

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 170 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 □	168.1 amp-hours □	170.8 amp-hours □
10 hour capacity to 1.80 VPC □	170 amp-hours □	172.4 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) □	1.5 m□ □	
Short Circuit Current □	5,000 Amps □	
Voltage □	12 Volts □	

MECHANICAL CHARACTERISTICS

	SI Units □	English Units
Height □	320.0 mm □	12.60 inches □
Width □	125.0 mm □	4.92 inches
Length □	560.0 mm □	22.05 inches
Weight □	59.1 kilograms □	131.2 pounds
Terminal Torque □	8.0 Newton-meters □	71 inch-pounds



NOTHING IS MORE RELIABLE

NSB+170+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 □	728.1 □	772.3 □	820.3 □	872.4 □	905.9 □	929.2 □	991.0 □	1058.3 □	1131.7
□ 5 □	0.08 □	486.1 □	525.8 □	564.2 □	600.6 □	621.1 □	634.2 □	664.5 □	690.6 □	712.1
□ 10 □	0.17 □	338.5 □	367.2 □	393.8 □	417.5 □	430.1 □	437.6 □	453.5 □	464.6 □	470.5
□ 15 □	0.25 □	268.2 □	290.3 □	310.4 □	327.9 □	336.8 □	342.1 □	352.5 □	358.8 □	360.8
□ 20 □	0.33 □	225.2 □	243.1 □	259.2 □	272.9 □	279.8 □	283.8 □	291.4 □	295.6 □	296.0
□ 30 □	0.50 □	173.9 □	186.7 □	198.0 □	207.4 □	212.0 □	214.7 □	219.5 □	221.7 □	221.7
□ 45 □	0.75 □	132.3 □	141.1 □	148.7 □	154.9 □	158.0 □	159.6 □	162.6 □	163.7 □	163.7
□ 60 □	1 □	108.1 □	114.6 □	120.2 □	124.8 □	126.9 □	128.1 □	130.2 □	130.9 □	130.9 □
□ 120 □	2 □	64.6 □	67.5 □	69.9 □	71.9 □	72.8 □	73.3 □	74.2 □	74.4 □	74.4
□ 180 □	3 □	46.9 □	48.6 □	50.1 □	51.2 □	51.7 □	52.0 □	52.5 □	52.7 □	52.7
□ 240 □	4 □	37.2 □	38.3 □	39.2 □	40.0 □	40.3 □	40.5 □	40.9 □	41.0 □	41.0
□ 300 □	5 □	30.9 □	31.7 □	32.4 □	32.9 □	33.2 □	33.3 □	33.6 □	33.7 □	33.7
□ 480 □	8 □	20.7 □	21.0 □	21.4 □	21.6 □	21.7 □	21.8 □	22.0 □	22.0 □	22.1
□ 600 □	10 □	17.0 □	17.2 □	17.5 □	17.6 □	17.7 □	17.8 □	17.9 □	18.0 □	18.0
□ 1200 □	20 □	9.0 □	9.1 □	9.2 □	9.3 □	9.3 □	9.4 □	9.4 □	9.5 □	9.5

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 □	24.3 □	25.7 □	27.3 □	29.1 □	30.2 □	31.1 □	33.0 □	35.3 □	37.7
□ 5 □	0.08 □	40.5 □	43.8 □	47.0 □	50.0 □	51.8 □	52.9 □	55.5 □	57.6 □	59.3
□ 10 □	0.17 □	56.4 □	61.2 □	65.6 □	69.6 □	71.7 □	72.9 □	75.6 □	77.4 □	78.4
□ 15 □	0.25 □	67.0 □	72.6 □	77.6 □	82.0 □	84.2 □	85.5 □	88.1 □	89.7 □	90.2
□ 20 □	0.33 □	75.1 □	81.0 □	86.4 □	91.0 □	93.3 □	94.6 □	97.1 □	98.5 □	98.7
□ 30 □	0.50 □	86.9 □	93.3 □	99.0 □	103.7 □	106.0 □	107.3 □	109.7 □	110.8 □	110.8
□ 45 □	0.75 □	99.2 □	105.8 □	111.5 □	116.2 □	118.5 □	119.7 □	121.9 □	122.8 □	122.8
□ 60 □	1 □	108.1 □	114.6 □	120.2 □	124.8 □	126.9 □	128.1 □	130.2 □	130.9 □	130.9
□ 120 □	2 □	129.1 □	135.0 □	139.9 □	143.8 □	145.7 □	146.7 □	148.3 □	148.8 □	148.8
□ 180 □	3 □	140.8 □	145.9 □	150.2 □	153.6 □	155.2 □	156.1 □	157.6 □	158.1 □	158.1
□ 240 □	4 □	148.7 □	153.2 □	156.9 □	160.0 □	161.4 □	162.2 □	163.5 □	164.0 □	164.0
□ 300 □	5 □	154.4 □	158.4 □	161.8 □	164.5 □	165.8 □	166.5 □	167.8 □	168.3 □	168.3
□ 480 □	8 □	165.3 □	168.3 □	170.8 □	172.9 □	174.0 □	174.6 □	175.7 □	176.4 □	176.5
□ 600 □	10 □	169.8 □	172.4 □	174.6 □	176.5 □	177.4 □	178.0 □	179.1 □	179.8 □	180.2
□ 1200 □	20 □	180.9 □	182.7 □	184.3 □	185.8 □	186.6 □	187.1 □	188.2 □	189.2 □	190.0

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 □	1293.4 □	1365.6 □	1440.1 □	1516.9 □	1564.1 □	1595.9 □	1677.1 □	1760.2 □	1845.3
□ 5 □	0.08 □	907.6 □	971.1 □	1031.1 □	1086.5 □	1117.0 □	1136.0 □	1178.8 □	1213.8 □	1240.3
□ 10 □	0.17 □	647.3 □	693.4 □	735.5 □	772.3 □	791.5 □	802.9 □	826.5 □	842.3 □	849.9
□ 15 □	0.25 □	517.7 □	553.4 □	585.4 □	612.8 □	626.7 □	634.8 □	650.7 □	660.1 □	662.6
□ 20 □	0.33 □	436.9 □	465.9 □	491.6 □	513.2 □	524.0 □	530.3 □	542.1 □	548.5 □	549.1
□ 30 □	0.50 □	339.0 □	359.8 □	377.9 □	393.0 □	400.4 □	404.5 □	412.2 □	415.7 □	415.7
□ 45 □	0.75 □	258.8 □	273.0 □	285.3 □	295.4 □	300.3 □	303.0 □	307.8 □	309.7 □	309.7
□ 60 □	1 □	211.6 □	222.2 □	231.4 □	238.8 □	242.3 □	244.2 □	247.7 □	248.9 □	248.9
□ 120 □	2 □	126.5 □	131.3 □	135.3 □	138.6 □	141.0 □	140.9 □	142.4 □	142.8 □	142.8
□ 180 □	3 □	91.9 □	94.7 □	97.1 □	99.0 □	99.9 □	100.4 □	101.2 □	101.5 □	101.5
□ 240 □	4 □	72.7 □	74.6 □	76.2 □	77.5 □	78.1 □	78.4 □	79.0 □	79.2 □	79.2
□ 300 □	5 □	60.4 □	61.7 □	62.9 □	63.8 □	64.2 □	64.5 □	64.9 □	65.1 □	65.1
□ 480 □	8 □	40.4 □	41.0 □	41.6 □	42.0 □	42.3 □	42.4 □	42.6 □	42.8 □	42.8
□ 600 □	10 □	33.2 □	33.6 □	34.0 □	34.4 □	34.5 □	34.6 □	34.8 □	34.9 □	35.0
□ 1200 □	20 □	17.7 □	17.9 □	18.1 □	18.2 □	18.3 □	18.3 □	18.4 □	18.5 □	18.5