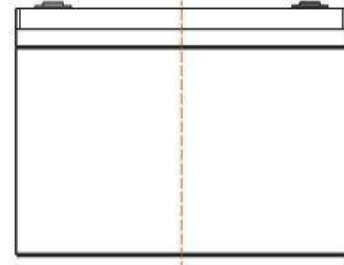


GHL Series GEL Battery

GHL Series – Storage – type Gelled Battery

- Completely sealed and maintenance-free, low self-discharge
- 100% precise quality testing, stable quality and high reliable performance
- Unique grid alloy formula, Gelled electrolyte formula and updated manufacturing technique
- Floating & standby use : up to 12 years
- Cycle use 1 : More than 350 cycles at 100% DOD
- Cycle use 2 : More than 750 cycles at 50% DOD
- Cycle use 3 : More than 1.800 cycles at 30% DOD



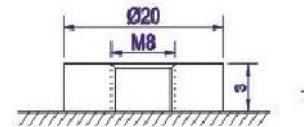
Application :

- Telecommunications
- UPS / EPS
- DC Power Supply
- Solar system
- Wind Power System
- Auto Control System

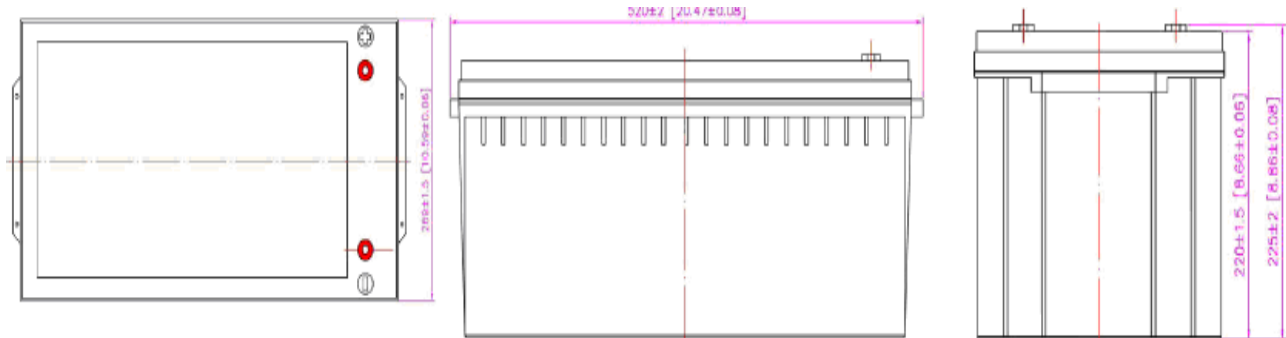


Construction :

- ComponentRaw material
- PositiveLead dioxide
- NegativeLead
- Container ABS "UL 94 V0"
- Cover ABS "UL 94 V0"
- SealantEpoxy
- Safety valveRubber
- TerminalCopper/Pb
- SeparatorFiber glass
- ElectrolyteGelled acid

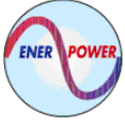


B5 Terminal



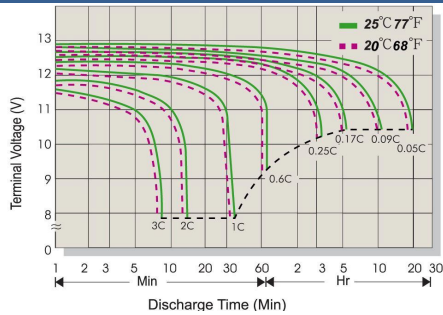
Construction :

Battery Model	GHL 250-12A 12 V 250 Ah			
Designed Floating Life	Up to 12 Years			
Capacity (25°C)	20 hr (12,5A 10,8V)	10 hr (24,5A 10,8V)	5 hr (40,33A 10,5V)	3 hr (59,3A 10,5V)
	250 Ah	245 Ah	201,65 Ah	177,9 Ah
Dimensions	Length	Width	Height	Total Height
	520 mm	269 mm	220 mm	225 mm
Approx. Weight	73 kg			
Internal Resistance	Full charged at 25°C : ≤ 2 mΩ			
Self Discharge	2% of capacity declined per month at 25°C			
Capacity Affected by Temp. (20 hr)	40°C	25°C	0°C	-15°C
	102%	100%	85%	65%
Charge Voltage (25°C)	Cycle Use		Float Use	
	14,4-14,6V(-30mV/°C) max current 50A		13,5-13,8 (-20mV/°C)	

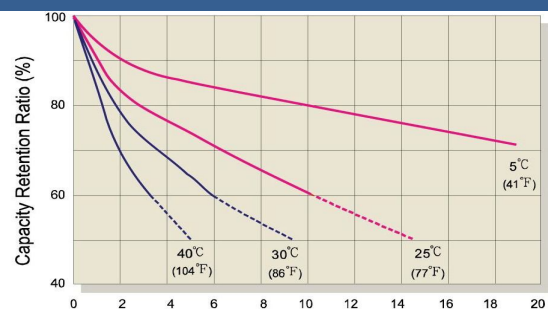


GHL Series GEL Battery

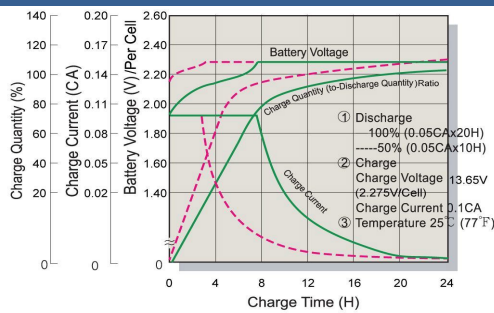
Terminal Voltage(V) and Discharge Time



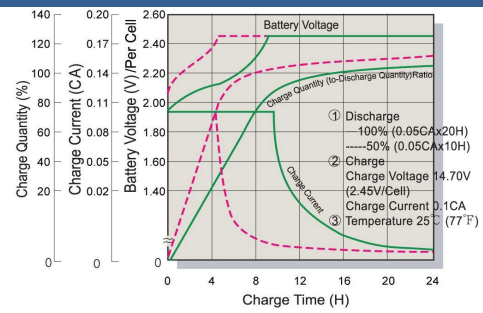
Capacity Retention Characteristic



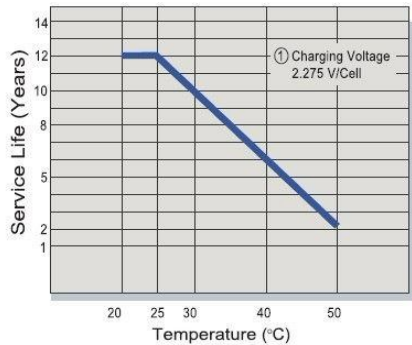
Battery Voltage and Charge Time for Standby Use



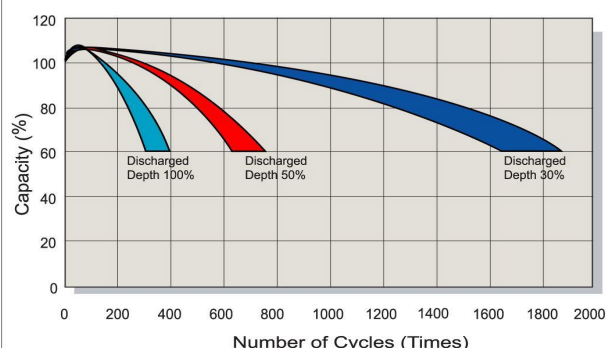
Battery Voltage and Charge Time for Cycle Use



Tickle (or Float) Service Life



Cycle Service Life



Constant Current Discharge (CC, Unit : A) at 25°C

F.V/Time	5 min	10 min	15 min	30 min	1 hr	2 hr	3 hr	4 hr	5 hr	6 hr	8 hr	10 hr	20 hr
1,85V/Cell	551,8	406,4	352,8	212,9	125,8	74,10	55,30	46,57	38,34	35,28	27,50	23,52	12,31
1,80V/Cell	578,8	423,4	367,5	221,7	131,1	77,20	57,60	48,51	39,94	36,75	28,65	24,50	12,50
1,75V/Cell	632,2	444,5	385,9	230,6	136,6	79,50	59,30	49,00	40,33	37,12	28,95	24,75	12,75
1,70V/Cell	707,0	465,7	404,3	241,7	138,9	81,00	60,50	49,48	40,73	37,49	29,24	24,99	13,00
1,67V/Cell	781,7	486,9	422,6	248,3	144,2	83,30	62,20	49,97	41,13	37,85	29,52	25,24	13,18
1,60V/Cell	846,8	512,3	444,6	258,9	145,7	84,18	62,91	50,52	41,60	38,27	29,85	25,50	13,33

Constant Power Discharge (CP, Unit : W) at 25°C

F.V/Time	5 min	10 min	15 min	30 min	1 hr	2 hr	3 hr	4 hr	5 hr	6 hr	8 hr	10 hr	20 hr
1,85V/Cell	1048,4	772,2	670,3	404,4	239,1	140,8	105,00	88,48	72,84	67,03	52,28	44,69	22,35
1,80V/Cell	1092,1	804,4	698,3	421,3	249,0	146,6	109,40	92,17	75,88	69,83	54,47	46,55	23,30
1,75V/Cell	1201,3	844,6	733,2	438,1	259,0	151,0	112,70	93,09	76,64	70,52	55,01	47,02	23,55
1,70V/Cell	1343,2	884,8	768,1	459,2	264,0	154,0	114,90	94,01	77,39	71,22	55,55	47,48	23,80
1,67V/Cell	1485,2	925,0	803,0	471,8	273,9	158,4	118,10	94,93	78,15	71,92	56,10	47,95	24,00
1,60V/Cell	1609,0	973,3	844,9	492,0	276,8	160,1	119,4	95,9	79,0	72,7	56,7	48,5	24,2