

NSB 100FT *Blue Battery*™

Specifically designed for **unstable mains**



Superior cyclic performance and fast recharge for high potential **fuel savings** when used with hybrid gensets.

- Ideal for demanding environments with unstable AC power
- 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 and cover
 - Flame retardant (UL 94 V0) and LOI of at least 28%
- Operating temperature range -40°C to +65°C
- High cycling and superior fast recharge performance
- Modified electrochemistry for repeated outages
 - Optimized paste additives and grid alloy
 - Less reliance on full recharge following an outage
 - No need for regular overcharge factor
 - Capable of uncontrolled Partial State of Charge (uPSOC)* operation without loss of capacity

* For a detailed description of uPSOC, please see the *Blue Star Technology*™ section of the Telecom Application Manual



NSB 100FT Blue Battery™

Technical Specifications



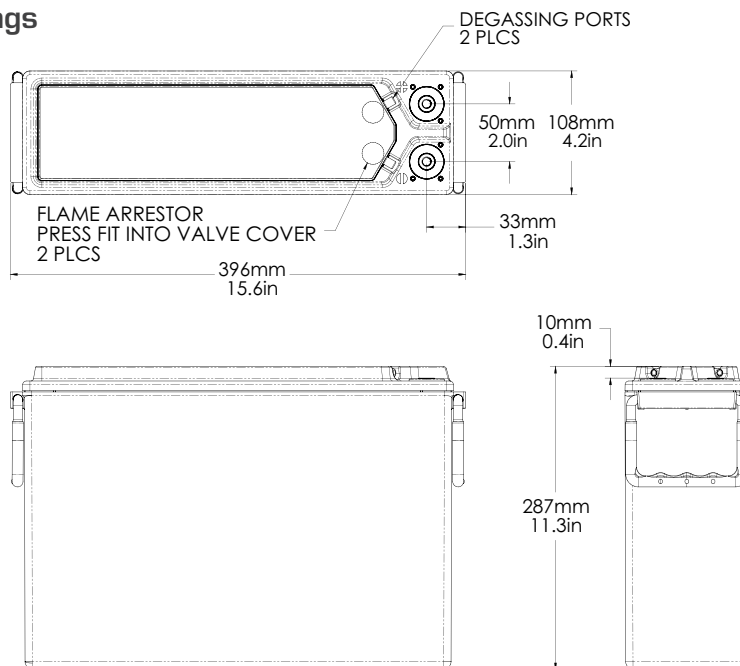
Electrical

10 hour capacity to 1.80 VPC @ 25°C (77°F)	84 Ah
8 hour capacity to 1.75 VPC @ 25°C (77°F)	83 Ah
10 hour capacity to 1.80 VPC @ 20°C (68°F)	82 Ah
Float Voltage	2.27 +/- 0.02 VPC @ 25°C (77°F)
Nominal Voltage	12 V
Impedance (1kHz)	3.7 mΩ @ 25°C (77°F)
Conductance	1,288 S
Short Circuit Current	3,500 A
Maximum Charge Current	no limit

Dimensions

Height	287 mm (11.3 in)	Weight	34 kg (74 lbs)
Width	108 mm (4.2 in)	Terminal	Female M8 x 1.25
Depth	396 mm (15.6 in)	Terminal Torque	8.0 Nm (71 in-lbs)

Drawings



Performance Table @ 20°C (68°F)

NSB 100 BLUE



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	308.7	360.4	413.7	467.1	498.4	518.7	566.5	608.4	642.7
5	0.08	244.0	275.6	306.3	335.1	351.0	360.8	382.3	398.7	409.2
10	0.17	182.5	200.4	217.1	232.1	240.1	244.9	254.8	261.6	265.0
15	0.25	147.9	159.8	170.6	180.1	185.0	187.9	193.9	197.7	199.3
20	0.33	125.3	133.8	141.5	148.1	151.5	153.5	157.5	160.0	160.9
30	0.50	97.1	102.1	106.6	110.3	112.2	113.4	115.5	116.9	117.2
45	0.75	73.4	76.2	78.6	80.6	81.6	82.2	83.4	84.0	84.2
60	1	59.5	61.2	62.6	63.9	64.5	64.9	65.6	66.0	66.1
120	2	34.3	34.8	35.2	35.5	35.7	35.8	36.0	36.2	36.3
180	3	24.3	24.5	24.7	24.9	25.0	25.0	25.1	25.2	25.3
240	4	18.9	19.0	19.1	19.3	19.3	19.4	19.5	19.5	19.6
300	5	15.4	15.6	15.7	15.8	15.8	15.9	15.9	16.0	16.1
480	8	10.0	10.1	10.2	10.4	10.4	10.4	10.5	10.6	10.6
600	10	8.1	8.2	8.4	8.5	8.5	8.6	8.6	8.7	8.7
1200	20	4.1	4.3	4.5	4.6	4.7	4.7	4.8	4.8	4.8

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	10.3	12.0	13.8	15.6	16.6	17.3	18.9	20.3	21.4
5	0.08	20.3	23.0	25.5	27.9	29.2	30.1	31.9	33.2	34.1
10	0.17	30.4	33.4	36.2	38.7	40.0	40.8	42.5	43.6	44.2
15	0.25	37.0	39.9	42.7	45.0	46.3	47.0	48.5	49.4	49.8
20	0.33	41.8	44.6	47.2	49.4	50.5	51.2	52.5	53.3	53.6
30	0.50	48.5	51.1	53.3	55.2	56.1	56.7	57.8	58.4	58.6
45	0.75	55.1	57.1	59.0	60.5	61.2	61.7	62.5	63.0	63.2
60	1	59.5	61.2	62.6	63.9	64.5	64.9	65.6	66.0	66.1
120	2	68.7	69.6	70.3	71.0	71.4	71.6	72.0	72.3	72.5
180	3	73.0	73.6	74.1	74.6	74.9	75.0	75.4	75.7	76.0
240	4	75.5	76.1	76.6	77.0	77.3	77.4	77.8	78.2	78.5
300	5	77.2	77.8	78.4	78.9	79.1	79.3	79.7	80.1	80.4
480	8	79.9	81.0	82.0	82.8	83.3	83.5	84.1	84.6	84.9
600	10	80.9	82.4	83.7	84.8	85.4	85.8	86.5	87.0	87.2
1200	20	82.6	86.4	89.7	92.5	93.8	94.5	95.9	96.5	96.5

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	576.2	654.5	732.6	808.4	851.6	879.2	942.4	995.8	1037.0
5	0.08	457.5	506.6	553.3	596.1	619.2	633.4	664.0	686.6	700.3
10	0.17	345.0	373.4	399.5	422.6	434.7	441.9	456.8	466.7	471.5
15	0.25	281.3	300.3	317.5	332.4	340.1	344.6	353.7	359.5	361.8
20	0.33	239.4	253.2	265.5	276.1	281.4	284.6	290.8	294.6	296.0
30	0.50	186.7	195.0	202.2	208.4	211.4	213.2	216.7	218.8	219.4
45	0.75	142.2	146.8	150.8	154.1	155.8	156.7	158.6	159.7	160.0
60	1	115.7	118.5	121.0	123.1	124.1	124.7	125.8	126.5	126.7
120	2	67.5	68.3	68.9	69.5	69.8	70.0	70.3	70.6	70.7
180	3	48.1	48.4	48.7	49.0	49.1	49.2	49.4	49.6	49.7
240	4	37.4	37.6	37.9	38.0	38.1	38.2	38.4	38.5	38.6
300	5	30.6	30.8	31.0	31.2	31.3	31.4	31.5	31.6	31.7
480	8	19.9	20.1	20.3	20.5	20.6	20.6	20.7	20.8	20.9
600	10	16.1	16.3	16.6	16.8	16.9	16.9	17.0	17.1	17.2
1200	20	8.2	8.5	8.8	9.0	9.1	9.2	9.3	9.4	9.4