41.5	42.7	43.6	44.1	44.3	44.8	45.1	45.1
180	3	28.8	29.6	30.2	30.7	31.0	31.1	31.4	31.5	31.5
240	4	22.6	23.1	23.5	23.8	24.0	24.0	24.2	24.3	24.3
300	5	18.6	19.0	19.2	19.5	19.6	19.6	19.8	19.8	19.8
480	8	12.3	12.4	12.6	12.7	12.7	12.8	12.8	12.8	12.8
600	10	10.0	10.1	10.2	10.3	10.3	10.4	10.4	10.4	10.4
1200	20	5.3	5.3	5.3	5.4	5.4	5.4	5.4	5.4	5.4

Capacity / Ah

Duration		End of Discharge Voltage								
Mins	Hours	1.85	1.80	1.75	1.70	1.67	1.65	1.60	1.55	1.50
2	0.03	15.9	17.7	19.4	21.0	21.9	22.5	23.8	25.0	25.9
5	0.08	27.0	29.6	32.2	34.5	35.7	36.5	38.2	39.5	40.3
10	0.17	37.5	40.7	43.7	46.4	47.8	48.7	50.5	51.7	52.3
15	0.25	44.3	47.7	50.9	53.7	55.1	56.0	57.8	58.9	59.4
20	0.33	49.3	52.9	56.1	58.9	60.3	61.2	62.9	63.9	64.3
30	0.50	56.6	60.1	63.3	66.0	67.4	68.2	69.8	70.8	71.0
45	0.75	63.8	67.3	70.3	72.9	74.1	74.9	76.3	77.1	77.3
60	1	68.9	72.2	75.0	77.4	78.6	79.3	80.6	81.3	81.4
120	2	80.5	83.1	85.4	87.2	88.2	88.7	89.7	90.2	90.2
180	3	86.5	88.7	90.6	92.1	92.9	93.3	94.1	94.5	94.5
240	4	90.4	92.3	93.9	95.2	95.8	96.2	96.9	97.2	97.2
300	5	93.2	94.8	96.2	97.4	97.9	98.2	98.8	99.1	99.2
480	8	98.3	99.5	100.5	101.4	101.8	102.0	102.5	102.7	102.8
600	10	100.3	101.4	102.3	103.0	103.4	103.6	104.0	104.3	104.4
1200	20	105.1	106.0	106.8	107.5	107.8	108.0	108.4	108.7	108.8

Power / W per cell

Duration		End of Discharge Voltage								
Mins	Hours	1.85	1.80	1.75	1.70	1.67	1.65	1.60	1.55	1.50
2	0.03	862.7	946.9	1027.5	1102.2	1143.3	1168.9	1225.6	1270.4	1301.8
5	0.08	610.9	662.6	710.6	753.7	776.6	790.5	819.8	840.9	852.9
10	0.17	433.9	465.4	494.1	519.2	532.2	540.0	555.9	566.5	571.4
15	0.25	344.9	367.3	387.5	405.0	413.9	419.2	429.9	436.6	439.3
20	0.33	289.5	306.7	322.1	335.3	342.1	346.0	353.8	358.7	360.4
30	0.50	222.5	234.0	244.2	252.9	257.2	259.8	264.7	267.7	268.5
45	0.75	167.9	175.4	181.9	187.4	190.1	191.7	194.7	196.4	196.8
60	1	136.1	141.5	146.1	150.0	151.9	153.0	155.1	156.3	156.5
120	2	79.5	81.8	83.7	85.2	86.0	86.4	87.3	87.7	87.7
180	3	57.0	58.3	59.3	60.2	60.7	60.9	61.4	61.6	61.6
240	4	44.6	45.5	46.2	46.8	47.1	47.2	47.5	47.7	47.7
300	5	36.8	37.4	37.9	38.3	38.5	38.6	38.8	39.0	39.0
480	8	24.2	24.5	24.8	25.0	25.1	25.1	25.3	25.3	25.3
600	10	19.8	20.0	20.2	20.3	20.4	20.4	20.5	20.6	20.6
1200	20	10.4	10.5	10.6	10.6	10.7	10.7	10.7	10.7	10.7