

UPS



ALL NORTHSTAR PRODUCTS ARE COMPLIANT WITH:

- ✦ DOT 49CFR173.159(d)
 - (i) and (ii)
- ✦ UL Approval
- ✦ ISO 9000/14000

NSB-12-330

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 M6 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
15 minute power to 1.67 VPC □	311 watts per cell □	310 watts per cell
20 hour capacity to 1.75 VPC □	71.1 amp-hours □	72.6 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) □	2.7 m-ohms □	
Short Circuit Current □	3,200 Amps □	
Voltage □	12 Volts □	

MECHANICAL CHARACTERISTICS

	SI Units □	English Units
Height □	176 mm □	6.93 inches □
Width □	165 mm □	6.50 inches
Length □	331 mm □	13.03 inches
Weight □	27.3 kilograms □	60.0 pounds
Terminal Torque □	8.0 Newton-meters □	71 inch-pounds



NOTHING IS MORE RELIABLE

NSB12+310

PERFORMANCE TABLES @ 25°C (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			482.7	509.1	524.8	535.2	560.7	585.3	609.0
5	0.08		283.4	305.5	325.6	336.5	343.1	357.5	368.4	375.2
10	0.17	168.1	184.4	199.4	212.6	219.4	223.5	231.6	236.7	238.5
15	0.25	127.7	139.9	151.1	160.8	165.7	168.5	174.1	177.1	177.6
20	0.33	104.2	113.9	122.7	130.3	134.1	136.2	140.4	142.5	142.5
30	0.50	77.3	84.1	90.3	95.4	98.0	99.4	102.1	103.3	103.3
45	0.75	56.7	61.3	65.4	68.8	70.4	71.4	73.0	73.7	73.7
60	1	45.2	48.6	51.6	54.1	55.3	55.9	57.1	57.5	57.5
120	2	25.6	27.2	28.5	29.6	30.1	30.4	30.9	31.0	31.0
180	3	18.2	19.1	19.9	20.6	20.9	21.1	21.3	21.4	21.4
240	4	14.2	14.8	15.4	15.8	16.1	16.2	16.4	16.4	16.4
300	5	11.6	12.1	12.6	12.9	13.1	13.2	13.3	13.4	13.4
480	8	7.7	7.9	8.2	8.4	8.5	8.5	8.6	8.6	8.6
600	10	6.3	6.5	6.7	6.8	6.9	6.9	7.0	7.0	
1200	20	3.3	3.4	3.5	3.6	3.6	3.7	3.7		

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			16.1	17.0	17.5	17.8	18.7	19.5	20.3
5	0.08		23.6	25.5	27.1	28.0	28.6	29.8	30.7	31.3
10	0.17	28.0	30.7	33.2	35.4	36.6	37.2	38.6	39.4	39.7
15	0.25	31.9	35.0	37.8	40.2	41.4	42.1	43.5	44.3	44.4
20	0.33	34.7	38.0	40.9	43.4	44.7	45.4	46.8	47.5	47.5
30	0.50	38.7	42.1	45.1	47.7	49.0	49.7	51.0	51.6	51.6
45	0.75	42.5	46.0	49.0	51.6	52.8	53.5	54.8	55.3	55.3
60	1	45.2	48.6	51.6	54.1	55.3	55.9	57.1	57.5	57.5
120	2	51.2	54.4	57.1	59.2	60.3	60.8	61.8	62.1	62.1
180	3	54.5	57.3	59.8	61.7	62.7	63.2	64.0	64.3	64.3
240	4	56.7	59.3	61.6	63.4	64.2	64.7	65.5	65.7	65.7
300	5	58.2	60.7	62.9	64.5	65.3	65.8	66.5	66.8	66.8
480	8	61.4	63.6	65.4	67.0	67.7	68.1	68.8	69.0	69.0
600	10	62.7	64.8	66.6	68.1	68.8	69.2	69.9	70.2	
1200	20	66.6	68.7	70.5	72.0	72.8	73.2	74.0		

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			856.3	885.5	903.8	916.3	948.8	983.1	1019.3
5	0.08		526.5	559.7	589.5	605.	615.2	636.1	651.7	661.6
10	0.17	320.5	347.9	372.8	394.3	405.3	411.7	424.4	431.9	433.9
15	0.25	244.9	266.2	285.4	301.7	309.9	314.6	323.5	328.1	328.2
20	0.33	200.7	217.9	233.3	246.3	252.8	256.4	263.2	266.4	266.4
30	0.50	150.0	162.2	173.1	182.1	186.5	189.0	193.5	195.4	195.4
45	0.75	110.7	119.0	126.3	132.4	135.3	136.9	139.7	140.8	140.8
60	1	88.6	94.8	100.2	104.6	106.7	107.9	109.9	110.6	110.6
120	2	50.8	53.6	55.9	57.9	58.8	59.3	60.1	60.4	60.4
180	3	36.2	37.8	39.3	40.4	41.0	41.2	41.7	41.9	41.9
240	4	28.3	29.4	30.4	31.2	31.6	31.8	32.1	32.2	32.2
300	5	23.3	24.2	24.9	25.5	25.8	25.9	26.2	26.3	26.3
480	8	15.4	15.9	16.3	16.6	16.7	16.8	17.0	17.0	17.0
600	10	12.6	13.0	13.3	13.5	13.6	13.7	13.8	13.9	
1200	20	6.7	6.9	7.1	7.2	7.3	7.3	7.4		