

GHL Series GEL Battery

GHL Series – Storage – type Gelled Battery

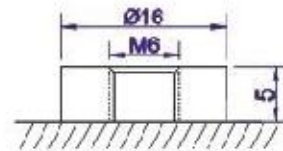
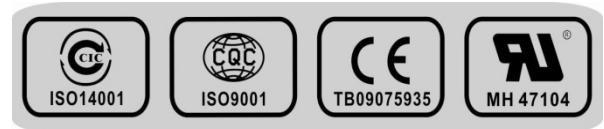
- Completely sealed and maintenance-free, low self-discharge
- 100% precise quality testing, stable quality and high reliable performance
- Unique grid alloy formula, Gelled electrolyte formula and updated manufacturing technique
- Floating & standby use : up to 12 years
- Cycle use 1 : More than 350 cycles at 100% DOD
- Cycle use 2 : More than 750 cycles at 50% DOD
- Cycle use 3 : More than 1800 cycles at 30% DOD

Application :

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

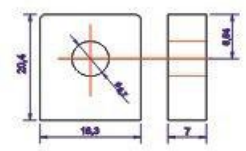
Construction :

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



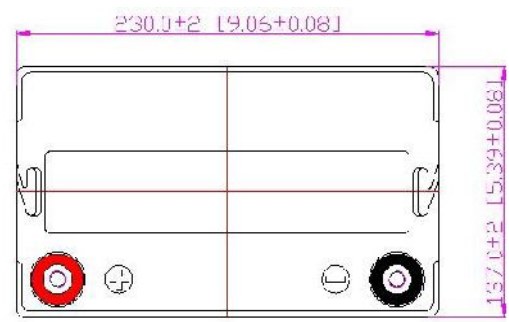
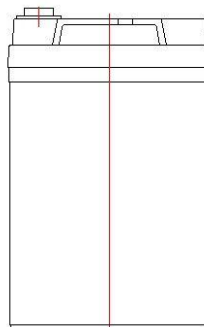
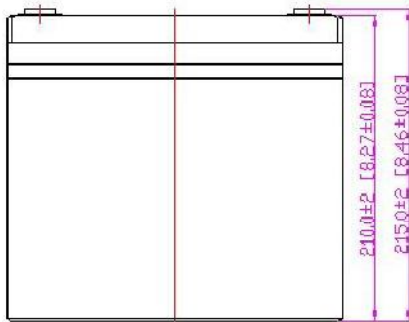
M6 Bolt

B4 Terminal



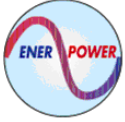
M6 Bolt & Nut

T11 Terminal



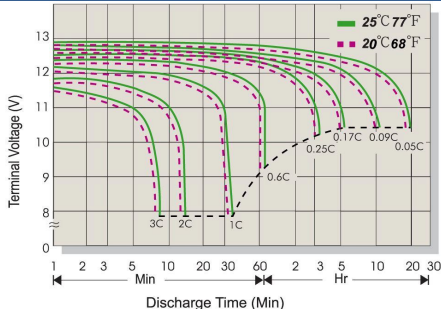
Construction :

Battery Model	GHL 50-12A 12 V 50 Ah			
Designed Floating Life	Up to 12 Years			
Capacity (25°C)	20 hr (2.56A 10,8V)	10 hr (5.0A 10,8V)	5 hr (8.24A 10,5V)	3 hr (12,11A 10,5V)
	51.2 Ah	50 Ah	41.2 Ah	36.33 Ah
Dimensions	Length	Width	Height	Total Height
	230 mm	137 mm	210 mm	215 mm
Approx. Weight	16.30 kg			
Internal Resistance	Full charged at 25°C : ≤ 9.6 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 10A		13,6-13,8 (-20mV/°C)	

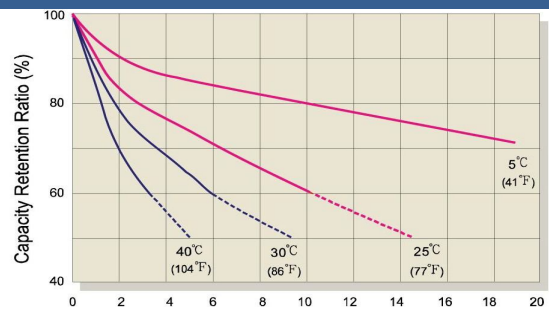


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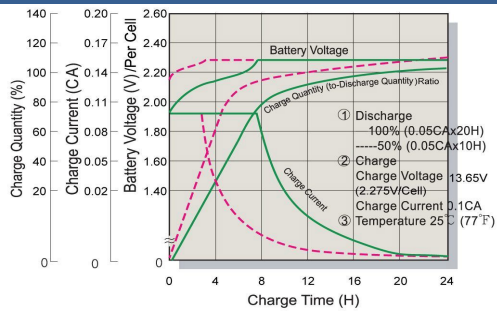
Terminal Voltage(V) and Discharge Time



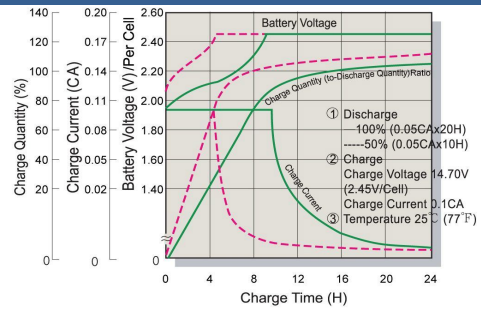
Capacity Retention Characteristic



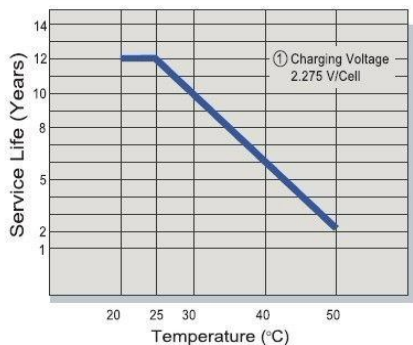
Battery Voltage and Charge Time for Standby Use



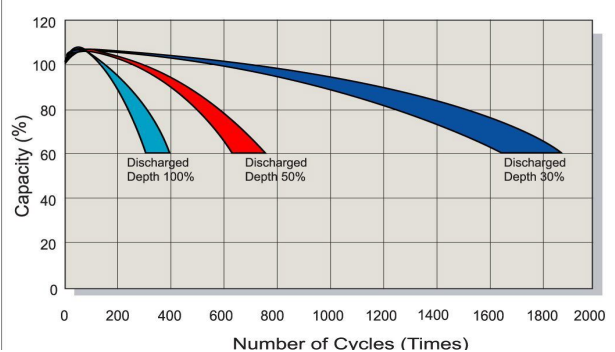
Battery Voltage and Charge Time for Cycle Use



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	113,1	83,3	72,3	43,6	25,7	15,15	11,28	9,51	7,83	7,21	5,77	4,80	2,44
1,80V/Cell	117,4	86,5	75,1	45,3	26,8	15,78	11,78	9,91	8,16	7,51	6,01	5,00	2,56
1,75V/Cell	129,2	90,8	78,8	47,1	27,9	16,25	12,11	10,01	8,24	7,58	6,06	5,05	2,57
1,70V/Cell	144,4	95,1	82,6	49,4	28,4	16,55	12,35	10,11	8,32	7,66	6,13	5,10	2,60
1,67V/Cell	159,7	99,5	86,3	50,7	29,5	17,02	12,71	10,21	8,40	7,73	6,18	5,15	2,63
1,60V/Cell	173,0	104,7	90,8	52,9	29,8	17,20	12,85	10,32	8,50	7,82	6,25	5,20	2,66

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	214,9	158,3	137,4	82,9	48,8	28,80	21,43	18,07	14,87	13,69	11,02	9,12	4,56
1,80V/Cell	223,1	164,3	142,6	86,1	50,9	30,00	22,38	18,83	15,50	14,26	11,48	9,50	4,80
1,75V/Cell	245,4	172,6	149,8	89,5	52,9	30,90	23,01	19,02	15,65	14,41	11,60	9,60	4,81
1,70V/Cell	174,4	180,7	156,9	93,9	53,9	31,40	23,46	19,20	15,80	14,55	11,71	9,69	4,85
1,67V/Cell	303,4	189,0	164,1	96,4	56,0	32,30	24,15	19,39	15,96	14,69	11,83	9,78	4,90
1,60V/Cell	328,7	198,9	172,7	100,5	56,6	32,65	24,42	19,59	16,13	14,84	11,95	9,88	4,95