

# genesis™ NP RANGE SUMMARY



# Sealed Rechargeable, Valve Regulated Lead-Acid Batteries

## GENERAL SPECIFICATIONS

### GENESIS® NPH BATTERY SERIES

Type	FR Type*	Volts	Nominal Capacity (10hr rate-Ah)	Length		Width		Overall Height incl. Terminals		Weight		Layout	Terminal Illustration
				mm	(in.)	mm	(in.)	mm	(in.)	kgs.	(lbs)		
NPH3.2-12	NPH3.2-12FR	12	3.2	134	5.28	67	2.64	64	2.52	1.38	3.05	3	A/C

### GENESIS® NP BATTERY SERIES

Type	FR Type*	Volts	Nominal Capacity (20hr rate-Ah)	Length		Width		Overall Height incl. Terminals		Weight		Layout	Terminal Illustration
				mm	(in.)	mm	(in.)	mm	(in.)	kgs.	(lbs)		
NP1-6	NP1-6FR	6	1.0	51	2.01	42	1.65	57	2.24	0.28	0.61	5	A
NP1.2-6	NP1.2-6FR		1.2	97	3.82	25	0.98	56	2.20	0.30	0.67	1	A
NP2.8-6	NP2.8-6FR		2.8	67	2.64	33	1.30	105	4.13	0.59	1.30	5	A/C
NP3-6	NP3-6FR		3.0	134	5.28	33	1.30	67	2.64	0.69	1.53	1	A
NP3.2-6	NP3.2-6FR		3.2	66	2.60	33	1.30	104	4.09	0.59	1.30	5	A
NP3.8-6	NP3.8-6FR		3.8	66	2.60	33	1.30	125	4.92	0.75	1.65	1	A
NP4-6	NP4-6FR		4.0	70	2.76	47	1.85	105	4.15	0.80	1.76	5	A/C
NP4.5-6	NP4.5-6FR		4.5	70	2.76	47	1.85	105	4.15	0.86	1.90	5	A/C
NP5-6	NP5-6FR		5.0	70	2.76	47	1.85	105	4.15	0.95	2.10	5	A/C
NP7-6	NP7-6FR		7.0	151	5.95	33	1.30	100	3.94	1.28	2.83	1	A/C
NP8.5-6	NP8.5-6FR		8.5	98	3.86	56	2.20	118	4.65	1.60	3.53	9	A/C
NP10-6	NP10-6FR		10.0	151	5.95	50	1.97	101	3.98	1.99	4.38	1	A/C
NP12-6	NP12-6FR		12.0	151	5.95	50	1.97	101	3.98	2.04	4.48	1	A/C
NP0.8-12	NP0.8-12FR		12	0.8	96	3.78	25	0.98	61	2.42	0.37	0.82	7
NP1.2-12	NP1.2-12FR	1.2		97	3.82	48	1.89	56	2.20	0.57	1.25	3	A
NP2-12	NP2-12FR	2.0		150	5.91	20	0.79	89	3.50	0.70	1.54	8	B
NP2-12-C	NP2-12CFR	2.0		182	7.17	24	0.93	61	2.40	0.73	1.61	6	L
NP2.3-12	NP2.3-12FR	2.3		178	7.01	35	1.38	67	2.64	1.02	2.15	1	A
NP2.6-12	NP2.6-12FR	2.6		134	5.28	67	2.64	66	2.60	1.36	3.00	3	A
NP2.9-12	NP2.9-12FR	2.9		79	3.11	56	2.20	105	4.13	1.24	2.73	1	A/C
NP3-12	NP3-12FR	3.0		132	5.20	33	1.30	105	4.13	1.18	2.60	1	A/C
NP3.4-12	NP3.4-12FR	3.4		134	5.28	67	2.64	67	2.64	1.39	3.06	3	A/C
NP4-12	NP4-12FR	4.0		90	3.54	70	2.76	107	4.21	1.70	3.74	1	A/C
NP4.5-12	NP4.5-12FR	4.5		90	3.54	70	2.76	107	4.21	1.76	3.88	1	A/C
NP5-12	NP5-12FR	5.0		90	3.54	70	2.76	107	4.21	1.81	4.00	1	A/C
NP7-12	NP7-12FR	7.0		151	5.95	65	2.56	100	3.94	2.59	5.72	4	A/C
NP12-12	NP12-12FR	12.0		151	5.95	98	3.86	100	3.94	4.06	8.95	4	C
NP18-12	NP18-12FR	17.2		181	7.13	76	3.00	167	6.57	6.17	13.60	2	D/E
NP24-12	NP24-12FR	24.0		166	6.54	175	6.89	125	4.92	9.07	20.00	2	C/D/E
NP33-12	NP33-12FR	33.0		197	7.76	131	5.16	158+	6.22+	11.79	26.00	1	E/F
NP35-12	NP35-12FR	35.0		198	7.80	132	5.20	170	6.69	12.61	27.80	1	F
NP38-12	NP38-12FR	38.0		197	7.76	165	6.50	172	6.77	14.59	32.16	2	F/G
NP55-12	NP55-12FR	55.0		229	9.02	138	5.43	207+	8.15+	18.01	39.70	1	M/E
NP65-12	NP65-12FR	65.0		350	13.78	166	6.54	174	6.85	23.63	52.10	2	F/G
NP75-12	NP75-12FR	75.0		259	10.20	169	6.65	208+	8.19+	26.50	58.42	1	M/G
NP90-12	NP90-12FR	90.0		304	11.97	168	6.61	229+	9.02	31.18	68.74	1	M/G
NP100-12	NP100-12FR	100.0		329	12.95	174	6.85	214+	8.43+	32.94	72.62	1	J/G
NP120-12	NP120-12FR	120.0	407	16.02	173	6.81	235	9.25	38.41	84.68	1	J/G	
NP150-12	NP150-12FR	150.0	483	19.02	170	6.69	241	9.49	47.13	103.90	1	J/G	
NP200-12	NP200-12FR	200.0	520	20.47	260	10.24	208	8.19	73.00	160.93	3	K/G	

### DATASAFE® NPX BATTERY SERIES

Type	FR Type*	Volts	Watts/Cell to 1.67 End Voltage	Nominal Capacity (20hr rate-Ah)	Length		Width		Overall Height incl. Terminals		Weight		Layout	Terminal Illustration
					mm	(in.)	mm	(in.)	mm	(in.)	kgs.	(lbs)		
NPX-35-6	NPX-35-6FR	6	35W/Cell	8	151	5.95	33	1.30	100	3.94	1.43	3.15	1	A/C
NPX-50	NPX-50FR		50W/Cell	13	151	5.95	50	1.97	100	3.94	2.09	4.60	1	A/C
NPX-25	NPX-25FR	12	23W/Cell	5	90	3.54	70	2.75	107	4.21	1.95	4.30	1	A/C
NPX-35	NPX-35FR		35W/Cell	8	151	5.95	65	2.56	100	3.94	2.75	6.06	4	A/C
NPX-80	NPX-80FR		80W/Cell	20	181	7.13	76	2.99	167	6.57	6.35	14.00	2	D/E
NPX-100	NPX-100FR		95W/Cell	28	166	6.54	125	4.92	175	6.89	9.70	21.38	2	D/E
NPX-135	NPX-135FR		135W/Cell	33	197	7.76	131	5.16	158+	6.22	11.94	26.32	1	E/F
NPX-150	NPX-150FR		150W/Cell	40	197	7.76	165	6.50	172	6.77	14.29	31.50	2	F/G

#### FOOTNOTES:

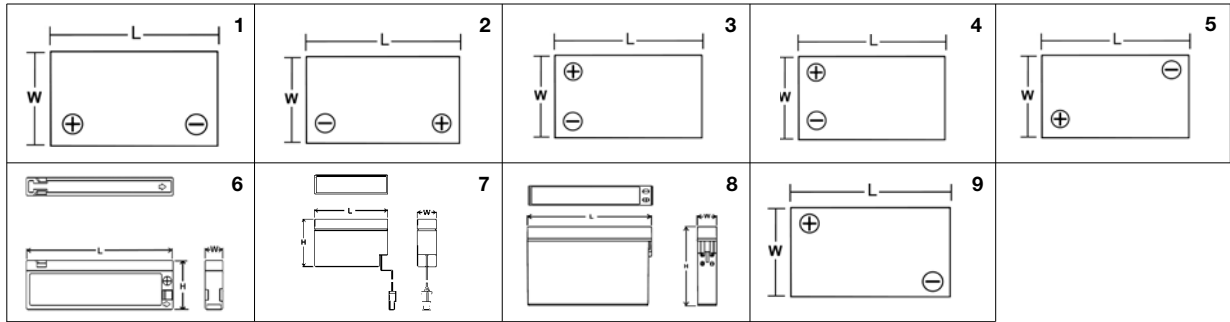
\* FR: UL94-VO, Flame Retardant Case and Cover (Oxygen index 28)  
 + Height is top cover. Overall Height, including terminal is dependent on the terminal configuration  
 Recognized by UL File No. MH16464

NOTE: All dimensions are +/- 0.08 inches (2mm); Weights are +/- 5%

#### Torque Specifications:

M5 bolt: 26.6 lbf.in (3Nm) +/- 5%  
 M6 bolt: 44.31 lbf.in (5Nm) +/- 5%  
 M5 receptacle: 35.4 lbf.in (4Nm) +/- 5%  
 M6 receptacle: 65 lbf.in (6.8Nm) +/- 5%

**LAYOUT ILLUSTRATION**



**TERMINAL ILLUSTRATION**

<p><b>A</b> INCH = MM</p> <table border="1"> <tr><td>0.250</td><td>6.35</td></tr> <tr><td>0.187</td><td>4.75</td></tr> <tr><td>0.124</td><td>3.15</td></tr> <tr><td>0.098</td><td>2.49</td></tr> <tr><td>0.059</td><td>1.50</td></tr> <tr><td>0.031</td><td>0.79</td></tr> <tr><td>0.020</td><td>0.51</td></tr> <tr><td>0.004</td><td>0.10</td></tr> </table> <p>Faston Tab: 187</p>	0.250	6.35	0.187	4.75	0.124	3.15	0.098	2.49	0.059	1.50	0.031	0.79	0.020	0.51	0.004	0.10	<p><b>B</b> INCH = MM</p> <table border="1"> <tr><td>0.472</td><td>11.99</td></tr> <tr><td>0.250</td><td>6.35</td></tr> <tr><td>0.236</td><td>5.99</td></tr> <tr><td>0.187</td><td>4.75</td></tr> <tr><td>0.130</td><td>3.30</td></tr> <tr><td>0.079</td><td>2.01</td></tr> <tr><td>0.020</td><td>0.51</td></tr> </table> <p>Faston Tab: 187</p>	0.472	11.99	0.250	6.35	0.236	5.99	0.187	4.75	0.130	3.30	0.079	2.01	0.020	0.51	<p><b>C</b> INCH = MM</p> <table border="1"> <tr><td>0.313</td><td>7.95</td></tr> <tr><td>0.250</td><td>6.35</td></tr> <tr><td>0.180</td><td>4.57</td></tr> <tr><td>0.098</td><td>2.49</td></tr> <tr><td>0.059</td><td>1.50</td></tr> <tr><td>0.031</td><td>0.79</td></tr> <tr><td>0.020</td><td>0.51</td></tr> <tr><td>0.004</td><td>0.10</td></tr> </table> <p>Faston Tab: 250</p>	0.313	7.95	0.250	6.35	0.180	4.57	0.098	2.49	0.059	1.50	0.031	0.79	0.020	0.51	0.004	0.10	<p><b>D</b> INCH = MM</p> <table border="1"> <tr><td>0.472</td><td>11.99</td></tr> <tr><td>0.453</td><td>11.51</td></tr> <tr><td>0.217</td><td>5.51</td></tr> <tr><td>0.079</td><td>2.01</td></tr> </table> <p>M5 Bolt Fastened Terminal</p>	0.472	11.99	0.453	11.51	0.217	5.51	0.079	2.01
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<p><b>I</b> INCH = MM</p> <table border="1"> <tr><td>0.860</td><td>21.84</td></tr> <tr><td>0.530</td><td>13.46</td></tr> <tr><td>0.430</td><td>10.92</td></tr> <tr><td>0.295</td><td>7.49</td></tr> </table> <p>Tyco. 1-480318-0</p>	0.860	21.84	0.530	13.46	0.430	10.92	0.295	7.49	<p><b>J</b> INCH = MM</p> <table border="1"> <tr><td>1.024</td><td>26.01</td></tr> <tr><td>0.910</td><td>23.11</td></tr> <tr><td>0.430</td><td>10.92</td></tr> <tr><td>0.335</td><td>8.51</td></tr> <tr><td>0.315</td><td>8.00</td></tr> </table> <p>M8 Bolt Fastened Terminal</p>	1.024	26.01	0.910	23.11	0.430	10.92	0.335	8.51	0.315	8.00	<p><b>K</b> INCH = MM</p> <table border="1"> <tr><td>1.100</td><td>27.94</td></tr> <tr><td>0.910</td><td>23.11</td></tr> <tr><td>0.510</td><td>12.95</td></tr> <tr><td>0.390</td><td>9.91</td></tr> <tr><td>0.330</td><td>8.38</td></tr> </table> <p>M10 Bolt Fastened Terminal</p>	1.100	27.94	0.910	23.11	0.510	12.95	0.390	9.91	0.330	8.38	<p><b>L</b> INCH = MM</p> <table border="1"> <tr><td>0.870</td><td>22.01</td></tr> <tr><td>0.550</td><td>13.97</td></tr> <tr><td>0.430</td><td>10.92</td></tr> <tr><td>0.230</td><td>5.84</td></tr> </table> <p>"Camcorder" Terminal</p>	0.870	22.01	0.550	13.97	0.430	10.92	0.230	5.84																		
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<p><b>M</b> INCH = MM</p> <table border="1"> <tr><td>0.806</td><td>20.47</td></tr> <tr><td>0.760</td><td>19.30</td></tr> <tr><td>0.690</td><td>17.53</td></tr> <tr><td>0.630</td><td>16.00</td></tr> <tr><td>0.394</td><td>10.01</td></tr> <tr><td>0.335</td><td>8.50</td></tr> </table> <p>Note: Dimensions are in inches (mm) Tolerances are ± 0.02 in. for dimensions &lt; 5mm ± 0.04 in. for dimensions ≥ 5mm ± 0.08 in. for all height dimensions unless otherwise specified.</p> <p>M8 "Universal" Bolt Fastened Terminal</p>				0.806	20.47	0.760	19.30	0.690	17.53	0.630	16.00	0.394	10.01	0.335	8.50																																										
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**Charging**

- Standby use: Apply constant voltage charging at 2.275 volts per cell (or 2.25–2.30VPC).
- Cyclic use: Apply constant voltage charging at 2.40–2.50 VPC. Initial charging current should be set at less than 0.25CA.
- Top charge: Product in storage (ambient temperature 25°C/77°F) requires a top charge every six months. Apply constant voltage at 2.40 volts per cell, initial charging current should be set at less than 0.1CA for 15 to 20 hours.

**Discharge**

- Stop operation when voltage has reached the minimum permissible voltage. Recharge immediately.
- Do not operate at 6CA or more current continuously.

**Storage**

- Always store battery in a fully charged condition.
- If battery is to be stored for a long period, apply a recovery top-charge every 6 months.
- Store batteries in a dry and cool location.

**Temperature**

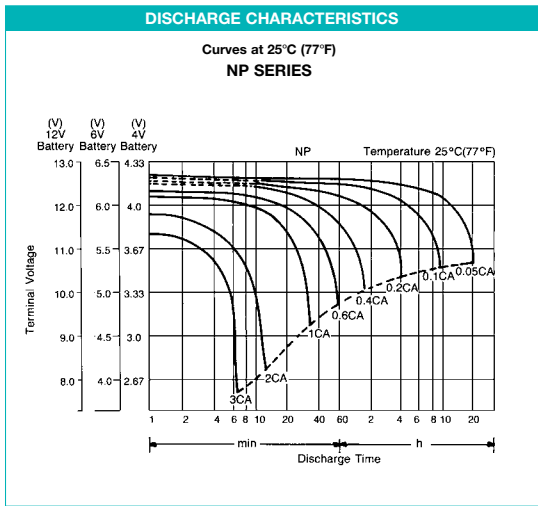
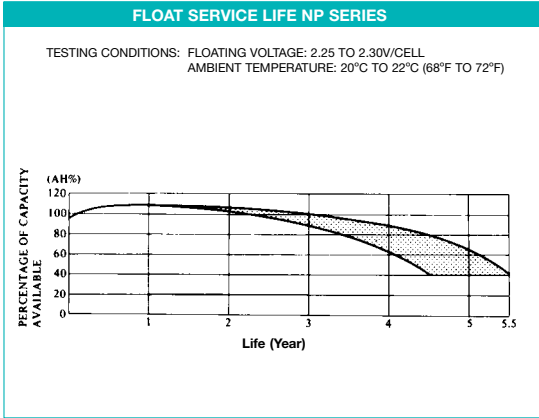
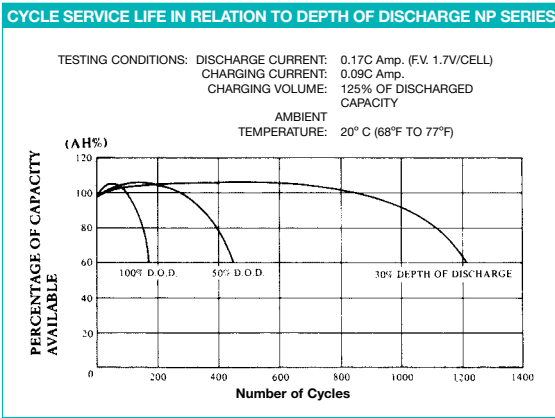
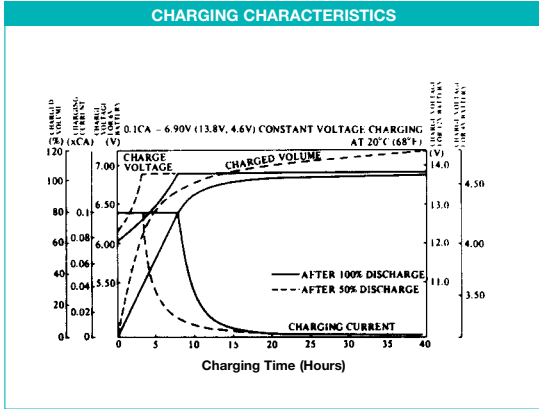
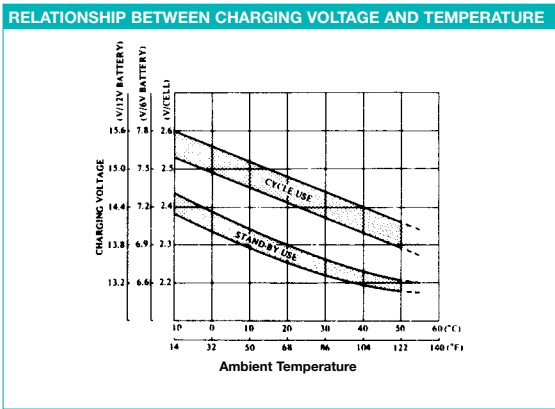
- Keep within ambient temperatures of –15°C to +50°C for both charging and discharging.

**Incorporating battery into equipment**

- Encase battery in a well ventilated compartment.
- Avoid installing battery near heated units such as a transformer.
- House the battery in the lowest section of the equipment enclosure or rack to prevent unnecessary battery temperature rise.

**Others**

- Avoid terminal short circuit.
- DO NOT expose to open flame.
- WARNING - Avoid exposure of the battery to any type of oil, solvent, detergent, petroleum-based solvent or ammonia solution. These materials could potentially cause permanent damage to the battery jar and cover and will void the warranty.



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