

NSB 92FT *Blue + Battery*[®]

Designed for demanding telecom applications



The proven performance of **Blue Star Technology**[®] now enhanced to deliver **more power, high cycling and fast recharge**

- + 2 year shelf life
- + Ideal for demanding environments with unstable AC power
- + High cycling and fast recharge performance
- + High potential fuel savings when used with hybrid genset applications
- + Modified electrochemistry delivers high capacity and high power density
- + 10 year float life at 25°C (77°F)
- + Operating temperature range -40°C to +65°C
- + High modulus Polyphenylene Oxide (PPO) plastic materials designed to withstand extended elevated operating temperatures
 - Non-halogenated, thermally sealed plastic casing
 - Flame retardant (UL 94 V0) and LOI of at least 28%
- + Partial State of Charge (PSOC) cycling technology



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Technical Specifications



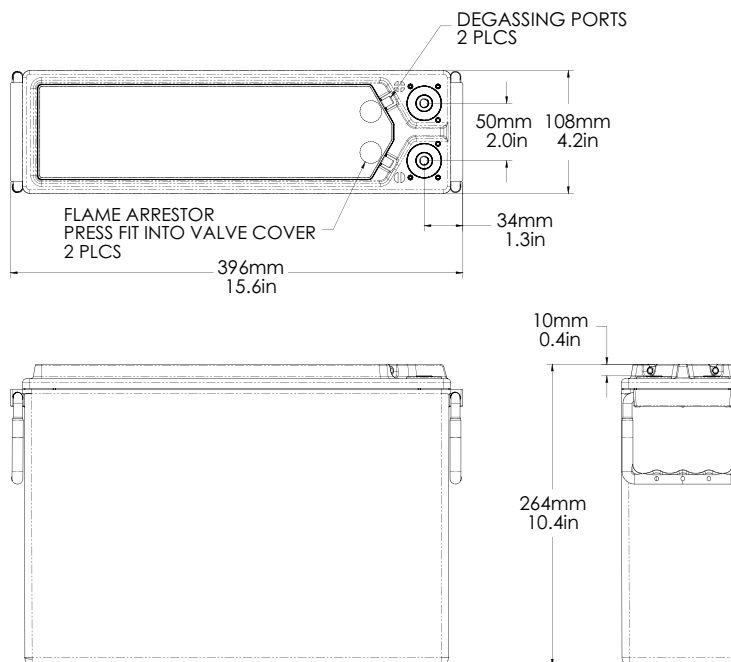
Electrical

10 hour capacity to 1.80 VPC @ 25°C (77°F)	86 Ah
8 hour capacity to 1.75 VPC @ 25°C (77°F)	85 Ah
10 hour capacity to 1.80 VPC @ 20°C (68°F)	85 Ah
Float Voltage	2.27 +/- 0.02 VPC @ 25°C (77°F)
Nominal Voltage	12 V
Impedance (1kHz)	2.8 mΩ @ 25°C (77°F)
Conductance	1,669 S
Short Circuit Current	3,500 A
Maximum Charge Current	no limit

Dimensions

Height	264 mm (10.4 in)	Weight	32 kg (70 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



92FT Blue+ Battery®



Discharge Tables - 20°C (68°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	349.1	402.3	456.4	509.5	540.1	559.7	605.2	643.9	674.3
5	0.08	276.6	308.4	338.8	366.8	382.0	391.4	411.5	426.4	435.4
10	0.17	203.3	220.8	236.8	251.0	258.4	262.8	271.9	277.9	280.7
15	0.25	162.4	173.6	183.8	192.6	197.1	199.8	205.1	208.4	209.7
20	0.33	135.9	143.9	151.0	157.0	160.1	161.9	165.4	167.6	168.3
30	0.50	103.5	108.1	112.1	115.4	117.1	118.1	120.1	121.2	121.5
45	0.75	77.0	79.4	81.5	83.3	84.2	84.7	85.7	86.3	86.5
60	1	61.6	63.1	64.4	65.4	66.0	66.3	66.9	67.3	67.4
120	2	34.9	35.2	35.5	35.8	35.9	36.0	36.2	36.4	36.5
180	3	24.6	24.7	24.8	25.0	25.0	25.1	25.2	25.3	25.4
240	4	19.1	19.1	19.2	19.3	19.4	19.4	19.5	19.6	19.6
300	5	15.6	15.7	15.8	15.8	15.9	15.9	16.0	16.0	16.1
480	8	10.2	10.3	10.4	10.5	10.5	10.6	10.6	10.7	10.7
600	10	8.4	8.5	8.6	8.7	8.7	8.7	8.8	8.8	8.8
1200	20	4.5	4.7	4.8	4.9	5.0	5.0	5.0	5.0	5.0

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	11.6	13.4	15.2	17.0	18.0	18.7	20.2	21.5	22.5
5	0.08	23.0	25.7	28.2	30.6	31.8	32.6	34.3	35.5	36.3
10	0.17	33.9	36.8	39.5	41.8	43.1	43.8	45.3	46.3	46.8
15	0.25	40.6	43.4	45.9	48.1	49.3	49.9	51.3	52.1	52.4
20	0.33	45.3	48.0	50.3	52.3	53.4	54.0	55.1	55.9	56.1
30	0.50	51.7	54.0	56.0	57.7	58.6	59.1	60.0	60.6	60.8
45	0.75	57.7	59.5	61.1	62.5	63.1	63.5	64.3	64.7	64.8
60	1	61.6	63.1	64.4	65.4	66.0	66.3	66.9	67.3	67.4
120	2	69.7	70.4	71.1	71.6	71.9	72.1	72.5	72.8	73.0
180	3	73.7	74.1	74.5	74.9	75.1	75.2	75.6	75.9	76.2
240	4	76.2	76.6	76.9	77.3	77.5	77.6	77.9	78.2	78.5
300	5	78.1	78.5	78.9	79.2	79.4	79.6	79.9	80.2	80.5
480	8	81.8	82.6	83.3	84.0	84.3	84.5	84.9	85.3	85.5
600	10	83.6	84.8	85.8	86.7	87.1	87.4	87.9	88.2	88.4
1200	20	90.0	93.3	96.0	98.2	99.2	99.8	100.7	101.0	101.0

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	585.1	688.2	791.2	889.2	943.4	976.9	1049.2	1101.6	1130.7
5	0.08	511.7	562.6	610.4	653.7	677.0	691.1	721.1	742.8	755.1
10	0.17	392.0	416.5	438.8	458.6	468.9	475.2	488.3	497.7	503.0
15	0.25	317.3	332.4	345.9	357.7	363.8	367.5	375.1	380.5	383.5
20	0.33	267.4	277.8	287.1	295.1	299.3	301.7	306.8	310.3	312.2
30	0.50	204.5	210.6	216.1	220.6	223.0	224.4	227.2	229.0	229.9
45	0.75	152.3	155.9	159.0	161.7	163.0	163.8	165.3	166.2	166.6
60	1	121.8	124.4	126.5	128.3	129.2	129.7	130.7	131.3	131.5
120	2	68.7	69.9	70.8	71.6	72.0	72.2	72.6	72.7	72.7
180	3	48.4	49.1	49.8	50.3	50.5	50.6	50.9	51.0	51.0
240	4	37.6	38.2	38.6	39.0	39.2	39.3	39.4	39.5	39.5
300	5	30.9	31.3	31.7	32.0	32.1	32.2	32.3	32.4	32.4
480	8	20.4	20.7	20.9	21.1	21.2	21.2	21.3	21.4	21.4
600	10	16.8	17.0	17.2	17.3	17.4	17.4	17.5	17.6	17.6
1200	20	9.4	9.4	9.5	9.5	9.5	9.5	9.6	9.6	9.7

92FT Blue+ Battery®



Discharge 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	387.4	446.5	506.4	565.4	599.3	621.1	671.6	714.6	748.3
5	0.08	301.2	335.8	368.9	399.4	416.0	426.1	448.1	464.3	474.1
10	0.17	218.5	237.2	254.4	269.7	277.6	282.4	292.1	298.6	301.6
15	0.25	173.2	185.2	196.0	205.4	210.2	213.1	218.8	222.3	223.7
20	0.33	144.3	152.7	160.2	166.6	169.9	171.8	175.6	177.9	178.6
30	0.50	109.1	113.9	118.2	121.7	123.5	124.5	126.6	127.8	128.1
45	0.75	80.6	83.2	85.4	87.2	88.2	88.7	89.7	90.4	90.6
60	1	64.3	65.8	67.1	68.2	68.8	69.1	69.8	70.2	70.3
120	2	36.0	36.4	36.7	37.0	37.1	37.2	37.4	37.6	37.7
180	3	25.2	25.4	25.5	25.7	25.7	25.8	25.9	26.0	26.1
240	4	19.5	19.6	19.7	19.8	19.8	19.9	19.9	20.0	20.1
300	5	15.9	16.0	16.1	16.2	16.2	16.3	16.3	16.4	16.5
480	8	10.4	10.5	10.6	10.7	10.7	10.7	10.8	10.8	10.9
600	10	8.5	8.6	8.7	8.8	8.8	8.9	8.9	8.9	9.0
1200	20	4.5	4.7	4.8	4.9	5.0	5.0	5.1	5.1	5.1

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	12.9	14.9	16.9	18.8	20.0	20.7	22.4	23.8	24.9
5	0.08	25.1	28.0	30.7	33.3	34.7	35.5	37.3	38.7	39.5
10	0.17	36.4	39.5	42.4	44.9	46.3	47.1	48.7	49.8	50.3
15	0.25	43.3	46.3	49.0	51.4	52.6	53.3	54.7	55.6	55.9
20	0.33	48.1	50.9	53.4	55.5	56.6	57.3	58.5	59.3	59.5
30	0.50	54.6	57.0	59.1	60.9	61.7	62.3	63.3	63.9	64.1
45	0.75	60.5	62.4	64.0	65.4	66.1	66.5	67.3	67.8	67.9
60	1	64.3	65.8	67.1	68.2	68.8	69.1	69.8	70.2	70.3
120	2	72.0	72.7	73.4	74.0	74.3	74.5	74.9	75.2	75.4
180	3	75.7	76.2	76.6	77.0	77.2	77.3	77.7	78.0	78.3
240	4	78.0	78.4	78.8	79.1	79.3	79.5	79.8	80.1	80.4
300	5	79.7	80.1	80.5	80.9	81.1	81.3	81.6	81.9	82.3
480	8	83.2	84.0	84.7	85.3	85.7	85.9	86.3	86.6	86.9
600	10	84.8	86.0	87.0	87.9	88.3	88.6	89.1	89.4	89.6
1200	20	90.7	94.0	96.7	98.9	99.9	100.5	101.4	101.7	101.7

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	649.3	763.7	878.0	986.7	1046.9	1084.1	1164.3	1222.5	1254.8
5	0.08	557.2	612.5	664.6	711.8	737.1	752.5	785.2	808.7	822.1
10	0.17	421.2	447.5	471.5	492.7	503.8	510.6	524.7	534.7	540.4
15	0.25	338.5	354.5	369.0	381.5	388.0	392.0	400.1	405.8	409.0
20	0.33	283.8	294.8	304.7	313.2	317.6	320.2	325.6	329.4	331.4
30	0.50	215.6	222.1	227.8	232.6	235.1	236.5	239.5	241.5	242.4
45	0.75	159.5	163.3	166.6	169.4	170.7	171.6	173.2	174.1	174.5
60	1	127.1	129.7	132.0	133.9	134.8	135.3	136.4	137.0	137.1
120	2	71.0	72.2	73.2	74.0	74.3	74.6	75.0	75.1	75.1
180	3	49.8	50.5	51.1	51.6	51.9	52.0	52.3	52.4	52.4
240	4	38.5	39.1	39.5	39.9	40.1	40.2	40.4	40.5	40.5
300	5	31.5	32.0	32.4	32.7	32.8	32.9	33.0	33.1	33.1
480	8	20.8	21.0	21.2	21.4	21.5	21.5	21.6	21.7	21.7
600	10	17.1	17.2	17.4	17.5	17.6	17.7	17.7	17.8	17.8
1200	20	9.5	9.5	9.5	9.6	9.6	9.6	9.7	9.7	9.8