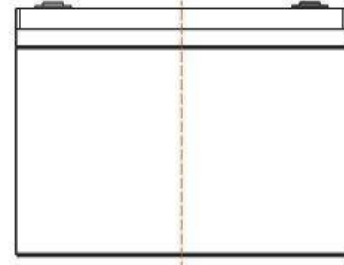


## GHL Series GEL Battery

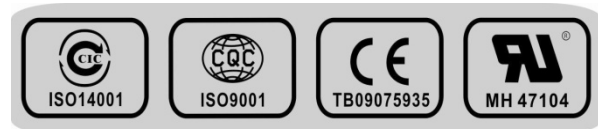
### GHL Series – Storage – type Gelled Battery

- 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



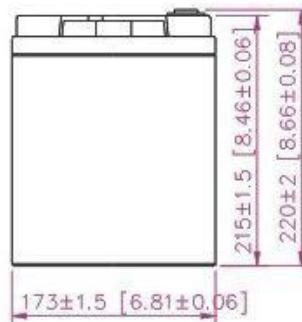
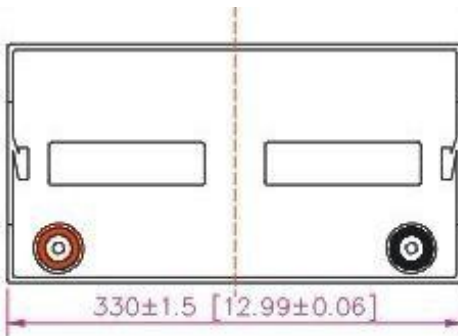
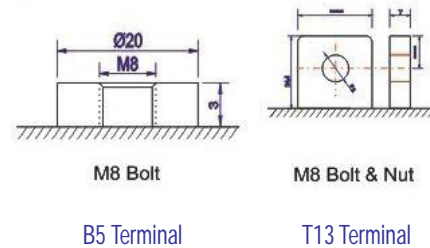
### Application :

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



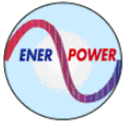
### Construction :

- Component ....Raw material
- Positive ....Lead dioxide
- Negative ....Lead
- Container .... ABS "UL 94 V0"
- Cover .... ABS "UL 94 V0"
- Sealant ....Epoxy
- Safety valve ....Rubber
- Terminal ....Copper/Pb
- Separator ....Fiber glass
- Electrolyte ....Gelled acid



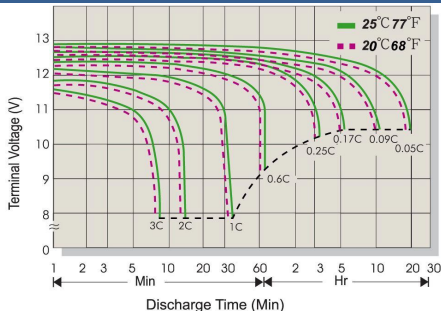
### Construction :

Battery Model	GHL 100-12A 12 V 100 Ah			
Designed Floating Life	Up to 12 Years			
Capacity (25°C)	20 hr (5,5A 10,8V)	10 hr (10A 10,8V)	5 hr (16,6A 10,5V)	3 hr (25,8A 10,5V)
	110 Ah	100 Ah	83 Ah	77,4 Ah
Dimensions	Length	Width	Height	Total Height
	330 mm	173 mm	215 mm	220 mm
Approx. Weight	30,8 kg			
Internal Resistance	Full charged at 25°C : ≤ 7,8 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%	88%	78%
Charge Voltage (25°C)	Cycle Use		Float Use	
	14,4-14,6V(-30mV/°C) max current 20A		13,6-13,8 (-20mV/°C)	

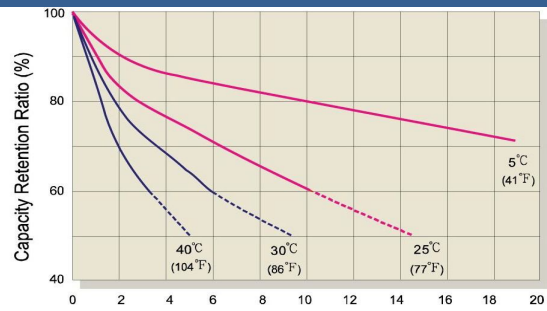


# GHL Series GEL Battery

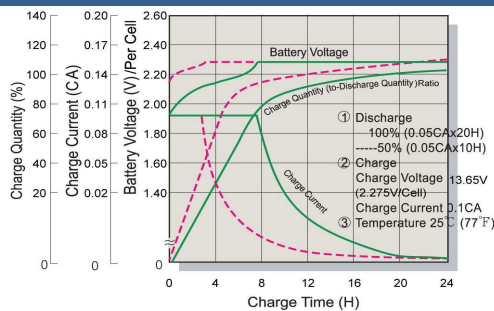
Terminal Voltage(V) and Discharge Time



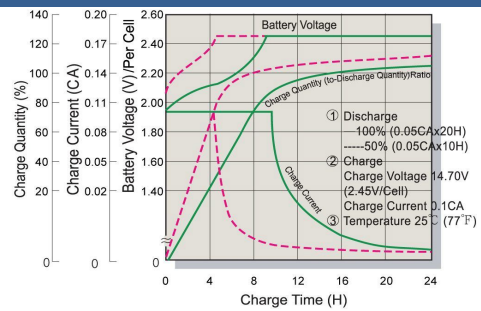
Capacity Retention Characteristic



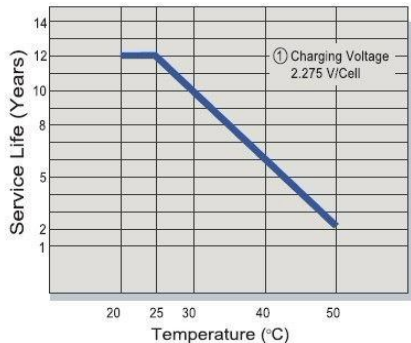
Battery Voltage and Charge Time for Standby Use



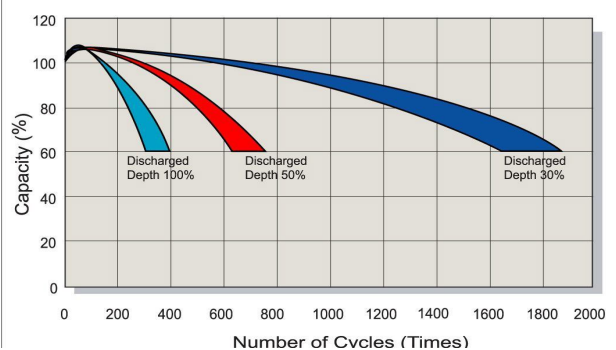
Battery Voltage and Charge Time for Cycle Use



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	209	160	135	98	56	33,3	23,9	19,7	16,2	14,25	11,41	9,8	5,30
1,80V/Cell	259	205	164	105	58	34,5	25,3	20,8	16,3	14,34	11,92	10,0	5,5
1,75V/Cell	266	224	171	108	59	36,8	25,8	21,3	16,6	14,61	12,12	10,1	5,55
1,70V/Cell	284	230	176	110	60	37,1	26,3	21,35	16,65	14,65	12,20	10,2	5,6
1,67V/Cell	302,8	237,4	180,6	112,7	61,4	37,57	26,89	21,78	17,18	14,91	12,38	10,36	5,63
1,60V/Cell	318	242	183	114	62	37,6	27,15	21,8	17,15	15,00	12,42	10,4	5,65

## 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	397,1	304	256,5	186,2	106,4	63,3	45,4	37,4	30,8	27,41	21,7	18,6	9,2
1,80V/Cell	492,1	389,5	311,6	199,5	110,2	65,6	48,1	39,5	31	27,59	22,6	19	9,5
1,75V/Cell	505,4	425,6	324,9	205,2	112,1	69,9	50	40,5	31,5	28,04	23	19,2	9,6
1,70V/Cell	539,6	437	334,4	209	114	70,5	50,05	40,55	31,55	28,10	23,2	19,4	9,7
1,67V/Cell	596,8	456,9	349,7	214,7	118,3	72,5	51,5	41,0	31,9	28,4	23,4	19,6	9,8
1,60V/Cell	604,2	459,8	347,7	216,6	117,8	71,4	51,5	41,4	32,5	28,93	23,6	19,8	9,9