

The HengMing Cell range meet, exceed the requirement of IEC60623 standard. There are low, medium, high, ultra high rate discharge types.



1.KPL TYPE (Low Discharge Rate Cell)

KPL Series low rate nickel cadmium battery is made of pocket plates.

Low rate cell for Railway signaling, Alarms, Telecommunications, UPS, etc



2.KPM TYPE (Medium Discharge Rate Cell)

KPM Series medium rate nickel cadmium battery is made of pocket plates.

Medium rate cell for railroad DC power sources, UPS, Power plant, Gas turbine control, etc.



3.KPH TYPE=GNG (High Discharge Rate Cell)

KPH Series high rate nickel cadmium battery is made of pocket plate with the characteristics of thin plate, high porosity and low internal resistance.

High rate cells for Engine starting, Switchgears, uninterruptible power supply, etc



4.KPX type=GNC (Ultra high rate cell)

KPX series ultra high rate nickel cadmium battery which made of sintered plate is characterized by compact construction, low internal resistance, high reliability, high capacity, long service life and excellent low temperature performance.

Ultra high rate cells for Engine starting, Emergency back-up power, Civil aviation, etc

Heng Ming Ni-Cd Batteries

The broadest capability in the world.

HengMing have over 30 years' experiences in the development and manufacture of pocket and sintered plate batteries.

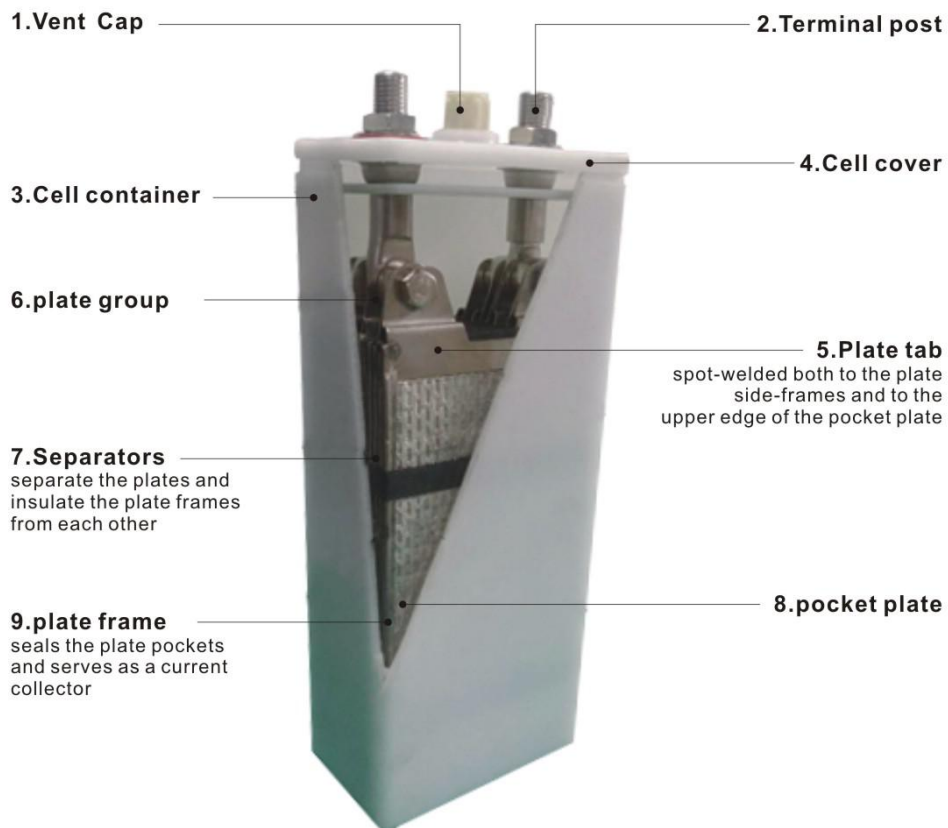
Today, we offer the widest range of high quality nickel-cadmium batteries available throughout the world, our Ni-Cd batteries have been exported to many countries and welcomed by end user's.

Advantages of Hengming Ni-Cd batteries

1. Have packing room, welding room, assembling room, heating room, production room and more
2. Wide operating temperature range: -25°C to 45°C
3. Long service life: more than 20 years
4. Excellent charging efficiency and smooth discharge voltage
5. High resistance to mechanical and electrical abuse
6. Plastic material is produced by our own factory
7. Low maintenance cost and replacement cost
8. 30 years nickel-cadmium batteries manufacture experiences
9. One of the top three supplier in China nickel-cadmium battery field
10. We can design the battery according to the customer's requirement

Good Performance High Quality Simple Maintenance

Cell Construction Features



The HengMing Cell ranges fully comply and exceed the requirements of the IEC60623 standard

Cell Capacity and Dimension

L Range

Cell Type	Nominal Voltage (V)	Rated Capacity (Ah)	KPL=GN(Low Rate Type)			Pocket----Pocket			Thread of pole	Weight (filled) (Kg)	Electrolyte Volume (L)	Container Material
			Dimension(mm)			Weight (filled) (Kg)	Electrolyte Volume (L)	Container Material				
			L	W	H							
GN10	1.2	10	85	39	150	M8	1	0.2	ABS /PP			
			82	33	245	M10×1.5	0.95	0.2	ABS			
			114	52	266	M10×1.5	2	0.6	ABS			
GN20	1.2	20	82	43	258	M10×1.5	1.3	0.3	ABS /PP			
			135	54	265	M10×1.5	1.8	0.6	ABS /PP			
GN30	1.2	30	114	52	266	M10×1.5	2.2	0.5	ABS			
			135	54	265	M10×1.5	2.2	0.6	ABS /PP			
GN40	1.2	40	114	52	266	M10×1.5	2.3	0.4	ABS			
			135	54	265	M10×1.5	2.5	0.6	ABS /PP			
			141	66	226	M10×1.5	2.6	0.5	PP			
GN45	1.2	45	138	61	266	M10×1.5	2.9	0.7	ABS /PP			
			141	66	226	M10×1.5	3	0.9	ABS			
GN50	1.2	50	141	66	226	M10×1.5	3	0.8	PP			
			138	61	266	M10×1.5	3.2	0.7	ABS /PP			
GN60	1.2	60	141	71	295	M10×1.5	3.5	0.9	PP			
			135	53	370	M10×1.5	3.9	1.0	PP			
			141	71	295	M10×1.5	4	1.1	PP			
GN70	1.2	70	139	79	295	M10×1.5	4.3	1.1	ABS			
			138	61	266	M10×1.5	3.8	0.8	ABS /PP			
2GN70	2.4	70	195	79	331	M8	8.3	2.5	PP			
GN75	1.2	75	139	79	291	M10	4.6	1.1	ABS			
GN80	1.2	80	141	71	295	M10×1.5	4.6	0.9	PP			
GN90	1.2	90	139	79	295	M10×1.5	4.6	1.1	ABS			
GN80	1.2	90	139	79	362	M10×1.5	5.9	1.4	ABS /PP			
GN100	1.2	100	139	79	362	M10×1.5	6	1.4	ABS /PP			
GN110	1.2	110	143	100	280	M10×1.5	6.1	1.3	ABS			
			139	79	362	M10×1.5	6	1.4	ABS /PP			
GN120	1.2	120	143	100	280	M10×1.5	6.1	1.3	ABS			
GN120	1.2	120	139	79	362	M10×1.5	6.2	1.3	ABS/PP			
GN130	1.2	130	164	104	345	M20×1.5	9	1.9	ABS /PP			
GN150	1.2	150	167	162	345	M20×1.5	12	3.0	ABS /PP			
GN180	1.2	180	164	104	345	M20×1.5	9.3	2.0	ABS /PP			
			167	162	345	M20×1.5	13	3.3	ABS /PP			
GN200	1.2	200	165	105	345	M20×1.5	9.4	1.8	ABS /PP			
			167	162	345	M20×1.5	14	3.3	ABS /PP			
GN200	1.2	200	164	104	345	M20×1.5	10	1.8	ABS /PP			
GN230	1.2	230	167	162	345	M20×1.5	13.7	3.3	ABS /PP			
GN250	1.2	250	167	162	345	M20×1.5	14	3.4	ABS /PP			
			277	145	420	M16	15.7	2.6	PP			
GN300	1.2	300	282	170	348	M20×1.5	22.5	5.0	ABS			
			176	161	540	M16/20	20.5	4.7	ABS			
GN400	1.2	400	277	145	450	M16	21	6.0	PP			
			282	170	348	M20×1.5	25	5.0	ABS			
GN500	1.2	500	277	145	450	M16	22.6	6.0	PP			
			232	172	410	M16	24.5	6.0	ABS			
GN600	1.2	600	285	172	490	M20×1.5	33.6	7.8	ABS			
			277	145	490	M20×1.5	22.6	6.0	PP			
GN700	1.2	700	285	172	490	M20×1.5	34	7.5	ABS			
GN700	1.2	700	285	172	490	M20×1.5	39	8.4	ABS			
GN800	1.2	800	395	185	560	M20×1.5	57.5	15.5	ABS			
GN900	1.2	900	395	185	560	M20×1.5	59	15.0	ABS			
GN1000	1.2	1000	395	185	560	M20×1.5	60	14.0	ABS			
GN1100	1.2	1100	395	185	560	M20×1.5	62	12.0	ABS			
GN1200	1.2	1200	395	185	560	M20×1.5	62	11.3	ABS			



Cell Capacity and Dimension

M Range

Cell Type	Nominal Voltage (V)	Rated Capacity (Ah)	KPM=GNZ(Medium Rate Type)			Pocket----Pocket			
			Dimension(mm)			Thread of pole	Weight (filled) (Kg)	Electrolyte Volume (L)	Container Material
			L	W	H				
GNZ10	1.2V	10	82	43	258	M10×1.5	1.20	0.40	ABS / PP
GNZ20	1.2V	20	135	54	265	M10×1.5	1.90	0.60	ABS / PP
			114	52	266	M10×1.5	2.10	0.70	ABS
GNZ30	1.2V	30	135	54	265	M10×1.5	2.40	0.60	ABS / PP
GNZ40	1.2V	40	141	71	295	M10×1.5	3.60	1.00	PP
			138	61	266	M10×1.5	3.62	0.84	ABS / PP
GNZ50	1.2V	50	139	79	295	M10/M16	4.65	1.00	ABS
			141	71	295	M10×1.5	4.20	1.00	PP
GNZ60	1.2V	60	139	79	295	M16	5.30	1.20	ABS
			141	71	295	M10×1.5	4.40	1.00	PP
			139	79	295	M16	5.40	1.20	ABS
GNZ70	1.2V	70	139	79	362	M16	6.20	1.42	ABS / PP
			141	71	295	M10×1.5	4.60	1.00	PP
GNZ80	1.2V	80	139	79	362	M16	6.50	1.40	ABS / PP
			143	100	280	M10×1.5	5.80	1.5	ABS
GNZ90	1.2V	90	164	104	345	M20×1.5	8.20	1.62	ABS / PP
			139	79	362	M16	6.50	1.25	ABS / PP
GNZ100	1.2V	100	164	104	345	M20×1.5	9.30	1.8	ABS / PP
			164	104	345	M20×1.5	9.50	1.80	ABS / PP
GNZ120	1.2V	120	139	89	362	M16	7.50	1.50	PP
			165	105	345	M20×1.5	9.50	1.75	ABS / PP
GNZ130	1.2V	130	167	162	345	M20×1.5	11.40	2.70	ABS / PP
			165	105	345	M20×1.5	9.60	1.75	ABS / PP
GNZ140	1.2V	140	167	162	345	M20×1.5	12.50	2.70	ABS / PP
			165	105	345	M20×1.5	9.60	1.60	ABS / PP
GNZ150	1.2V	150	167	162	345	M20×1.5	12.80	3.00	ABS / PP
			167	162	345	M20×1.5	13.60	3.40	ABS / PP
GNZ180	1.2V	180	167	162	345	M20×1.5	13.60	3.40	ABS / PP
			167	162	345	M20×1.5	14.00	2.90	ABS / PP
GNZ200	1.2V	200	282	170	348	M20×1.5	20.60	4.60	ABS
			167	162	345	M20×1.5	14.00	2.90	ABS / PP
GNZ250	1.2V	250	277	145	450	M20×1.5	21.50	4.60	ABS
			176	161	540	M16	20.60	4.60	ABS
			282	170	348	M20×1.5	23	5	ABS
GNZ300	1.2V	300	176	161	540	M20×1.5	22.60	5.00	ABS
			232	172	410	M20×1.5	23.00	4.80	ABS
			282	170	348	M20×1.5	24.00	6.00	ABS
GNZ400	1.2V	400	285	172	490	M20×1.5	31.80	7.00	ABS
			277	140	490	M20×1.5	26.50	5.00	PP
			285	172	490	M20×1.5	36.50	8.50	ABS
GNZ500	1.2V	500	285	172	490	M20×1.5	39.00	10.00	ABS
GNZ600	1.2V	600	285	172	490	M20×1.5	54.70	11.50	ABS
GNZ700	1.2V	700	395	185	560	M20×1.5	66.00	15.00	ABS
GNZ800	1.2V	800	395	185	560	M20×1.5	66.00	15.00	ABS
GNZ900	1.2V	900	395	185	560	M20×1.5	66.00	15.00	ABS
GNZ1100	1.2V	1100	395	185	560	M20×1.5	68.30	12.50	ABS



Cell Capacity and Dimension

H Range

Cell Type	Nominal Voltage (V)	Rated Capacity (Ah)	KPH=GNG(High Rate Type)			Pocket----Pocket			
			Dimension(mm)			Thread of pole	Weight (filled) (Kg)	Electrolyte Volume (L)	Container Material
			L	W	H				
GNG10	1.2	10	135	54	266	M10×1.5	2.15	0.8	ABS/PP
GNG20	1.2	20	135	54	266	M10×1.5	2.55	0.63	ABS/PP
GNG30	1.2	30	141	71	291	M16	4.3	1.2	PP
GNG40	1.2	40	139	79	362	M16	6	1.5	ABS/PP
GNG50	1.2	50	139	79	370	M16	6.2	0.4	ABS/PP
GNG60	1.2	60	139	79	370	M16	6.5	1.4	ABS/PP
			165	105	345	M20×1.5			ABS/PP
GNG70	1.2	70	143	100	275	M20×1.5	6.7	1.2	ABS
			165	105	345	M20×1.5	9.6	2	ABS/PP
GNG80	1.2	80	165	105	345	M20×1.5	9.9	2	ABS/PP
GNG90	1.2	90	165	105	345	M20×1.5	13.3	3.6	ABS/PP
GNG100	1.2	100	167	162	345	M20×1.5	14	0.96	ABS/PP
GNG120	1.2	120	167	162	345	M20×1.5	21.8	6.2	ABS
GNG150	1.2	150	282	170	348	M20×1.5	25.6	6.1	ABS
			282	170	348	M20×1.5	16.2	3.5	ABS
GNG200	1.2	200	282	170	348	M20×1.5	27	6	ABS
			165	128	401	M20×1.5			ABS
GNG250	1.2	250	282	170	348	M20×1.5			ABS
GNG300	1.2	300	285	170	490	M20×1.5			ABS
GNG400	1.2	400	395	185	560	M20×1.5			ABS

Cell Capacity and Dimension

X Range

Cell Type	Nominal Voltage (V)	Rated Capacity (Ah)	KPX=GNC(Ultra High Rate Type)			Sintered----Sintered			
			Dimension(mm)			Thread of pole	Weight (filled) (Kg)	Electrolyte Volume (L)	Container Material
			L	W	H				
GNC5	1.2	5	81	26	163	M8	0.51	0.05	ABS
GNC10	1.2	10	81	26	163	M8	0.62	0.06	ABS
GNC10-(2)	1.2	10	81	34	245	M10	1.1	0.13	ABS
GNC20	1.2	20	81	34	245	M10	1.25	0.12	ABS
GNC20-(2)	1.2	20	138	61	266	M10	2.8	0.5	ABS/PP
GNC20-(3)	1.2	20	81	43	266	M10	1.7	0.2	ABS/PP
GNC30	1.2	30	81	43	266	M10	1.75	0.2	ABS/PP
GNC30-(2)	1.2	30	138	61	266	M10	3	0.5	ABS/PP
GNC40	1.2	40	81	43	266	M10	1.85	0.2	ABS/PP
GNC40-(2)	1.2	40	80	35	235	M10	1.5	0.16	Nylon
GNC40-(3)	1.2	40	138	61	266	M10	3.3	0.5	ABS/PP
GNC40-(4)	1.2	40	100	85	138	M10	1.6	0.2	ABS
GNC50	1.2	50	81	50	266	M10	2.14	0.25	ABS
GNC50-(2)	1.2	50	138	61	266	M16	3.5	0.5	ABS/PP
GNC60	1.2	60	81	50	266	M10	2.2	0.24	ABS



GNC60-(2)	1.2	60	138	61	266	M16	3.8	0.5	ABS/PP
GNC70	1.2	70	138	61	266	M16	4	0.4	ABS/PP
GNC80	1.2	80	138	61	266	M16	4.2	0.4	ABS/PP
GNC80-(2)	1.2	80	86	86	276	M10	3.6	0.45	PP
GNC80-(3)	1.2	80	86	86	305	M10	3.8	0.6	PP
GNC90	1.2	90	138	61	266	M16	4.3	0.4	ABS/PP
GNC100	1.2	100	138	61	266	M16	4.3	0.4	ABS/PP
GNC100-(2)	1.2	100	148	78	196	M16	4.3	0.25	ABS
GNC100-(3)	1.2	100	139	79	295	M16	5.5	1.4	ABS
GNC110	1.2	110	138	61	266	M16	4.5	0.4	ABS/PP
GNC110-(2)	1.2	110	139	79	295	M16	5.5	1.4	ABS
GNC120	1.2	120	138	61	266	M16	4.6	0.35	ABS/PP
GNC120-(2)	1.2	120	139	79	295	M16	5.5	1.4	ABS
GNC130	1.2	130	139	79	295	M16	5.6	1.4	ABS
GNC140	1.2	140	165	105	350	M20	9.5	1.9	ABS/PP
GNC140-(2)	1.2	140	139	79	362	M16	9	1.7	ABS/PP
GNC140-(3)	1.2	140	139	79	295	M16	6	1.3	ABS
GNC150	1.2	150	165	105	350	M20	9.5	1.8	ABS/PP
GNC150-(2)	1.2	150	139	79	362	M16	9.3	1.6	ABS/PP
GNC150-(3)	1.2	150	139	79	295	M16	6	1.2	ABS
GNC160	1.2	160	165	105	350	M20	9.5	1.75	ABS/PP
GNC160-(2)	1.2	160	139	79	362	M16	9.5	1.6	ABS/PP
GNC160-(3)	1.2	160	139	79	295	M16	6.5	1.5	ABS
GNC170	1.2	170	165	105	350	M20	9.5	1.7	ABS/PP
GNC170-(2)	1.2	170	139	79	295	M16	6.7	1.5	ABS
GNC170-(3)	1.2	170	139	79	362	M16	9.5	1.6	ABS/PP
GNC190	1.2	190	165	105	350	M20	9.9	1.7	ABS/PP
GNC210	1.2	210	165	105	350	M20	10.5	1.6	ABS/PP
GNC230	1.2	230	167	162	343	M16	13	2.8	ABS/PP
GNC230-(2)	1.2	230	146	128	363	M20	10	3	ABS
GNC250	1.2	250	167	162	343	M16	13	2.6	ABS/PP
GNC250-(2)	1.2	250	146	128	363	M20	10	3	ABS

Recommended Charging Voltage

Series	Float charge	Equalizing charge voltage
KPX=GNC	1.36-1.38	1.55-1.60
KPH=GNG	1.40-1.43	1.60-1.65
KPM=GNZ	1.42-1.45	1.60-1.65
KPL=GN	1.44-1.50	1.65-1.70



Cell Performance

X Range

Discharge current and time when battery is fully charged at 20°C ± 5°C.

End voltage of 0.85V/Cell (KPX=GNC)

Model	Capacity (Ah)	Minutes			Seconds					
		10	5	3	90	60	30	10	5	1
GNC10	10	49.5	73	105	118	136	151	158	164	178
GNC20	20	109	168	216	242	307	326	339	353	374
GNC30	30	153	251	322	363	453	469	492	529	561
GNC40	40	198	316	413	485	582	632	657	706	748
GNC50	50	247	395	502	606	733	778	821	882	935
GNC60	60	297	474	619	727	853	923	985	1059	1122
GNC70	70	345	553	721	848	991	1076	1149	1235	1309
GNC80	80	396	631	826	970	1138	1229	1314	1412	1496
GNC90	90	445	712	928	1091	1276	1377	1478	1571	1652
GNC100	100	496	790	1004	1213	1412	1530	1642	1764	1870
GNC120	120	594	948	1238	1454	1586	1736	1970	2118	2247
GNC140	140	691	1106	1442	1693	1964	2040	2298	2470	2618
GNC170	170	843	1341	1706	1962	2291	2403	2784	2995	3172
GNC190	190	942	1501	1907	2104	2565	2807	3119	3351	3553
GNC210	210	1041	1659	2108	2404	2852	3013	3448	3704	3927
GNC230	230	1140	1717	2309	2689	3133	3419	3776	4057	4301
GNC250	250	1242	1775	2510	2831	3315	3625	4105	4410	4675

Cell Performance

X Range

End voltage of 0.65V/Cell (KPX=GNC)

Model	Capacity (Ah)	Minutes			Seconds					
		10	5	3	90	60	30	10	5	1
GNC10	10	53	85	107	165	176	201	238	247	261
GNC20	20	108	173	221	341	376	407	493	506	530
GNC30	30	162	259	331	512	564	611	739	759	797
GNC40	40	216	346	442	683	752	815	986	1012	1063
GNC50	50	270	432	552	853	935	1009	1228	1265	1321
GNC60	60	324	513	663	1021	1125	1217	1474	1518	1592
GNC70	70	378	585	773	1176	1312	1415	1713	1661	1856
GNC80	80	432	362	884	1362	1504	1619	1967	2018	2123
GNC100	100	486	759	1105	1535	1683	1816	2201	2274	2362
GNC120	120	538	864	1326	1706	1867	2018	2443	2527	2631
GNC140	140	648	1026	1547	2040	2239	2434	2948	3036	3174
GNC170	170	756	1170	1878	3551	2624	2830	3426	3315	3687
GNC190	190	914	1468	2085	2876	3173	3426	3853	4191	4454
GNC210	210	1015	1641	2328	3236	3542	3815	4326	4783	4968
GNC230	230	1123	1714	2431	3581	3913	4227	5085	5278	5513



Cell Performance

X Range

End voltage of 1.00V/Cell (KPX=GNC)

Model	Capacity (Ah)	Hours			Minutes			Seconds	
		5	1.5	1	5	1.5	1	5	1
GNC10	10	2.2	6.8	9.8	54	65.3	76.6	89	91
GNC20	20	4.6	14.5	21.5	120	142.5	169	175	186
GNC30	30	6.7	20.9	30.5	169	207	245	259	273
GNC40	40	8.9	27.2	40	232	272	322	352	368
GNC50	50	10.9	34.6	50	281	336	391	427	453
GNC60	60	13	41.3	58.2	297	365	437	489	511
GNC70	70	15.2	47.5	68	321	394	461	571	596
GNC80	80	17.2	55.3	78	369	457	521	664	682
GNC90	90	19.2	61.5	87	417	513	652	746	769
GNC100	100	21.5	69	99	452	562	723	832	850
GNC120	120	25.4	83	116	518	635	842	978	1025
GNC140	140	29.2	97	139	605	769	954	1159	1196
GNC150	150	31.3	104	147	662	824	1006	1231	1278
GNC170	170	35.3	115	167	779	925	1175	1408	1457
GNC190	190	39.5	125	186	848	1023	1298	1552	1609
GNC200	200	42	131	195	879	1071	1363	1618	1693
GNC210	210	44	138	205	937	1142	1447	1701	1762
GNC230	230	48.2	147	224	982	1208	1535	1839	1914
GNC250	250	52.6	159	243	1080	1337	1695	1987	2048

Cell Performance

X Range

End voltage of 1.05V/Cell (KPX=GNC)

Model	Capacity (Ah)	Hours			Minutes			Seconds	
		5	1.5	1	5	1.5(90)	1(60)	5	1
GNC10	10	2.2	6.7	9.6	45.6	55	66	75.3	80.7
GNC20	20	4.5	14.3	20.5	101	118	146	150	161
GNC30	30	6.5	20.7	30	142	169	205	224	242
GNC40	40	8.8	27	38.8	179	223	268	301	326
GNC50	50	10.8	34.3	49.2	236	267	341	354	401
GNC60	60	12.9	41	57	262	311	359	417	453
GNC70	70	14.9	46	67.5	288	361	398	492	528
GNC80	80	17	54	77.6	314	409	452	553	604
GNC90	90	19	59	86.5	352	462	547	637	681
GNC100	100	21.3	67	97	393	517	594	705	753
GNC120	120	25	79	115	478	528	682	843	907
GNC140	140	29	96.1	134	521	697	813	993	1058
GNC150	150	31	103	148	569	751	886	1061	1132
GNC170	170	35	110	164	675	847	992	1203	1290
GNC190	190	39.3	125	183	721	941	1102	1344	1424
GNC200	200	41.7	129	194	762	984	1168	1415	1496
GNC210	210	43.8	137	203	796	1036	1213	1485	1560
GNC230	230	48	152	221	874	1112	1295	1517	1694
GNC250	250	52	167	238	953	1209	1398	1598	1785



Cell Performance

X Range

End voltage of 1.10V/Cell (KPX=GNC)

Model	Capacity (Ah)	Hours			Minutes			Seconds	
		5	1.5	1	5	1.5	1	5	1
GNC10	10	2.1	6.5	9.3	37.7	51	57.5	65.5	69
GNC20	20	4.4	14	20	80	98	121	131	138
GNC30	30	6.4	20	29	112	143	168	195	207
GNC40	40	8.5	26.5	38.2	149	198	227	261	276
GNC50	50	10.7	33	49	187	229	269	308	343
GNC60	60	12.8	39	56	203	254	305	363	388
GNC70	70	14.8	45.6	67	217	271	323	427	452
GNC80	80	16.9	52	76	244	305	378	481	517
GNC90	90	18.8	57	85	275	366	443	554	582
GNC100	100	21.1	64	94	306	407	507	615	647
GNC120	120	24.9	77	113	352	465	573	738	776
GNC140	140	2.8	92	131	397	549	702	861	905
GNC150	150	30.7	97	141	441	586	732	923	969
GNC170	170	34.9	108	159	523	692	851	1046	1103
GNC190	190	39.2	121	176	566	742	919	1169	1228
GNC200	200	41.5	127	185	594	770	948	1231	1293
GNC210	210	43.3	132	197	620	804	987	1292	1357
GNC230	230	47.6	144	213	673	886	1076	1392	1486
GNC250	250	51.5	156	228	715	943	1167	1524	1619

Cell Performance

X Range

End voltage of 1.14V/Cell (KPX=GNC)

Model	Capacity (Ah)	Hours			Minutes			Seconds	
		5	1.5	1	5	1.5	1	5	1
GNC10	10	2.0	6.3	9	31	31	43	57	65
GNC20	20	4.2	13.3	19	66	73	89	126	131
GNC30	30	6	18	27.5	94	108	127	189	189
GNC40	40	8	25	36.4	134	138	162	245	257
GNC50	50	10	30	45.5	147	157	186	278	319
GNC60	60	12.2	36.5	54	169	189	225	334	362
GNC70	70	14	43	63.7	193	224	261	397	418
GNC80	80	16	50	72.8	221	253	297	445	478
GNC90	90	18	55	80.5	248	283	347	502	538
GNC100	100	20	62	91	276	314	371	556	598
GNC120	120	22.5	74	109	332	378	443	667	714
GNC140	140	28	88	129	386	441	516	770	833
GNC150	150	30	94	134	413	472	553	825	892
GNC170	170	34	102	155	469	535	627	936	1012
GNC190	190	38	124.5	169	512	587	673	1039	1098
GNC200	200	40	132	181	539	618	709	1094	1156
GNC210	210	41	138	193	566	652	748	1157	1214
GNC230	230	45	151	208	624	713	819	1236	1408
GNC250	250	49	162	217	676	779	893	1368	1445

The HengMing X range NiCd battery mainly used for engine starting



Cell Performance

L Range

Discharge current and time when battery is fully charged at 20°C ± 5°C.

Final discharge voltage 1.14V per cell (KPL=GN)

Cell type	Capacity (Ah)	Hours					Minutes					
		8	5	3	2	1	30	20	15	10	5	1
GN10	10	1.2	1.8	2.5	2.8	3.8	4.5	5	5.5	6	6.5	8.5
GN20	20	2.4	3.6	5	5.6	7.6	9	10	11	12	13	17
GN22	22	2.6	4.0	5.5	6.2	8.4	9.9	11	12.1	13.2	14.3	18.7
GN30	30	3.5	5.4	7.5	8.4	11.4	13.5	15	16.5	18	19.5	25.5
GN40	40	4.7	7.2	10	11.2	15.2	18	20	22	24	26	34.0
GN45	45	5.3	8.1	11.3	12.6	17.1	20.3	22.5	24.8	27	29.3	38.3
GN50	50	5.9	9	12.5	14	19	22.5	25	27.5	30	32.5	42.5
GN60	60	7.1	10.8	15	16.8	22.8	27	30	33	36	39	51
GN70	70	8.3	12.6	17.5	19.6	26.6	31.5	35	38.5	42	45.5	59.5
GN80	80	9.4	14.4	20	22.4	30.4	36	40	44	48	52	68
GN90	90	10.6	16.2	22.5	25.2	34.2	40.5	45	49.5	54	58.5	76.5
GN100	100	11.8	18	25	28	38	45	50	55	60	65	85
GN110	110	13	19.8	27.5	30.8	41.8	49.5	55	60.5	66	71.5	93.5
GN120	120	14.2	21.6	30	33.6	45.6	54	60	66	72	78	102
GN150	150	17.7	27	37.5	42	57	67.5	75	82.5	90	97.5	127.5
GN200	200	23.6	36	50	56	76	90	100	110	120	130	170
GN250	250	29.5	45	62.5	70	95	112.5	125	137.5	150	162.5	212.5
GN300	300	35.4	54	75	84	114	135	150	165	180	195	255
GN400	400	47.2	72	100	112	152	180	200	220	240	260	340
GN500	500	59	90	125	140	190	225	250	275	300	325	425
GN600	600	70.8	108	150	168	228	270	300	330	360	390	510
GN700	700	82.6	126	175	196	266	315	350	385	420	455	595
GN800	800	94.4	144	200	224	304	360	400	440	480	520	680
GN900	900	106.2	162	225	252	342	405	450	495	540	585	765
GN1000	1000	118	180	250	280	380	450	500	550	600	650	850
GN1100	1100	129.8	198	275	308	418	495	550	605	660	715	935
GN1200	1200	141.6	216	300	336	456	540	600	660	720	780	1020



Cell Performance

L Range

Final discharge voltage 1.10V per cell (KPL=GN)

Cell type	Capacity (Ah)	Hours					Minutes					
		8	5	3	2	1	30	20	15	10	5	1
GN10	10	1.3	1.9	2.7	3.5	4.6	5.5	6	6.5	7	8	10.5
GN20	20	2.5	3.8	5.4	7	9.2	11	12	13	14	16	21
GN22	22	2.8	4.2	5.9	7.7	10.1	12.1	13.2	14.3	15.4	17.6	23.1
GN30	30	3.8	5.7	8.1	10.5	13.8	16.5	18	19.5	21	24	31.5
GN40	40	5	7.6	10.8	14	18.4	22	24	26	28	32	42
GN45	45	5.6	8.6	12.2	15.8	20.7	24.8	27	29.3	31.5	36	47.3
GN50	50	6.3	9.5	13.5	17.5	23	27.5	30	32.5	35	40	52.5
GN60	60	7.5	11.4	16.2	21	27.6	33	36	39	42	48	63
GN70	70	8.8	13.3	18.9	24.5	32.2	38.5	42	45.5	49	56	73.5
GN80	80	10	15.2	21.6	28	36.8	44	48	52	56	64	84
GN90	90	11.3	17.1	24.3	31.5	41.4	49.5	54	58.5	63	72	94.5
GN100	100	12.5	19	27	35	46	55	60	65	70	80	105
GN110	110	13.8	20.9	29.7	38.5	50.6	60.5	66	71.5	77	88	115.5
GN120	120	15	22.8	32.4	42	55.2	66	72	78	84	96	126
GN150	150	18.8	28.5	40.5	52.5	69	82.5	90	97.5	105	120	157.5
GN200	200	25	38	54	70	92	110	120	130	140	160	210
GN250	250	31.3	47.5	67.5	87.5	115	137.5	150	162.5	175	200	262.5
GN300	300	37.5	57	81	105	138	165	180	195	210	240	315
GN400	400	50	76	108	140	184	220	240	260	280	320	420
GN500	500	62.5	95	135	175	230	275	300	325	350	400	525
GN600	600	75	114	162	210	276	330	360	390	420	480	630
GN700	700	87.5	133	189	245	322	385	420	455	490	560	735
GN800	800	100	152	216	280	368	440	480	520	560	640	840
GN900	900	112.5	171	243	315	414	495	540	585	630	720	945
GN1000	1000	125	190	270	350	460	550	600	650	700	800	1050
GN1100	1100	137.5	209	297	385	506	605	660	715	770	880	1155
GN1200	1200	150	228	324	420	552	660	720	780	840	960	1260



Cell Performance

L Range

Final discharge voltage 1.05V per cell (KPL=GN)

Cell type	Capacity (Ah)	Hours					Minutes					
		8	5	3	2	1	30	20	15	10	5	1
GN10	10	1.3	1.9	2.8	4	6	6.5	7	8	8.5	10	12
GN20	20	2.5	3.9	5.6	8	12	13	14	16	17	20	24
GN22	22	2.8	4.3	6.2	8.8	13.2	14.3	15.4	17.6	18.7	22	26.4
GN30	30	3.8	5.8	8.4	12	18	19.5	21	24	25.5	30	36
GN40	40	5	7.8	11.2	16	24	26	28	32	34	40	48
GN45	45	5.6	8.7	12.6	18	27	29.3	31.5	36	38.3	45	54
GN50	50	6.3	9.7	14	20	30	32.5	35	40	42.5	50	60
GN60	60	7.5	11.6	16.8	24	36	39	42	48	51	60	72
GN70	70	8.8	13.6	19.6	28	42	45.5	49	56	59.5	70	84
GN80	80	10	15.5	22.4	32	48	52	56	64	68	80	96
GN90	90	11.3	17.5	25.2	36	54	58.5	63	72	76.5	90	108
GN100	100	12.5	19.4	28	40	60	65	70	80	85	100	120
GN110	110	13.8	21.3	30.8	44	66	71.5	77	88	93.5	110	132
GN120	120	15	23.3	33.6	48	72	78	84	96	102	120	144
GN150	150	18.8	29.1	42	60	90	97.5	105	120	127.5	150	180
GN200	200	25	38.8	56	80	120	130	140	160	170	200	240
GN250	250	31.3	48.5	70	100	150	162.5	175	200	212.5	250	300
GN300	300	37.5	58.2	84	120	180	195	210	240	255	300	360
GN400	400	50	77.6	112	160	240	260	280	320	340	400	480
GN500	500	62.5	97	140	200	300	325	350	400	425	500	600
GN600	600	75	116.4	168	240	360	390	420	480	510	600	720
GN700	700	87.5	135.8	196	280	420	455	490	560	595	700	840
GN800	800	100	155.2	224	320	480	520	560	640	680	800	960
GN900	900	112.5	174.6	252	360	540	585	630	720	765	900	1080
GN1000	1000	125	194	280	400	600	650	700	800	850	1000	1200
GN1100	1100	137.5	213.4	308	440	660	715	770	880	935	1100	1320
GN1200	1200	150	232.8	336	480	720	780	840	960	1020	1200	1440



Cell Performance

L Range

Final discharge voltage 1.00V per cell (KPL=GN)

Cell type	Capacity (Ah)	Hours					Minutes					
		8	5	3	2	1	30	20	15	10	5	1
GN10	10	1.3	2	3.1	4.2	6.5	8	8.5	9	10	11	12.2
GN20	20	2.5	4	6.2	8.4	13	16	17	18	20	22	24.4
GN22	22	2.8	4.4	6.8	9.2	14.3	17.6	18.7	19.8	22	24.2	26.8
GN30	30	3.8	6	9.3	12.6	19.5	24	25.5	27	30	33	36.6
GN40	40	5	8	12.4	16.8	26	32	34	36	40	44	48.8
GN45	45	5.7	9	14	18.9	29.3	36	38.3	40.5	45	49.5	54.9
GN50	50	6.3	10	15.5	21	32.5	40	42.5	45	50	55	61
GN60	60	7.6	12	18.6	25.2	39	48	51	54	60	66	73.2
GN70	70	8.8	14	21.7	29.4	45.5	56	59.5	63	70	77	85.4
GN80	80	10.1	16	24.8	33.6	52	64	68	72	80	88	97.6
GN90	90	11.3	18	27.9	37.8	58.5	72	76.5	81	90	99	109.8
GN100	100	12.6	20	31	42	65	80	85	90	100	110	122
GN110	110	13.9	22	34.1	46.2	71.5	88	93.5	99	110	121	134.2
GN120	120	15.1	24	37.2	50.4	78	96	102	108	120	132	146.4
GN150	150	18.9	30	46.5	63	97.5	120	127.5	135	150	165	183
GN200	200	25.2	40	62	84	130	160	170	180	200	220	244
GN250	250	31.5	50	77.5	105	162.5	200	212.5	225	250	275	305
GN300	300	37.8	60	93	126	195	240	255	270	300	330	366
GN400	400	50.4	80	124	168	260	320	340	360	400	440	488
GN500	500	63.0	100	155	210	325	400	425	450	500	550	610
GN600	600	75.6	120	186	252	390	480	510	540	600	660	732
GN700	700	88.2	140	217	294	455	560	595	630	700	770	854
GN800	800	100.8	160	248	336	520	640	680	720	800	880	976
GN900	900	113.4	180	279	378	585	720	765	810	900	990	1098
GN1000	1000	126	200	310	420	650	800	850	900	1000	1100	1220
GN1100	1100	138.6	220	341	462	715	880	935	990	1100	1210	1342
GN1200	1200	151.2	240	372	504	780	960	1020	1080	1200	1320	1464



Cell Performance

M Range

Discharge current and time when battery is fully charged at 20°C ±5°C.

Final discharge voltage 1.14V per cell (KPM=GNZ)

Cell type	Capacity (Ah)	Hours					Minutes					Seconds				
		8	5	3	2	1	30	20	15	10	5	1	30	5	1	
		GNZ10	10	1.2	1.8	2.7	3.3	4.5	5.5	6.5	7	8	9.5	13	16	18
GNZ20	20	2.4	3.6	5.4	6.6	9	11	13	14	16	19	26	32	36	38	
GNZ30	30	3.5	5.4	8.1	9.9	13.5	16.5	19.5	21	24	28.5	39	48	54	57	
GNZ40	40	4.7	7.2	10.8	13.2	18	22	26	28	32	38	52	64	72	76	
GNZ45	45	5.3	8.1	12.2	14.9	20.3	24.8	29.3	31.5	36	42.8	58.5	72	81	85.5	
GNZ50	50	5.9	9	13.5	16.5	22.5	27.5	32.5	35	40	47.5	65	80	90	95	
GNZ60	60	7.1	10.8	16.2	19.8	27	33	39	42	48	57	78	96	108	114	
GNZ70	70	8.3	12.6	18.9	23.1	31.5	38.5	45.5	49	56	66.5	91	112	126	133	
GNZ75	75	8.9	13.5	20.3	24.8	33.8	41.3	48.8	52.5	60	71.3	97.5	120	135	142.5	
GNZ80	80	9.4	14.4	21.6	26.4	36	44	52	56	64	76	104	128	144	152	
GNZ90	90	10.6	16.2	24.3	29.7	40.5	49.5	58.5	63	72	85.5	117	144	162	171	
GNZ100	100	11.8	18	27	33	45	55	65	70	80	95	130	160	180	190	
GNZ120	120	14.2	21.6	32.4	39.6	54	66	78	84	96	114	156	192	216	228	
GNZ150	150	17.7	27	40.5	49.5	67.5	82.5	97.5	105	120	142.5	195	240	270	285	
GNZ200	200	23.6	36	54	66	90	110	130	140	160	190	260	320	360	380	
GNZ250	250	29.5	45	67.5	82.5	112.5	137.5	162.5	175	200	237.5	325	400	450	475	
GNZ300	300	35.4	54	81	99	135	165	195	210	240	285	390	480	540	570	
GNZ400	400	47.2	72	108	132	180	220	260	280	320	380	520	640	720	760	
GNZ500	500	59	90	135	165	225	275	325	350	400	475	650	800	900	950	
GNZ600	600	70.8	108	162	198	270	330	390	420	480	570	780	960	1080	1140	
GNZ700	700	82.6	126	189	231	315	385	455	490	560	665	910	1120	1260	1330	
GNZ800	800	94.4	144	216	264	360	440	520	560	640	760	1040	1280	1440	1520	
GNZ900	900	106.2	162	243	297	405	495	585	630	720	855	1170	1440	1620	1710	
GNZ1000	1000	118	180	270	330	450	550	650	700	800	950	1300	1600	1800	1900	
GNZ1100	1100	129.8	187	297	363	495	605	715	770	880	1045	1430	1760	1980	2090	
GNZ1200	1200	141.6	204	324	396	540	660	780	840	960	1140	1560	1920	2160	2280	



Cell Performance

M Range

Final discharge voltage 1.10V per cell (KPM=GNZ)

Cell type	Capacity (Ah)	Hours					Minutes					Seconds				
		8	5	3	2	1	30	20	15	10	5	1	30	5	1	
		GNZ10	10	1.2	1.9	3	3.8	6	8	9	10	11	13	18	19	22
GNZ20	20	2.4	3.9	6	7.6	12	16	18	20	22	26	36	38	44	52	
GNZ30	30	3.7	5.8	9	11.4	18	24	27	30	33	39	54	57	66	78	
GNZ40	40	4.9	7.8	12	15.2	24	32	36	40	44	52	72	76	88	104	
GNZ45	45	5.5	8.7	13.5	17.1	27	36	40.5	45	49.5	58.5	81	85.5	99	117	
GNZ50	50	6.1	9.7	15	19	30	40	45	50	55	65	90	95	110	130	
GNZ60	60	7.3	11.6	18	22.8	36	48	54	60	66	78	108	114	132	156	
GNZ70	70	8.5	13.6	21	26.6	42	56	63	70	77	91	126	133	154	182	
GNZ75	75	9.2	14.6	22.5	28.5	45	60	67.5	75	82.5	97.5	135	142.5	165	195	
GNZ80	80	9.8	15.5	24	30.4	48	64	72	80	88	104	144	152	176	208	
GNZ90	90	11.0	17.5	27	34.2	54	72	81	90	99	117	162	171	198	234	
GNZ100	100	12.2	19.4	30	38	60	80	90	100	110	130	180	190	220	260	
GNZ120	120	14.6	23.3	36	45.6	72	96	108	120	132	156	216	228	264	312	
GNZ150	150	18.3	29.1	45	57	90	120	135	150	165	195	270	285	330	390	
GNZ200	200	24.4	38.8	60	76	120	160	180	200	220	260	360	380	440	520	
GNZ250	250	30.5	48.5	75	95	150	200	225	250	275	325	450	475	550	650	
GNZ300	300	36.6	58.2	90	114	180	240	270	300	330	390	540	570	660	780	
GNZ400	400	48.8	77.6	120	152	240	320	360	400	440	520	720	760	880	1040	
GNZ500	500	61	97	150	190	300	400	450	500	550	650	900	950	1100	1300	
GNZ600	600	73.2	116.4	180	228	360	480	540	600	660	780	1080	1140	1320	1560	
GNZ700	700	85.4	135.8	210	266	420	560	630	700	770	910	1260	1330	1540	1820	
GNZ800	800	97.6	155.2	240	304	480	640	720	800	880	1040	1440	1520	1760	2080	
GNZ900	900	109.8	174.6	270	342	540	720	810	900	990	1170	1620	1710	1980	2340	
GNZ1000	1000	122	194	300	380	600	800	900	1000	1100	1300	1800	1900	2200	2600	
GNZ1100	1100	134.2	213.4	330	418	660	880	990	1100	1210	1430	1980	2090	2420	2860	
GNZ1200	1200	146.4	232.8	360	456	720	960	1080	1200	1320	1560	2160	2280	2640	3120	



Cell Performance

M Range

Final discharge voltage 1.05V per cell (KPM=GNZ)

Cell type	Capacity (Ah)	Hours					Minutes					Seconds				
		8	5	3	2	1	30	20	15	10	5	1	30	5	1	
GNZ10	10	1.2	2.0	3.1	4.2	7	9	11.5	12	13.2	16	20	22	25	30	
GNZ20	20	2.5	3.9	6.2	8.4	14	18	23	24	26.4	32	40	44	50	60	
GNZ30	30	3.7	5.9	9.3	12.6	21	27	34.5	36	39.6	48	60	66	75	90	
GNZ40	40	5.0	7.8	12.4	16.8	28	36	46.0	48	52.8	64	80	88	100	120	
GNZ45	45	5.6	8.8	14.0	18.9	31.5	40.5	51.8	54	59.4	72	90	99	112.5	135	
GNZ50	50	6.2	9.8	15.5	21	35	45	57.5	60	66	80	100	110	125	150	
GNZ60	60	7.4	11.8	18.6	25.2	42	54	69	72	79.2	96	120	132	150	180	
GNZ70	70	8.7	13.7	21.7	29.4	49	63	80.5	84	92.4	112	140	154	175	210	
GNZ75	75	9.3	14.7	23.3	31.5	52.5	67.5	86.3	90	99	120	150	165	187.5	225	
GNZ80	80	9.9	15.7	24.8	33.6	56	72	92	96	105.6	128	160	176	200	240	
GNZ90	90	11.2	17.6	27.9	37.8	63	81	103.5	108	118.8	144	180	198	225	270	
GNZ100	100	12.4	19.6	31	42	70	90	115	120	132	160	200	220	250	300	
GNZ120	120	14.9	23.5	37.2	50.4	84	108	138	144	158.4	192	240	264	300	360	
GNZ150	150	18.6	29.4	46.5	63	105	135	172.5	180	198	240	300	330	375	450	
GNZ200	200	24.8	39.2	62	84	140	180	230	240	264	320	400	440	500	600	
GNZ250	250	31	49	77.5	105	175	225	287.5	300	330	400	500	550	625	750	
GNZ300	300	37.2	58.8	93	126	210	270	345	360	396	480	600	660	750	900	
GNZ400	400	49.6	78.4	124	168	280	360	460	480	528	640	800	880	1000	1200	
GNZ500	500	62	98	155	210	350	450	575	600	660	800	1000	1100	1250	1500	
GNZ600	600	74.4	117.6	186	252	420	540	690	720	792	960	1200	1320	1500	1800	
GNZ700	700	86.8	137.2	217	294	490	630	805	840	924	1120	1400	1540	1750	2100	
GNZ800	800	99.2	156.8	248	336	560	720	920	960	1056	1280	1600	1760	2000	2400	
GNZ900	900	111.6	176.4	279	378	630	810	1035	1080	1188	1440	1800	1980	2250	2700	
GNZ1000	1000	124	196	310	420	700	900	1150	1200	1320	1600	2000	2200	2500	3000	
GNZ1100	1100	136.4	215.6	341	462	770	990	1265	1320	1452	1760	2200	2420	2750	3300	
GNZ1200	1200	148.8	235.2	372	504	840	1080	1380	1440	1584	1920	2400	2640	3000	3600	



Cell Performance

M Range

Final discharge voltage 1.00V per cell (KPM=GNZ)

Cell type	Capacity (Ah)	Hours					Minutes					Seconds				
		8	5	3	2	1	30	20	15	10	5	1	30	5	1	
GNZ10	10	1.3	2	3.2	4.6	7.5	11	12.5	13.5	15.6	18	24	26	34	35	
GNZ20	20	2.5	4	6.4	9.2	15	22	25	27	31.2	36	48	52	68	70	
GNZ30	30	3.8	6	9.6	13.8	22.5	33	37.5	40.5	46.8	54	72	78	102	105	
GNZ40	40	5.0	8	12.8	18.4	30	44	50	54	62.4	72	96	104	136	140	
GNZ45	45	5.7	9	14.4	20.7	33.8	49.5	56.3	60.8	70.2	81	108	117	153	157.5	
GNZ50	50	6.3	10	16	23	37.5	55	62.5	67.5	78	90	120	130	170	175	
GNZ60	60	7.6	12	19.2	27.6	45	66	75	81	93.6	108	144	156	204	210	
GNZ70	70	8.8	14	22.4	32.2	52.5	77	87.5	94.5	109.2	126	168	182	238	245	
GNZ75	75	9.5	15	24	34.5	56.3	82.5	93.8	101.3	117	135	180	195	255	262.5	
GNZ80	80	10.1	16	25.6	36.8	60	88	100	108	124.8	144	192	208	272	280	
GNZ90	90	11.3	18	28.8	41.4	67.5	99	112.5	121.5	140.4	162	216	234	306	315	
GNZ100	100	12.6	20	32	46	75	110	125	135	156	180	240	260	340	350	
GNZ120	120	15.1	24	38.4	55.2	90	132	150	162	187.2	216	288	312	408	420	
GNZ150	150	18.9	30	48	69	112.5	165	187.5	202.5	234	270	360	390	510	525	
GNZ200	200	25.2	40	64	92	150	220	250	270	312	360	480	520	680	700	
GNZ250	250	31.5	50	80	115	187.5	275	312.5	337.5	390	450	600	650	850	875	
GNZ300	300	37.8	60	96	138	225	330	375	405	468	540	720	780	1020	1050	
GNZ400	400	50.4	80	128	184	300	440	500	540	624	720	960	1040	1360	1400	
GNZ500	500	63	100	160	230	375	550	625	675	780	900	1200	1300	1700	1750	
GNZ600	600	75.6	120	192	276	450	660	750	810	936	1080	1440	1560	2040	2100	
GNZ700	700	88.2	140	224	322	525	770	875	945	1092	1260	1680	1820	2380	2450	
GNZ800	800	100.8	160	256	368	600	880	1000	1080	1248	1440	1920	2080	2720	2800	
GNZ900	900	113.4	180	288	414	675	990	1125	1215	1404	1620	2160	2340	3060	3150	
GNZ1000	1000	126	200	320	460	750	1100	1250	1350	1560	1800	2400	2600	3400	3500	
GNZ1100	1100	138.6	220.0	352.0	506.0	825.0	1265.0	1430.0	1485.0	1716.0	1980.0	2640.0	2860.0	3740.0	3850.0	
GNZ1200	1200	151.2	240.0	384.0	552.0	900.0	1380.0	1560.0	1620.0	1872.0	2160.0	2880.0	3120.0	4080.0	4200.0	



Cell Performance

H Range

Discharge current and time when battery is fully charged at 20°C ± 5°C.

Final discharge voltage 1.00V per cell (KPH=GNG)

Cell type	Capacity (Ah)	Hours							Minutes							Seconds		
		8h	5h	3h	2h	1.5h	1h	30m	20m	15m	10m	5m	1m	30s	5s	1s		
GNG10	10	1.3	2	3.3	4.8	6.4	9.5	12.5	16	20	23	31	46	52	63	69		
GNG20	20	2.5	4	6.6	9.6	13	19	25	32	40	46	62	92	104	126	138		
GNG30	30	3.8	6	9.9	14.4	19.4	28.5	37.5	48	60	69	93	138	156	189	207		
GNG40	40	5	8	13.2	19.2	25.6	38	50	64	80	92	124	184	208	252	276		
GNG50	50	6.3	10	16.5	24	32	47.5	62.5	80	100	115	155	230	260	315	345		
GNG60	60	7.6	12	19.8	28.8	38.4	57	75	96	120	138	186	276	312	378	414		
GNG70	70	8.9	14	23.1	33.6	44.8	66.5	87.5	112	140	161	217	322	364	441	483		
GNG80	80	10	16	26.4	38.4	51.2	76	100	128	160	184	248	368	416	504	552		
GNG90	90	11.3	18	29.7	43.2	57.6	85.5	113	144	180	207	279	414	468	567	621		
GNG100	100	12.6	20	33	48	64	95	125	160	200	230	310	460	520	630	690		
GNG150	150	18.9	30	49.5	72	96	143	188	240	300	345	465	690	780	945	1035		
GNG160	160	20.16	32	52.8	76.8	102	152	200	256	320	368	496	736	832	1008	1104		
GNG200	200	25.2	40	66	96	128	190	250	320	400	460	620	920	1040	1260	1380		
GNG300	300	37.8	60	99	144	192	285	375	480	600	690	930	1380	1560	1890	2070		
GNG400	400	50.4	80	132	192	256	380	500	640	800	920	1240	1840	2080	2520	2760		

Cell Performance

H Range

Final discharge voltage 1.05V per cell (KPH=GNG)

Cell type	Capacity (Ah)	Hours							Minutes							Seconds		
		8h	5h	3h	2h	1.5h	1h	30m	20m	15m	10m	5m	1m	30s	5s	1s		
GNG10	10	1.3	2	3.2	4.5	6.2	8.5	12	15	17.5	22	28	35	46	52	54		
GNG20	20	2.5	3.9	6.4	9	12.4	17	24	30	35	44	56	70	92	104	108		
GNG30	30	3.8	5.9	9.6	13.5	18.6	25.5	36	45	52.5	66	84	105	138	156	162		
GNG40	40	5	7.8	12.8	18	24.8	34	48	60	70	88	112	140	184	208	216		
GNG50	50	6.3	9.8	16	22.5	31	42.5	60	75	87.5	110	140	175	230	260	270		
GNG60	60	7.5	11.8	19.2	27	37.2	51	72	90	105	132	168	210	276	312	324		
GNG70	70	8.8	13.7	22.4	31.5	43.4	59.5	84	105	123	154	196	245	322	364	378		
GNG80	80	10	15.7	25.6	36	49.6	68	96	120	140	176	224	280	368	416	432		
GNG90	90	11.2	17.6	28.8	40.5	55.8	76.5	108	135	158	198	252	315	414	468	486		
GNG100	100	12.5	19.6	32	45	62	85	120	150	175	220	280	350	460	520	540		
GNG150	150	18.8	29.4	48	67.5	93	128	180	225	263	330	420	525	690	780	810		
GNG160	160	20	31.4	51.2	72	99.2	136	192	240	280	352	448	560	736	832	864		
GNG200	200	25	39.2	64	90	124	170	240	300	350	440	560	700	920	1040	1080		
GNG300	300	37.5	58.8	96	135	180	255	360	450	525	660	840	1050	1380	1560	1620		
GNG400	400	50	78.4	128	180	248	340	480	600	700	880	1120	1400	1840	2080	2160		



Cell Performance

H Range

Final discharge voltage 1.10V per cell (KPH=GNG)

Cell type	Capacity (Ah)	Hours							Minutes							Seconds		
		8h	5h	3h	2h	1.5h	1h	30m	20m	15m	10m	5m	1m	30s	5s	1s		
GNG10	10	1.2	1.9	3.1	4.4	6	7.5	10	13	16	17	20	32	35	42	45		
GNG20	20	2.4	3.9	6.2	8.8	12	15	20	26	32	34	40	64	70	84	90		
GNG30	30	3.6	5.8	9.3	13.2	18	22.5	30	39	48	51	60	96	105	126	135		
GNG40	40	4.9	7.8	12.4	17.6	24	30	40	52	64	68	80	128	140	168	180		
GNG50	50	6.1	9.7	15.5	22	30	37.5	50	65	80	85	100	160	175	210	225		
GNG60	60	7.3	11.6	18.6	26.4	36	45	60	78	96	102	120	192	210	252	270		
GNG70	70	8.5	13.6	21.7	30.8	42	52.5	70	91	112	119	140	224	245	294	315		
GNG80	80	9.8	15.5	24.8	35.2	48	60	80	104	128	136	160	256	280	336	360		
GNG90	90	11	17.5	27.9	39.6	54	67.5	90	117	144	153	180	288	315	378	405		
GNG100	100	12.2	19.4	31	44	60	75	100	130	160	170	200	320	350	420	450		
GNG150	150	18.3	29.1	46.5	66	90	112.5	150	195	240	255	300	480	525	630	676		
GNG160	160	19.52	31.04	49.6	70.4	96	120	160	208	256	272	320	512	560	672	720		
GNG200	200	24.4	38.8	62	88	120	150	200	260	320	340	400	640	700	840	900		
GNG300	300	36.6	58.2	93	132	180	225	300	390	480	510	600	960	1050	1260	1350		
GNG400	400	48.8	77.6	124	176	240	300	400	520	640	680	800	1280	1400	1680	1800		

Cell Performance

H Range

Final discharge voltage 1.14V per cell (KPH=GNG)

Cell Type	Capacity (Ah)	Hours							Minutes							Seconds		
		8h	5h	3h	2h	1.5h	1h	30m	20m	15m	10m	5m	1m	30s	5s	1s		
GNG10	10	1.2	1.8	3	4	5	6.8	8.5	11	13	16	18	28	32	37	40		
GNG20	20	2.4	3.6	6	8	10	13.6	17	22	26	32	36	56	64	74	80		
GNG30	30	3.6	5.4	9	12	15	20.4	25.5	33	39	48	54	84	96	111	120		
GNG40	40	4.8	7.2	12	16	20	27.2	34	44	52	64	72	112	128	148	160		
GNG50	50	6	9	15	20	25	34	42.5	55	65	80	90	140	160	185	200		
GNG60	60	7.2	10.8	18	24	30	40.8	51	66	78	96	108	168	192	222	240		
GNG70	70	8.4	12.6	21	28	35	47.6	59.5	77	91	112	126	196	224	259	280		
GNG80	80	9.6	14.4	24	32	40	54.4	68	88	104	128	144	224	256	296	320		
GNG90	90	10.8	16.2	27	36	45	61.2	76.5	99	117	144	162	252	288	333	360		
GNG100	100	12	18	30	40	50	68	85	110	130	160	180	280	320	370	400		
GNG150	150	18	27	45	60	75	102	127.5	165	195	240	270	420	480	550	600		
GNG160	160	19.2	28.8	48	64	80	108.8	136	176	208	256	288	448	512	592	640		
GNG200	200	24	36	60	80	100	136	170	220	260	320	360	560	640	740	800		
GNG300	300	36	54	90	120	150	204	255	330	390	480	540	840	960	1110	1200		
GNG400	400	48	72	120	160	200	272	340	440	520	640	720	1120	1280	1480	1600		



Cell Performance

H Range

End voltage of 0.85V/Cell (KPH-GNG)							
Cell Type	Capacity (Ah)	Time(Seconds)					
		90s	60s	30s	15s	5s	1s
GNG10	10	60	63	68	78	87	100
GNG20	20	120	126	136	156	174	200
GNG30	30	180	189	204	234	261	300
GNG40	40	240	252	272	312	348	400
GNG50	50	300	315	340	390	435	500
GNG60	60	360	378	408	468	522	600
GNG70	70	420	441	476	546	609	700
GNG80	80	480	504	544	624	696	800
GNG90	90	540	567	612	702	783	900
GNG100	100	600	630	680	780	870	1000
GNG150	150	900	945	1020	1170	1305	1500
GNG160	160	960	1008	1088	1248	1392	1600
GNG200	200	1200	1260	1360	1560	1740	2000
GNG300	300	1800	1890	2040	2340	2610	3000
GNG400	400	2400	2520	2720	3120	3480	4000

End voltage of 0.65V/Cell (KPH-GNG)							
Cell Type	Capacity (Ah)	Time(Seconds)					
		90s	60s	30s	15s	5s	1s
GNG10	10	77	87.5	95	100	110	120
GNG20	20	154	175	190	200	220	240
GNG30	30	231	262.5	285	300	330	360
GNG40	40	308	350	380	400	440	480
GNG50	50	385	437.5	475	500	550	600
GNG60	60	462	525	570	600	660	720
GNG70	70	539	612.5	665	700	770	840
GNG80	80	616	700	760	800	880	960
GNG90	90	693	787.5	855	900	990	1080
GNG100	100	770	875	950	1000	1100	1200
GNG150	150	1155	1313	1425	1500	1650	1800
GNG160	160	1232	1400	1520	1600	1760	1920
GNG200	200	1540	1750	1900	2000	2200	2400
GNG300	300	2310	2625	2850	3000	3300	3600
GNG400	400	3080	3500	3800	4000	4400	4800

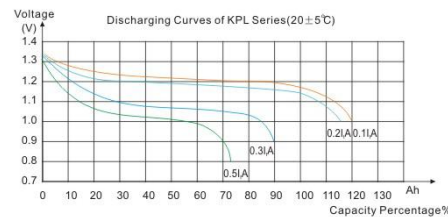


Battery Layout

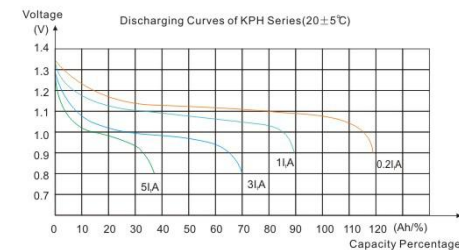
We can design different battery racks according to the different requirements of customers, that is the layout of different batteries



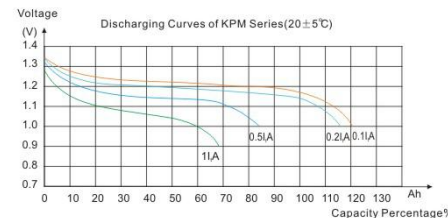
The Battery Discharging Characteristics



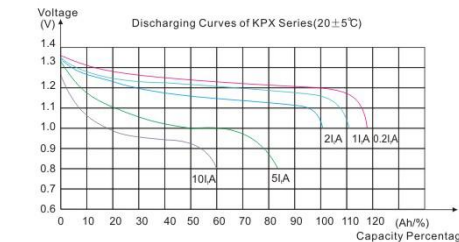
KPL Series



KPH Series



KPM Series



KPX Series