

GP Batteries

WORLDWIDE HEADQUARTERS

Hong Kong

GPI International Limited

Gold Peak Building, 8/F., 30 Kwai Wing Road, Kwai Chung, N.T., Hong Kong

Tel: (852) 2484 3333 Fax: (852) 2480 5912

E-mail address: gpil@goldpeak.com Website: <http://www.gpbatteries.com.hk>

SALES AND MARKETING BRANCH OFFICES

ASEAN

GP BATTERY MARKETING (SINGAPORE) PTE. LIMITED

97 Pioneer Road, Singapore 639579

Tel: (65) 6559 9760 Fax: (65) 6559 9761

MALAYSIA

GP BATTERY MARKETING (MALAYSIA) SDN. BHD.

Lot 8, Jalan Pemberita U1/49,

Temasya Industrial Park,

40150 Shah Alam, Selangor Darul Ehsan, Malaysia

Tel: (60) 3 5569 3499 Fax: (60) 3 5569 3498

THAILAND

GP BATTERY MARKETING (THAILAND) CO., LTD.

102 Soi Sukhumvit 26, Sukhumvit Road,

Klongton, Klongtoey,

Bangkok 10110 Thailand

Tel: (66) 2 661 3688 Fax: (66) 2 661 3602

TAIWAN

GOLD PEAK INDUSTRIES (TAIWAN) LIMITED - TAIPEI OFFICE

Room 1200, International Trade Building, No.205 Sec.1,

Tun Hua South Road, Taipei 10647, Taiwan R.O.C.

Tel: (886) 2 2741 4919 Fax: (886) 2 2731 4868/2741 0912

CHINA

HUIZHOU CHAO BA BATTERY TECHNOLOGY CO., LTD

2/F., South of Hongye Industrial Building,

Tianluo Mountain, 14th Industrial District,

Huizhou City, Guangdong, China

(Postal Code: 516003)

Tel: (86) 752 282 8428 Fax: (86) 752 280 2872

HONG KONG

GP BATTERY MARKETING (H.K.) LIMITED

Gold Peak Building, 8/F., 30 Kwai Wing Road,

Kwai Chung, N.T., Hong Kong

Tel: (852) 2420 0281 Fax: (852) 2494 9349

KOREA

GP BATTERY MARKETING (KOREA) LIMITED

Kunsul Hoekwan Building, 9/F., 71-2 Non Hyun-Dong,

Kang Nam-Gu, Seoul, South Korea

Tel: (82) 2 549 7188/9, 2516 3936/7

Fax: (82) 2 514 0623, 2516 0621

U.S.A.

GOLD PEAK INDUSTRIES (NORTH AMERICA) INC.

11235 West Bernardo Court, San Diego,

CA 92127-1638, U.S.A.

Tel: (1) 858 674 6099 Fax: (1) 858 674 6496

CANADA

GP BATTERY MARKETING INC.

Unit 7, 7780 Woodbine Avenue, Markham,

Ontario, Canada L3R 2N7

Tel: (1) 905 474 9507 Fax: (1) 905 474 9452

LATIN AMERICA

GP BATTERY MARKETING (LATIN AMERICA) INC.

8370 NW, 66th Street, Miami, Florida 33166, U.S.A.

Tel: (1) 305 471 7717 Fax: (1) 305 471 7718

EUROPE

GP BATTERIES EUROPE B.V.

Kortijzer 4, 5721 VE Asten,

The Netherlands

Tel: (31) 493 681030 Fax: (31) 493 681039

GERMANY

GP BATTERY MARKETING (GERMANY) GMBH

Niedérlohricker Str. 62, 40667 Meerbusch, Germany

Tel: (49) 2132 971504/5/6 Fax: (49) 2132 80145

POLAND

GP BATTERY (POLAND) SP. Z.O.O.

ul. Slowicza 19, PL-02170 Warsaw, Poland

Tel: (48) 22 868 0490 Fax: (48) 22 846 7535

U.K.

GP BATTERIES (U.K.) LIMITED

Summerfield Avenue, Chelston Business Park,

Wellington, Somerset, TA21 9JF, U.K.

Tel: (44) 1 823 660 044 Fax: (44) 1 823 665 595

ITALY

GP BATTERY MARKETING ITALY S.R.L.

Via. Alessandro Volta 3,

20094 Assago (Mi), Italy

Tel: (39) 02 488 2512 Fax: (39) 02 488 2865

SCANDINAVIA

GPBM NORDIC AB

Grimboasen 5, SE-417 49, Goteborg, Sweden

Tel: (46) 31 558 600 Fax: (46) 31 556 813

Batteries for Toys & Hobbies



Batteries for Toys & Hobbies



As a world leader in advanced battery technology, GP Batteries has time and again demonstrated scrupulous efforts to respond to customer's needs with products that are revolutionary, easy to use and affordable. Today, we have one of the most comprehensive ranges of rechargeable batteries for the toys and hobby applications.

Up there in the curves is our GP3300 series. Coveted from winning a multitude of national and worldwide championships, this is the ultimate choice for Champions for all Racing Car competitions. With cells matched to within +/-2%, it can unleash tremendous punch of power that will help you unlock the true potential of your game.

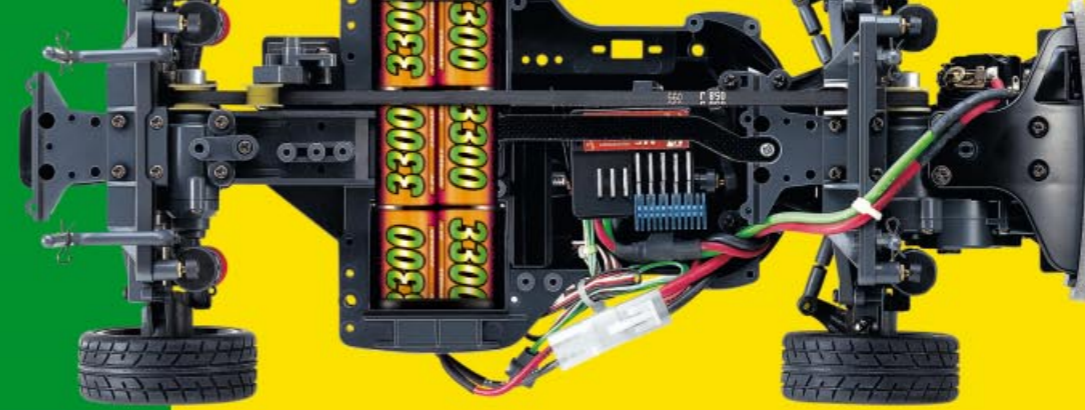
Advance features include:

- High MPV
- High punch power
- High capacity
- High rate of charging and discharging

And for the toys enthusiasts, we have a broad range of high energy density rechargeable batteries especially ideal for the radio controlled racing boats, racing flights, toy cars and machine guns, and the likes.

Enhanced features include:

- High energy density
- Excellent life cycle
- Longer running time
- Comprehensive range
- High rate of charging and discharging
- Low internal resistance (RI)
- Light weight
- High reliability

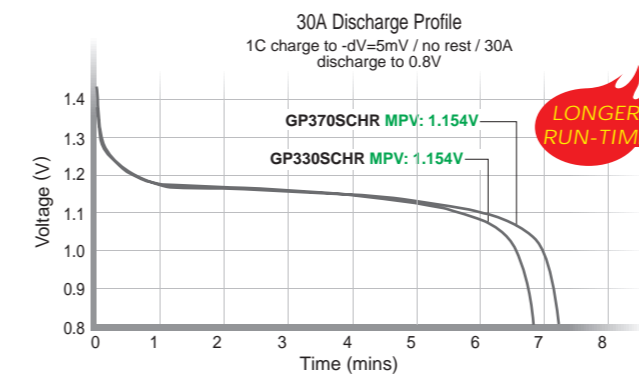


Racing Car Applications

Professional Racing Cars & Boats

- Ultra high MPV
- High punch power
- High capacity
- High rate of discharging

Performance Characteristics



Made for the Champions

GP330SCHR is homologated by international racing car associations including IFMAR, EFRA, BRCA and ROAR.

NiMH



Size	Sub-C	Sub-C	Sub-C
Voltage	1.2V	1.2V	1.2V
Capacity	3000mAh	3300mAh	3700mAh

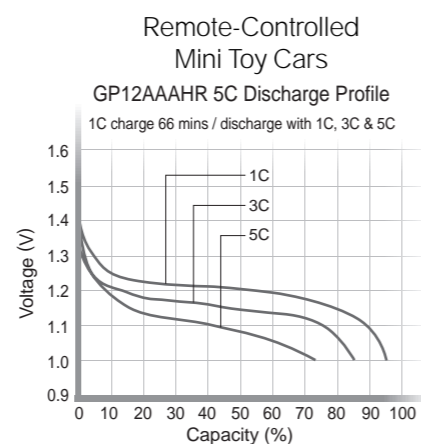
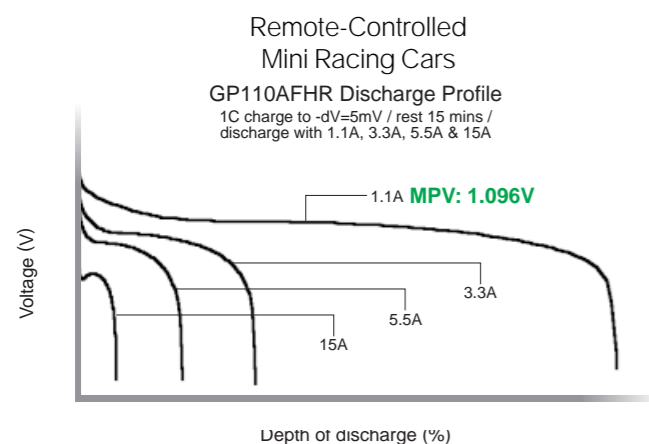
Racing Car Applications



Mini Toy Cars

- Fast charge
- High punch power
- High rate of charging & discharging
- Small size

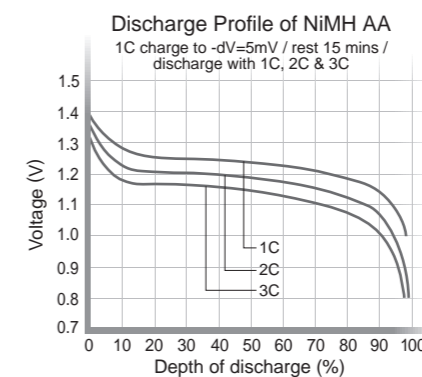
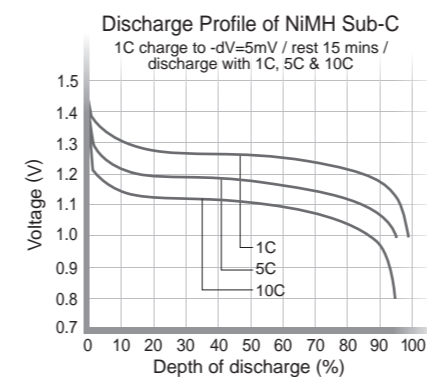
Performance Characteristics



Remote-Controlled Toy Cars

- High capacity
- High reliability
- High rate of discharging
- Comprehensive range

Performance Characteristics



Single cells

	NiMH		NiCd	
	AA	Sub-C	AA	Sub-C
Size	AA	Sub-C	AA	Sub-C
Voltage	1.2V	1.2V	1.2V	1.2V
Capacity	1300mAh	1400mAh	600mAh	1300mAh
	1500mAh	2200mAh	700mAh	1600mAh
	1600mAh	3000mAh	800mAh	2000mAh
	1700mAh		1000mAh	
	1800mAh			

Battery packs

	NiMH				NiCd				
	GPTC201	GPTC202	GPTC203	GPTC204	GPTC101	GPTC102	GPTC103	GPTC104	GPTC105
Model	GPTC201	GPTC202	GPTC203	GPTC204	GPTC101	GPTC102	GPTC103	GPTC104	GPTC105
Voltage	9.6V	7.2V	7.2V	7.2V	4.8V	9.6V	7.2V	7.2V	6.0V
Capacity	1600mAh	2200mAh	3000mAh	3300mAh	600mAh	600mAh	1600mAh	600mAh	600mAh

NiMH

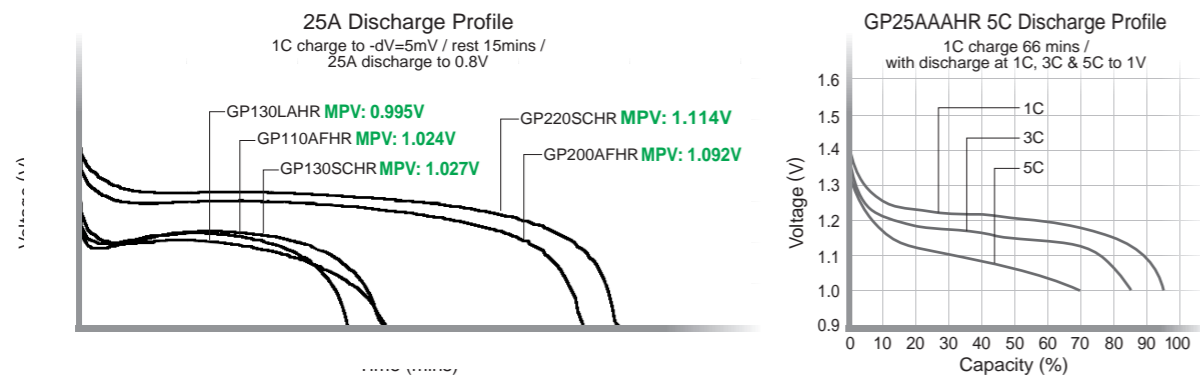


Size	1/4 AAA	1/3 AAA	1/2 AAA	2/3 AF
Voltage	1.2V	1.2V	1.2V	1.2V
Capacity	110mAh	100mAh	250mAh	1100mAh
		120mAh		
		160mAh		

Racing Flight Applications

- Light weight
- High punch power
- Long flying time
- Low RI

Performance Characteristics



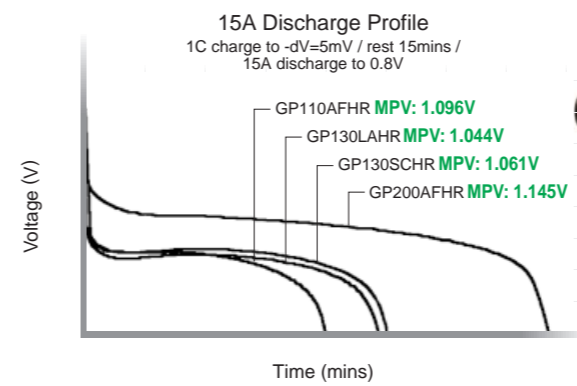
NiMH

Size	1/3 AAA	1/2 AAA	AAAA	2/3 AF	-	4/5 AF	2/3 Sub-C	4/5 Sub-C	Sub-C
Voltage	1.2V	1.2V	1.2V	1.2V	1.2V	1.2V	1.2V	1.2V	1.2V
Capacity	120mAh	250mAh	300mAh	1100mAh	1300mAh	2000mAh	1300mAh	2200mAh	3000mAh 3300mAh 3700mAh

Electric Gun Applications

- High punch power
- Compact batteries

Performance Characteristics



NiMH

Size	2/3 AF	-	4/5 AF	2/3 Sub-C	4/5 Sub-C	Sub-C
Voltage	1.2V	1.2V	1.2V	1.2V	1.2V	1.2V
Capacity	1100mAh	1300mAh	2000mAh	1300mAh	2200mAh	3000mAh 3300mAh 3700mAh



General Toy Applications

Specifications

Primary Batteries

Ultra Alkaline



Size	AAA	AA	C	D	9V
Voltage	1.5V	1.5V	1.5V	1.5V	9V

Super Alkaline



Size	AAA	AA	C	D	9V	N
Voltage	1.5V	1.5V	1.5V	1.5V	9V	1.5V

Greencell



Size	AAA	AA	C	D	9V
Voltage	1.5V	1.5V	1.5V	1.5V	9V

Rechargeable Batteries

NiMH



Size	AAA	AA	C	D	9V
Voltage	1.2V	1.2V	1.2V	1.2V	7.2/8.4/9.6V
Capacity	600mAh	1300mAh	2200mAh	2200mAh	170mAh
	650mAh	1600mAh	3500mAh	4500mAh	200mAh
	700mAh	1800mAh	4000mAh	7000mAh	300mAh
	750mAh	1950mAh		9000mAh	
	800mAh	2050mAh			
	850mAh	2250mAh			
	920mAh	2450mAh			

Racing Car Applications

Professional Racing Cars & Boats

Cell Size	Model Cell	Chemistry	Nominal Voltage (V)	Capacity (mAh)		Nominal Dimension (mm)		Weight (g)	Standard Charge		1 Hr Charge Current (mA)#
				Minimum	Typical	Diameter	Height		Current (mA)	Time (hour)	
Sub-C	300SCHR	NiMH	1.2	2800	3000	23	43	61	300	16	3000
	330SCHR**	NiMH	1.2	3100	3300	23	43	62	330	16	3300
	370SCHR	NiMH	1.2	3400	3700	23	43	64.5	360	16	3600

Mini Toy Cars

Cell Size	Model Cell	Chemistry	Nominal Voltage (V)	Capacity (mAh)		Nominal Dimension (mm)		Weight (g)	Standard Charge		1 Hr Charge Current (mA)#
				Minimum	Typical	Diameter	Height		Current (mA)	Time (hour)	
Standard Series											
AAA	1/4 AAA 11AAAM	NiMH	1.2	110	115	10.2	10.7	2.8	11	16	110
	1/3 AAA 16AAAM**	NiMH	1.2	160	168	10.2	14.7	3.75	16	16	160
Fast Charge Series											
AAA	1/3 AAA 10AAAHR	NiMH	1.2	100	110	10.4	15.6	3.9	10	16	100
	1/3 AAA 12AAAHR	NiMH	1.2	120	130	10.5	17.7	4.4	12	16	120
	1/2 AAA 25AAAHR	NiMH	1.2	250	260	10.5	23.5	6.3	25	16	250
AF	2/3 AF 110AFHR**	NiMH	1.2	1045	1100	17	28.5	21.5	110	16	1100

Remote-Controlled Toy Cars

Cell Size	Model Cell	Chemistry	Nominal Voltage (V)	Capacity (mAh)		Nominal Dimension (mm)		Weight (g)	Standard Charge		1 Hr Charge Current (mA)#
				Minimum	Typical	Diameter	Height		Current (mA)	Time (hour)	
AA	60AAS**	NiCd	1.2	600	660	14.4	48.2	18	60	16	600
	70AAS**	NiCd	1.2	700	770	14.4	48.2	21	70	16	700
	80AAS**	NiCd	1.2	800	850	14.4	48.2	21	80	16	800
	100AAS**	NiCd	1.2	1000	1030	14.4	48.2	26.5	100	16	1000
	130AAM**	NiMH	1.2	1300	1340	14.4	48.2	25	130	16	1300
	150AAM**	NiMH	1.2	1500	1530	14.4	48.2	26	150	16	1500
	160AAH**	NiMH	1.2	1600	1640	14.5	49.2	26	160	16	1600
	170AAH	NiMH	1.2	1700	1750	14.5	49.2	27	170	16	1700
	180AAH	NiMH	1.2	1800	1850	14.5	49.2	27	180	16	1800
	Sub-C	140SCH	NiMH	1.2	1400	1470	23	43	40	140	16
220SCH**		NiMH	1.2	2200	2420	23	43	55	220	16	2200
300SCHE		NiMH	1.2	3000	3150	23	43	59	300	16	3000
130SCK		NiCd	1.2	1300	1430	23	43	41	130	16	1300
130SCKE		NiCd	1.2	1300	1430	23	43	44.5	130	16	1300
160SCK**		NiCd	1.2	1600	1760	23	43	46	160	16	1600
160SCKE		NiCd	1.2	1600	1760	23	43	47	160	16	1600
200SCK**		NiCd	1.2	2000	2200	23	43	53	200	16	2000

	Model	Voltage (V)	Capacity (mAh)	Configuration
NiMH Series	TC201	9.6	1600	160AAH8SMX
	TC202	7.2	2200	220SCH6SMX
	TC203	7.2	3000	300SCHR6SMX
	TC204	7.2	3300	330SCHR6SMX
NiCd Series	TC101	4.8	600	60AAS4BMX
	TC102	9.6	600	60AAS8SMX
	TC103	7.2	1600	160SCK6SMX
	TC104	7.2	600	60AAS6SMX
	TC105	6.0	600	60AAS5BX

One hour rate with charge termination control. ** With UL approval.

Specifications

Racing Flight Applications

Cell Size	Model Cell	Chemistry	Nominal Voltage (V)	Capacity (mAh)		Nominal Dimension (mm)		Weight (g)	Standard Charge		1 Hr Charge Current (mA)#	
				Minimum	Typical	Diameter	Height		Current (mA)	Time (hour)		
AAA	1/3 AAA	12AAAHR	NiMH	1.2	120	130	10.5	17.7	4.4	12	16	120
	1/2 AAA	25AAAHR	NiMH	1.2	250	260	10.5	23.5	6.3	25	16	250
AAAA	AAAA	30AAAAH	NiMH	1.2	300	320	8.4	40.6	6.5	30	16	300
AF	2/3 AF	110AFHR**	NiMH	1.2	1045	1100	17	28.5	21.5	110	16	1100
	4/5 AF	200AFHR	NiMH	1.2	1900	2000	17	43.5	35.5	200	16	2000
-	-	130LAHR	NiMH	1.2	1235	1300	18.3	27.5	25	130	16	1300
Sub-C	2/3 Sub-C	130SCHR	NiMH	1.2	1235	1300	23	27.5	32	130	16	1300
	4/5 Sub-C	220SCHR**	NiMH	1.2	2090	2200	23	34	44	220	16	2200
	Sub-C	300SCHR	NiMH	1.2	2800	3000	23	43	61	300	16	3000
	Sub-C	330SCHR**	NiMH	1.2	3100	3300	23	43	62	330	16	3300
Sub-C	370SCHR	NiMH	1.2	3400	3700	23	43	64.5	360	16	3600	

Electric Gun Applications

Cell Size	Model Cell	Chemistry	Nominal Voltage (V)	Capacity (mAh)		Nominal Dimension (mm)		Weight (g)	Standard Charge		1 Hr Charge Current (mA)#	
				Minimum	Typical	Diameter	Height		Current (mA)	Time (hour)		
AF	2/3 AF	110AFHR**	NiMH	1.2	1045	1100	17	28.5	21.5	110	16	1100
	4/5 AF	200AFHR	NiMH	1.2	1900	2000	17	43.5	35.5	200	16	2000
-	-	130LAHR	NiMH	1.2	1235	1300	18.3	27.5	25	130	16	1300
Sub-C	2/3 Sub-C	130SCHR	NiMH	1.2	1235	1300	23	27.5	32	130	16	1300
	4/5 Sub-C	220SCHR**	NiMH	1.2	2090	2200	23	34	44	220	16	2200
	Sub-C	300SCHR	NiMH	1.2	2800	3000	23	43	61	300	16	3000
	Sub-C	330SCHR**	NiMH	1.2	3100	3300	23	43	62	330	16	3300
Sub-C	370SCHR	NiMH	1.2	3400	3700	23	43	64.5	360	16	3600	

One hour rate with charge termination control. ** With UL approval.



All the above technical data and graphical presentations are for reference only.

General Toy Applications

Primary Batteries

Series	Size	Model No.	Voltage (V)	Dimension (mm)	
				Diameter	Height
Ultra Alkaline	AA	15AU	1.5	14.5	50.5
	AAA	24AU	1.5	10.5	44.5
	C	14AU	1.5	26.2	50
	D	13AU	1.5	34.2	61.5
	9V	1604AU	9.0	25.5(L) x 16.5(W) x 47.5(H)	
Super Alkaline	AA	15A	1.5	14.5	50.5
	AAA	24A	1.5	10.5	44.5
	C	14A	1.5	26.2	50
	D	13A	1.5	34.2	61.5
	N	910A	1.5	12.0	30.2
Greencell	9V	1604A	9.0	25.5(L) x 16.5(W) x 47.5(H)	
	AA	15G	1.5	13.9	50
	AAA	24G	1.5	10.5	44.5
	C	14G	1.5	26.2	50
	D	13G	1.5	34.2	61.5
9V	1604G	9.0	26.5(L) x 17.5(W) x 48.5(H)		



NiMH Rechargeable Batteries

Cell Size	Model No.	Nominal Voltage (V)	Capacity (0.2C discharge)*(mAh)		Nominal Dimension (mm)		Weight (g)	Standard Charge		1 Hr Charge Current (mA)#
			Minimum	Typical	Diameter	Height		Current (mA)	Time (Hour)	
AA	250AAHC	1.2	2400	2450	14.5	50.5	31	240	16	2400
	230AAHC**	1.2	2200	2250	14.5	50.5	29.5	220	16	2200
	210AAHC**	1.2	2000	2050	14.5	50.5	28	200	16	2000
AAA	95AAAHC	1.2	900	920	10.5	44.5	15.2	90	16	900
	85AAAHC	1.2	830	850	10.5	44.5	15	85	16	850
	80AAAHC**	1.2	780	800	10.5	44.5	14	80	16	800
C	400CHC	1.2	3880	4000	26.2	50	82	400	16	N/A
	350CHC	1.2	3480	3500	26.2	50	78.5	350	16	N/A
	900DHC	1.2	8750	9000	34.2	61.5	173	900	16	N/A
D	700DHC	1.2	6800	7000	34.2	61.5	170	700	16	N/A
	450DHC	1.2	4400	4500	34.2	61.5	130	450	16	N/A

Standard Series

AA	200AAHC**	1.2	1900	1950	14.5	50.5	27	190	16	1900
	180AAHC**	1.2	1750	1800	14.5	50.5	26	180	16	1800
	160AAHC**	1.2	1550	1600	14.5	50.5	26	160	16	1600
	130AAHC**	1.2	1250	1300	14.5	50.5	26	130	16	1300
AAA	75AAAHC**	1.2	730	750	10.5	44.5	13	75	16	750
	70AAAHC**	1.2	680	700	10.5	44.5	12.2	70	16	700
	65AAAHC**	1.2	630	650	10.5	44.5	13	65	16	650
AAAA	60AAAHC**	1.2	600	630	10.5	44.5	13	60	16	600
	30AAAAMC	1.2	280	300	7.9	42.5	6.2	30	16	300
C	220CH	1.2	2150	2200	26.2	50	61	220	16	N/A
D	220DH	1.2	2150	2200	34.2	61.5	71	220	16	N/A

9V Series

9V	30R7H	7.2	300	320	17.5(T) x 26.2(W) x 48.5(H)		48.5	30	16	300
	20R8H	8.4	200	210	15.7(T) x 26.5(W) x 48.5(H)		42.5	20	16	200
	20R7H	7.2	200	210	15.7(T) x 26.5(W) x 48.5(H)		36.5	20	16	200
	17R8H**	8.4	170	175	15.7(T) x 26.5(W) x 48.5(H)		32	17	16	170
	17R7H**	7.2	170	175	15.7(T) x 26.5(W) x 48.5(H)		28	17	16	170

One hour rate with charge termination control. * After charging at 0.1 C for 16 hours. ** With UL approval.