



**DATASHEET**  
**GHL 100-12S**

**12V 100AH**

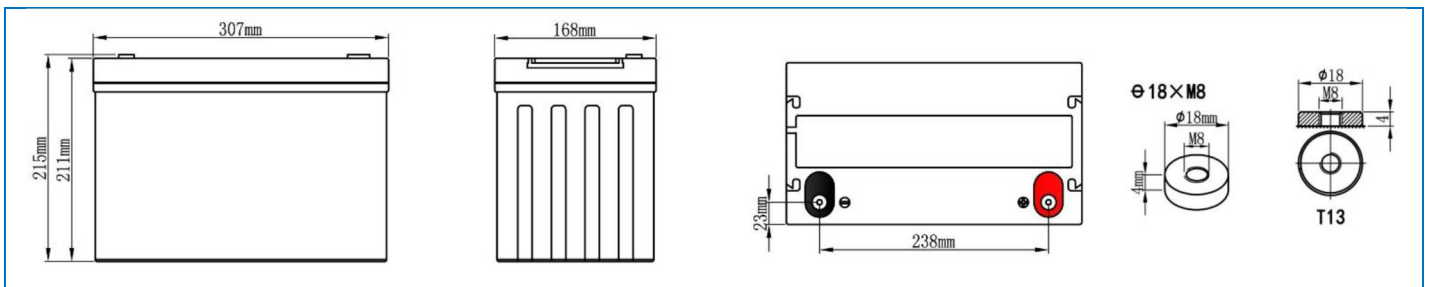
**GEL SEALED VRLA BATTERY**

**EUROBAT 2022 CLASSIFICATION: 12 Years – Long Life**

**Designed in accordance with IEC 60896-21/22**

**SPECIFICATIONS**

Nominal Voltage	Nominal Capacity	Dimension ±3mm				Weight ±2%	Max Discharge Current (5s)	Internal Resistance	Standard Terminal	Container Material
		L	W	H	TH					
12V	100AH	307mm	168mm	211mm	215mm	27kg	1.080A	≈5.8 mΩ	M8	ABS UL94-V0



**CONSTANT-VOLTAGE CHARGE**

Rated Capacity	
20 hour rate (4.68A)	100AH
10 hour rate (9.0A)	90.0AH
5 hour rate (15.3A)	76.5AH
3 hour rate (22.5A)	67.5AH
1 hour rate (54.0A)	57.0AH
Capacity affected by temperature	
40°C (104°F)	103%
25°C (77°C)	100%
0°C (32°F)	86%

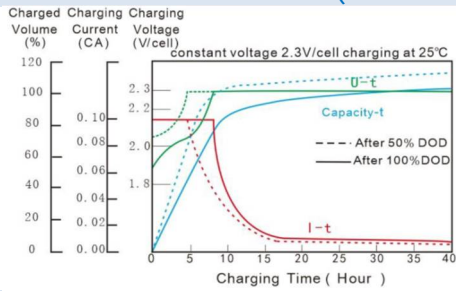
Cycle Application
1. Limit initial current less than 18.0A.
2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77°F).
3. Hold at 14.1V to 14.4V until current drop to under 0.54A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -30mV/°C.
Standby Service
1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 18.0A continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charge status.
2. Temperature compensation coefficient of charging voltage is -18mV/°C.

Nominal Operating Temp. Range
25±3°C (77±5°F)

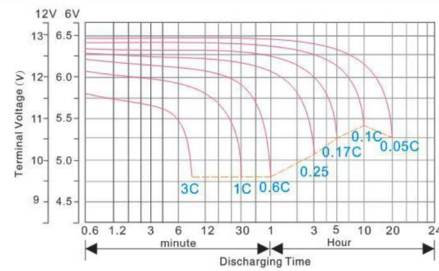
Operating Temperature
Wide operating temperature range from -20°C~55°C

NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

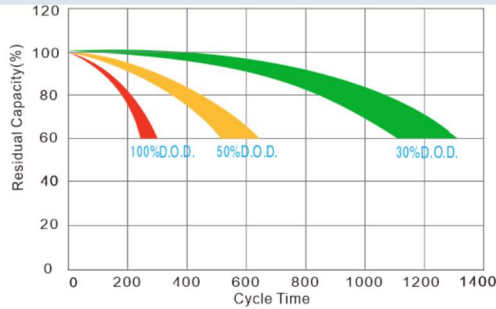
**CHARGE CHARACTERISTICS (25°C/77°F)**



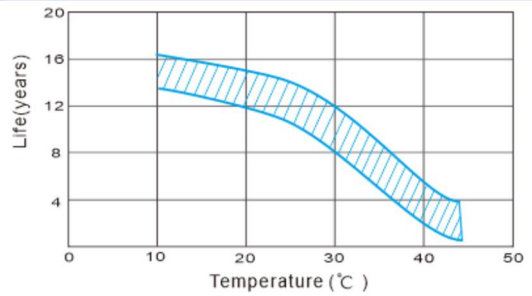
**DISCHARGE CHARACTERISTIC (25°C/77°F)**



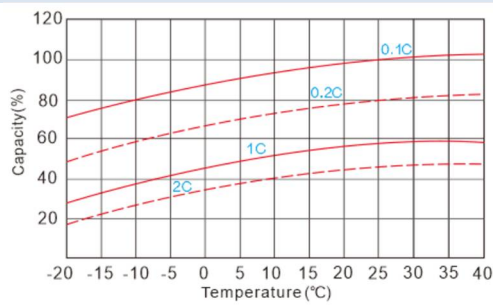
**CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE**



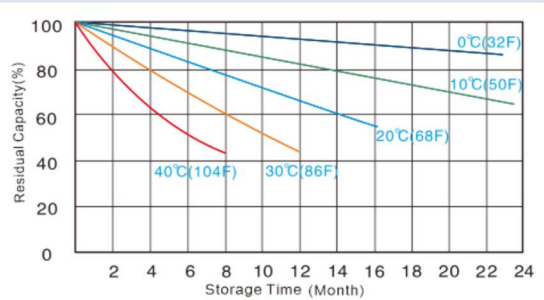
**TEMPERATURE VS FLOAT LIFE**



**CAPACITY CURVE AT DIFFERENT TEMPERATURE**



**SELF DISCHARGE CHARACTERISTICS**



**Constant Current Discharge (Amperes) at 25°C (77°F)**

End Voltage (V)	10 min	15 min	30 min	45 min	1 h	1,5 h	2 h	3 h	5 h	8 h	10 h	20 h
9.6V	219	173	97	84	57	45.0	38.1	23.4	16.3	11.2	9.37	4.87
9.9V	209	165	93	81	56	44.1	37.1	23.0	15.9	11.0	9.27	4.82
10.2V	199	157	88	78	54	43.2	36.2	22.5	15.6	10.8	9.18	4.77
10.5V	189	149	84	76	53	42.3	35.4	22.1	15.3	10.5	9.09	4.73
10.8V	180	142	80	73	52	41.4	34.5	21.6	14.9	10.4	9.00	4.68

**Constant Power Discharge (Watts) at 25°C (77°F)**

End Voltage (V)	10 min	15 min	30 min	45 min	1 h	1,5 h	2 h	3 h	5 h	8 h	10 h	20 h
9.6V	2442	2024	1253	878	730	533	399	297	192	145	112	60.4
9.9V	2327	1928	1193	847	713	519	389	290	187	142	111	59.9
10.2V	2216	1835	1136	820	695	507	379	283	183	140	110	59.2
10.5V	2111	1748	1082	792	678	494	370	275	178	137	109	58.6
10.8V	2010	1665	1031	765	662	482	361	269	174	134	108	58.1



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