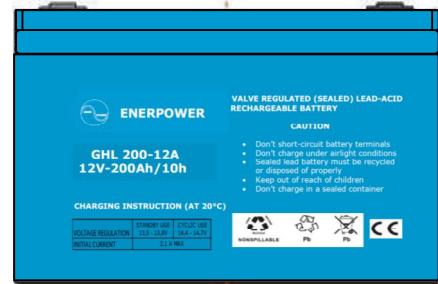


GHL Series GEL Battery

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



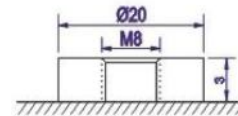
Application :

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

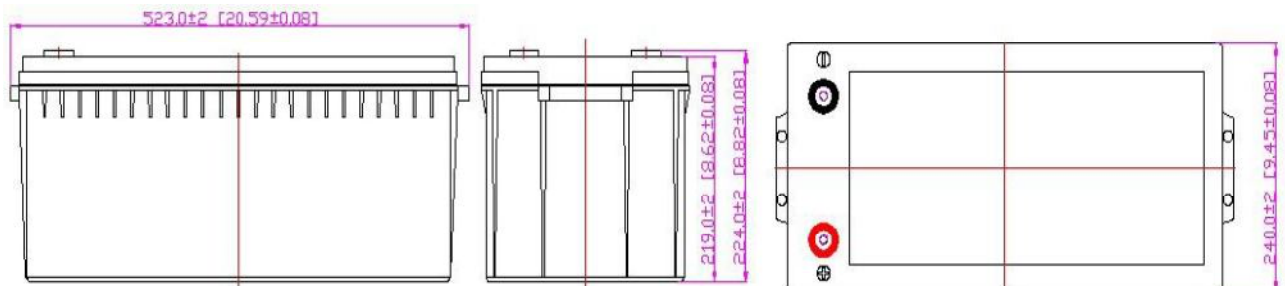


Construction :

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

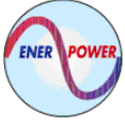


B5 Terminal



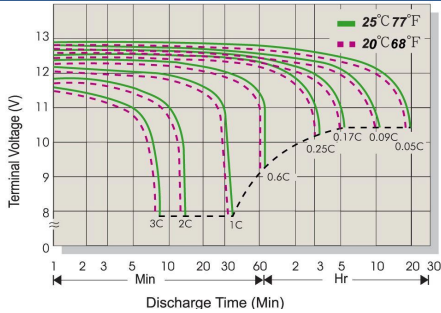
Construction :

Battery Model	GHL 200-12A 12 V 200 Ah			
Designed Floating Life	Up to 12 Years			
Capacity (25°C)	20 hr (10,47A 10,8V)	10 hr (20A 10,8V)	5 hr (32,92A 10,5V)	3 hr (48,4A 10,5V)
	209,4 Ah	200 Ah	164,6 Ah	145,2 Ah
Dimensions	Length	Width	Height	Total Height
	523 mm	240 mm	219 mm	224 mm
Approx. Weight	62,4 kg			
Internal Resistance	Full charged at 25°C : ≤ 3,9 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 40A		13,5-13,8 (-20mV/°C)	

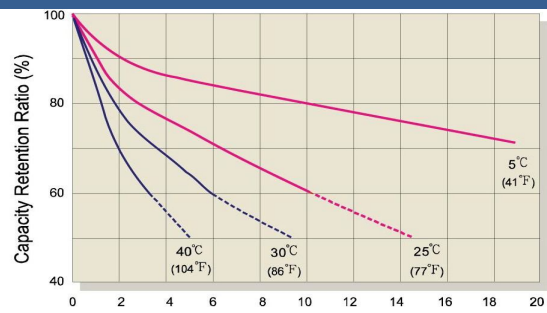


GHL Series GEL Battery

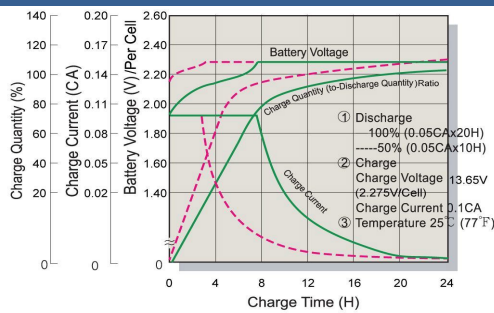
Terminal Voltage(V) and Discharge Time



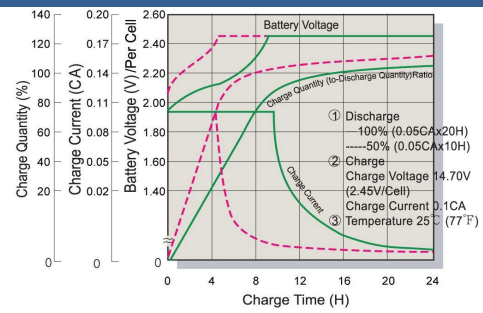
Capacity Retention Characteristic



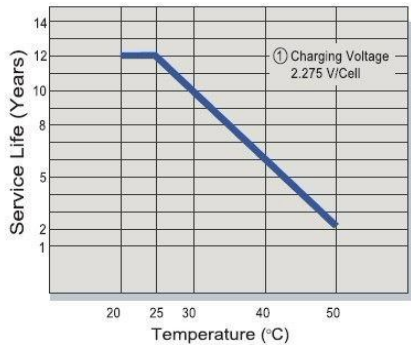
Battery Voltage and Charge Time for Standby Use



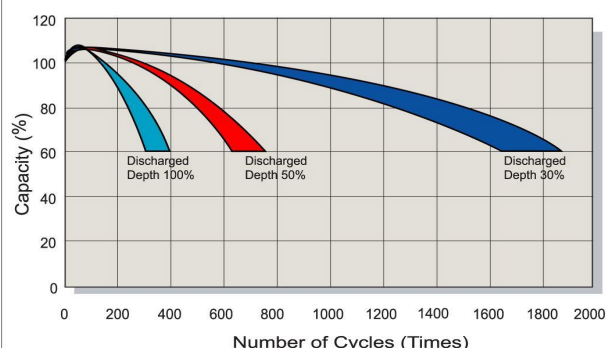
Battery Voltage and Charge Time for Cycle Use



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	452,0	332,9	288,9	174,4	102,7	60,53	45,06	38,01	31,28	28,80	23,04	19,20	10,05
1,80V/Cell	469,1	345,6	300,0	181,1	107,1	63,07	47,07	39,60	32,60	30,00	24,00	20,00	10,47
1,75V/Cell	516,1	362,9	315,0	188,3	111,3	64,93	48,40	40,00	32,92	30,31	24,25	20,20	10,47
1,70V/Cell	577,0	380,1	330,0	197,3	113,5	66,13	49,33	40,39	33,24	30,60	24,48	20,40	10,68
1,67V/Cell	638,1	397,4	345,0	202,7	117,7	67,99	50,80	40,79	33,57	30,91	24,73	20,60	10,78
1,60V/Cell	691,3	418,1	363,0	211,3	119,0	68,71	51,38	41,24	33,95	31,25	25,00	20,81	10,92

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	858,7	632,5	548,9	331,3	195,1	115,0	85,62	72,22	59,44	54,72	44,05	36,48	18,24
1,80V/Cell	891,4	656,6	570,0	344,0	203,4	119,8	89,43	75,24	61,94	57,00	45,89	38,00	19,00
1,75V/Cell	980,6	689,5	598,6	357,7	211,5	123,4	91,95	76,00	62,54	57,58	46,35	38,38	19,20
1,70V/Cell	1096,3	722,2	627,0	374,9	215,6	125,6	93,73	76,73	63,15	58,14	46,80	38,76	19,38
1,67V/Cell	1212,4	755,1	655,6	385,0	223,7	129,2	96,52	77,50	63,78	58,72	47,27	39,14	19,58
1,60V/Cell	1313,4	794,5	689,8	401,5	226,1	130,6	97,6	78,3	64,5	59,3	47,8	39,6	19,8