DBU-GEL12100 ▶ 12V100Ah

GEL series are the universal battery, which adopt the AGM valve Control technology and high purity raw materials. The battery owns the advantage of high consistency, good performance and long cycle Life. The battery is applicable to UPS/EPS, medical equipment and safety system.

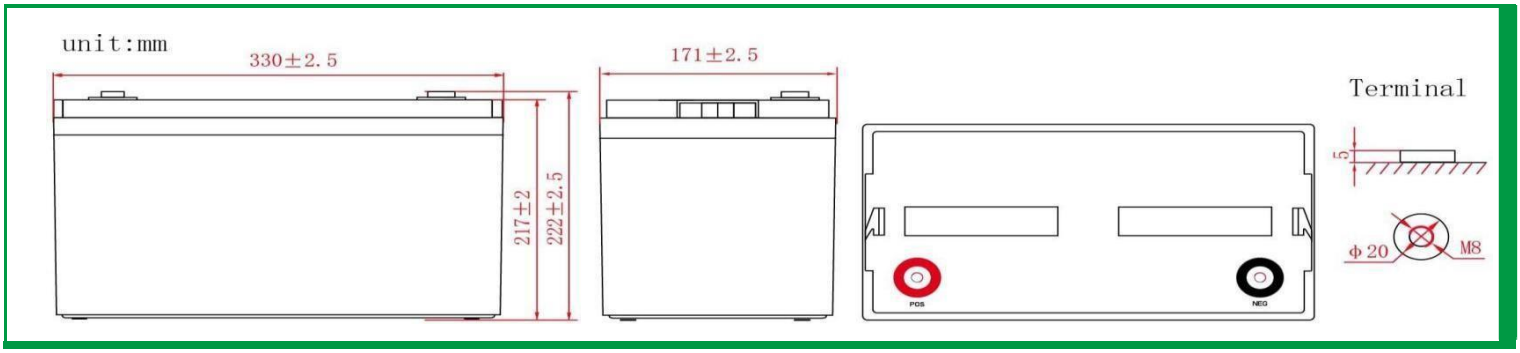
▶ Specification

Internal Cell	6
Nominal Voltage	12
Capacity	100Ah @ 10 hr-rate to1.8V/cell @25°C (77°F)
Weight	Approx. 29.5kg±3%
Max. Discharging Current	1000A(5sec)
Internal Resistance	Approx. 5.0mΩ
Operating Temperature Range	Discharge: -15°C~50°C (5°F~122°F) Charge: -15°C~40°C (5°F~104°F) Storage: -15°C~40°C (5°F~104°F)
Nominal Operating Temperature Range	25°C±3°C(77°F±5°F)
Float Charging Voltage	13.5~13.8V VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	30A
Equalization and Cycle Service	14.4~15.0V VDC/unit Average at 25°C (77°F)
Self Discharge	Batteries can be stored for more than 6 months at 25°C (77°F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
Terminal	Thread lead alloy recessed terminal to accept M8 bolt
Container Material	ABS (UL 94-HB) & Flammability resistance of (UL 94-V0) can be available upon request.

▶ Dimensions:

Unit: mm

Overall Height (H)	Container height (h)	Length (L)	Width (W)
222±2.5	217±2	330±2.5	171±2.5



Constant Current Discharge Characteristics Unit:A (25℃,77℉)

F.V/Time	15min	30min	1h	3h	5h	8h	10h	20h
1.60V	166.4	104.0	57.2	26.0	18.09	12.22	10.40	5.36
1.67V	164.8	103.0	56.7	25.8	17.92	12.11	10.30	5.30
1.70V	163.2	102.0	56.1	25.5	17.75	11.98	10.20	5.25
1.75V	161.6	101.0	55.5	25.3	17.57	11.86	10.10	5.20
1.8V	160.0	100.0	55.0	25.0	17.40	11.75	10.00	5.15
1.85V	155.2	97.0	53.4	24.3	16.88	11.39	9.70	5.01

Constant Power Discharge Unit:W (25℃,77℉)

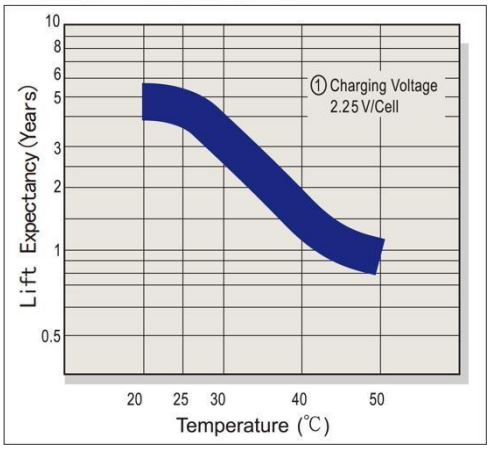
F.V/Time	15min	30min	1h	3h	5h	8h	10h	20h
1.60V	332.8	208.0	114.4	52.0	36.18	24.44	20.80	10.72
1.67V	329.6	206.0	113.4	51.5	35.84	24.22	20.60	10.60
1.70V	326.4	204.0	112.2	51.0	35.50	23.96	20.40	10.50
1.75V	323.2	202.0	111.0	50.6	35.14	23.72	20.20	10.40
1.8V	320.0	200.0	110.0	50.0	34.80	23.50	20.00	10.30
1.85V	310.4	194.0	106.8	48.6	33.76	22.78	19.40	10.02

The data and appearance provided in this article may be revised and changed without prior notice, and no further notice will be given.

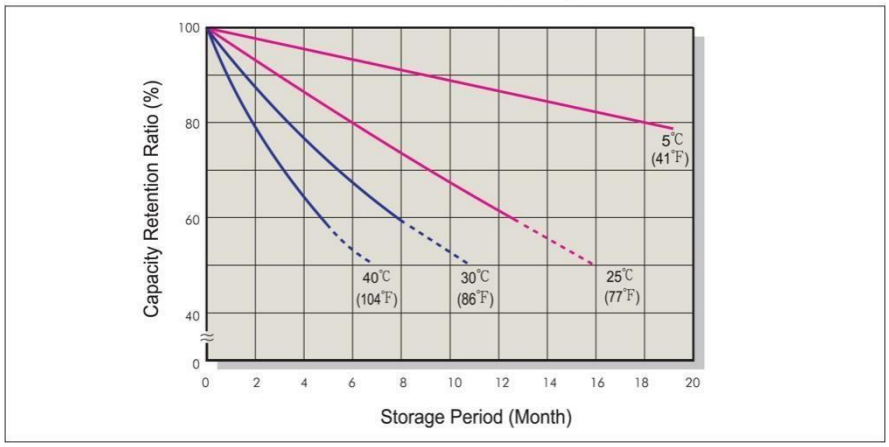
DBU-GEL12100

12V100Ah

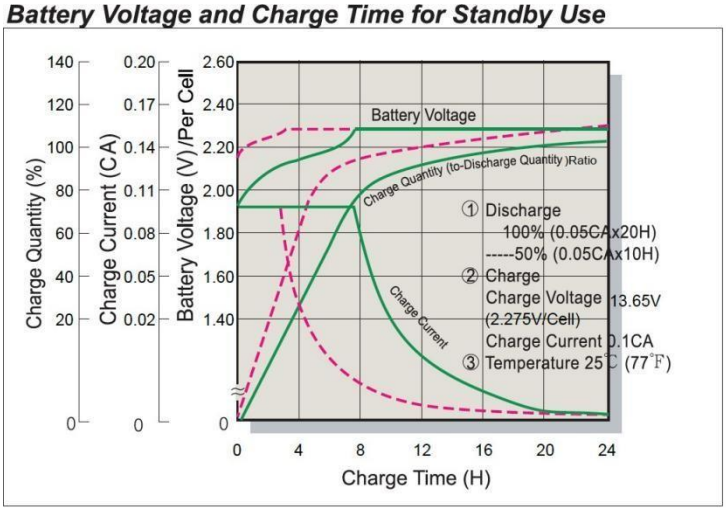
Trickle(or Float)Design Life



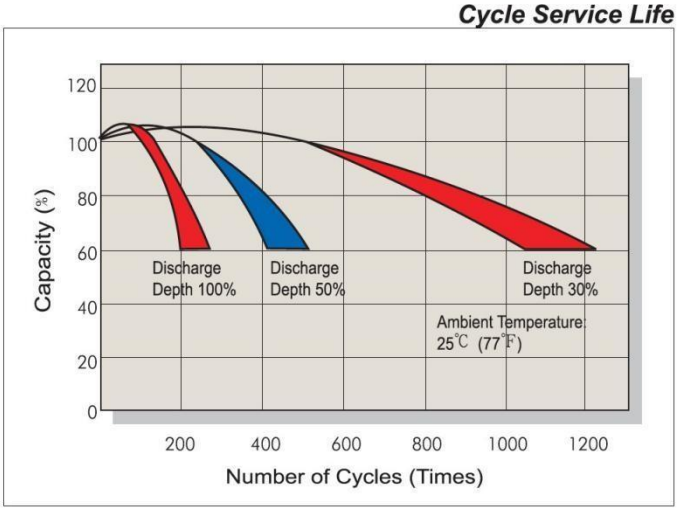
Capacity Retention Characteristic



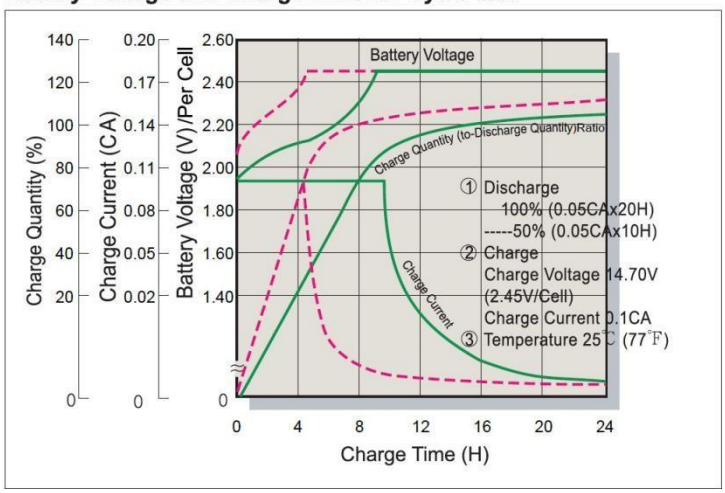
Battery Voltage and Charge Time for Standby Use



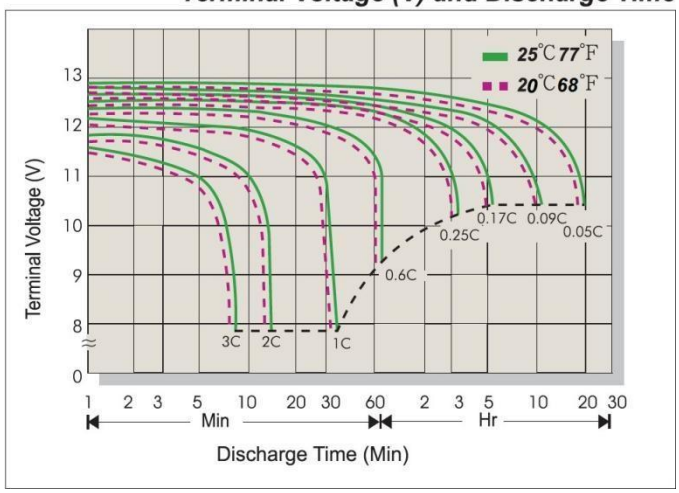
Cycle Service Life



Battery Voltage and Charge Time for Cycle Use



Terminal Voltage (V) and Discharge Time



Charging Procedures

Application	Charge Voltage (V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25℃(77℉)	2.45	2.40~2.50	0.3C
Standby	25℃(77℉)	2.275	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.65	1.6
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

Effect of temperature on capacity(20HR)

Temperature	Dependency of Capacity(20HR)
40°C	103%
25°C	100%
0°C	85%
-15°C	65%

Self-discharge Characteristics

Storage time	Preservation rate
3 months	91%
6 months	82%
12 months	64%