

# DBU-AGM12100 ▶ 12V100Ah

AGM 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.



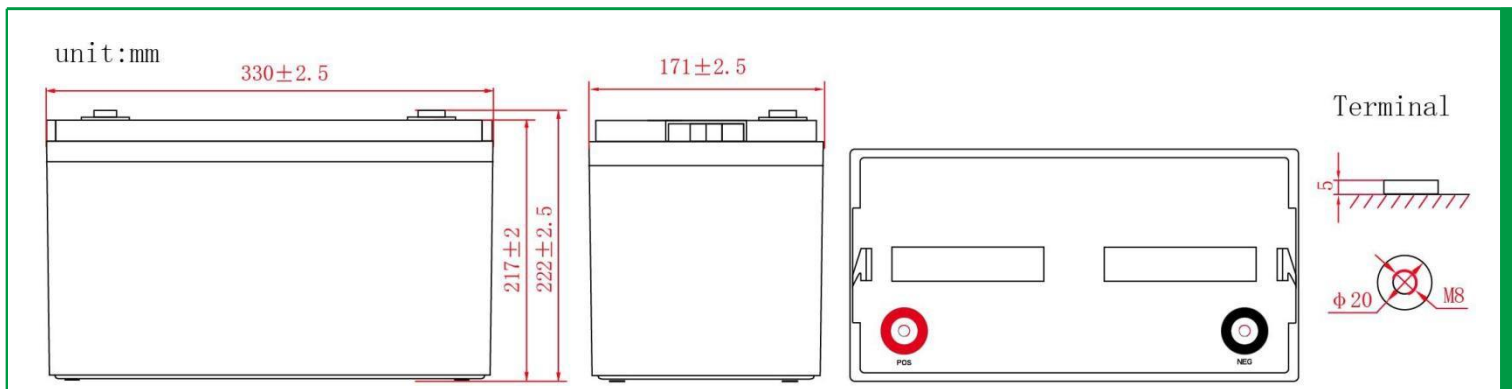
## ► Specification

Internal Cell	6
Nominal Voltage	12
Capacity	100Ah @ 10 hr-rate 1.8V/cell @ 25°C (77°F)
Weight	Approx. 29.5 kg±3%
Max. Discharging Current	1000A(5sec)
Internal Resistance	Approx. 5.4mΩ
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



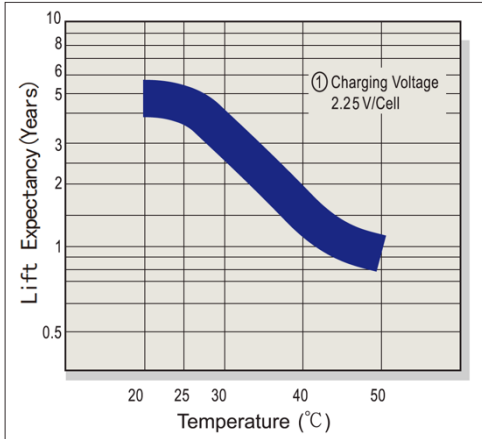
## Constant Current Discharge Characteristics Unit:A (25°C,77°F)

F.V/Time	5min	15min	30min	1h	3h	5h	10h	20h
1.60V	250.9	202.8	120.92	67.35	25.235	18.389	10.322	5.489
1.65V	248.7	200.6	118.75	66.14	25.126	18.295	10.315	5.424
1.70V	247.4	199.3	117.47	65.32	25.095	18.255	10.232	5.338
1.75V	243.7	195.6	113.75	63.56	24.825	18.121	10.182	5.256
1.80V	238.9	190.8	108.93	61.45	24.425	17.987	10.138	5.250
1.85V	232.4	184.3	102.45	58.43	23.355	17.585	9.813	5.236

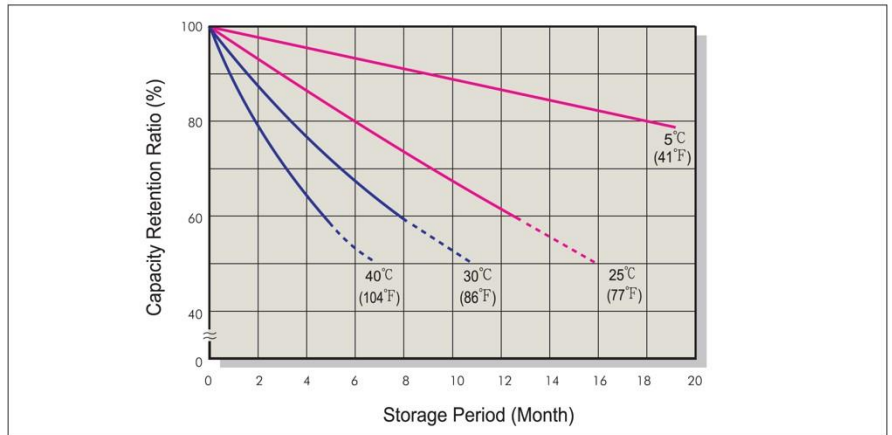
## Constant Power Discharge Unit:W (25°C,77°F)

F.V/Time	5min	15min	30min	1h	3h	5h	10h	20h
1.60V	413.9	334.6	253.93	141.44	45.42	33.100	20.532	11.441
1.65V	410.4	330.9	249.38	138.89	45.23	32.931	20.503	11.388
1.70V	408.2	328.8	246.69	137.17	45.17	32.859	20.463	11.361
1.75V	402.1	322.7	238.88	133.48	44.69	32.618	20.315	11.282
1.80V	394.2	314.8	228.75	129.05	43.97	32.377	20.063	11.173
1.85V	383.5	304.1	215.15	122.70	42.04	31.653	19.551	10.918

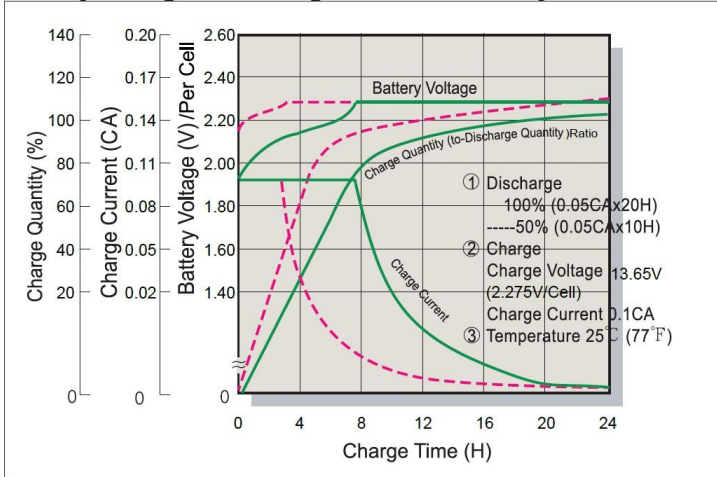
### Trickle(or Float)Design Life



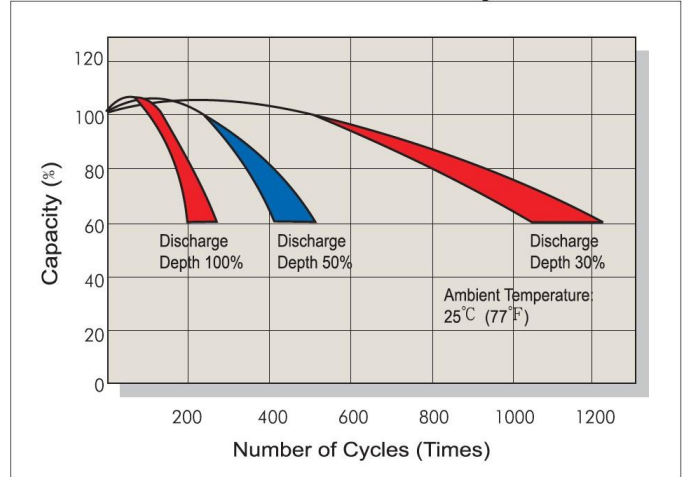
### Capacity Retention Characteristic



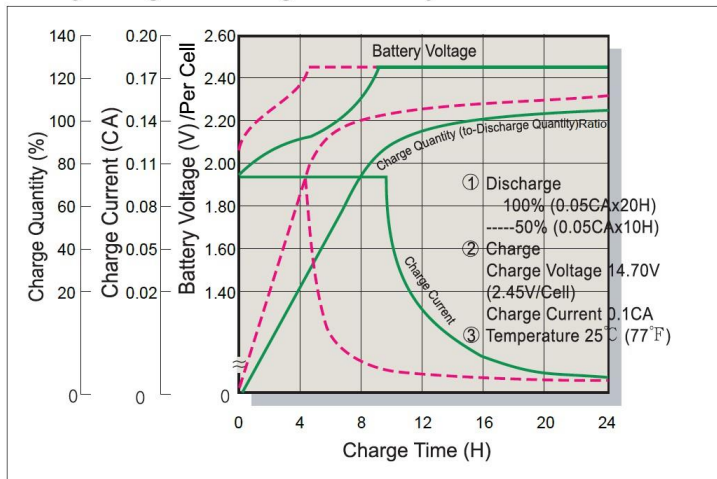
### Battery Voltage and Charge Time for Standby Use



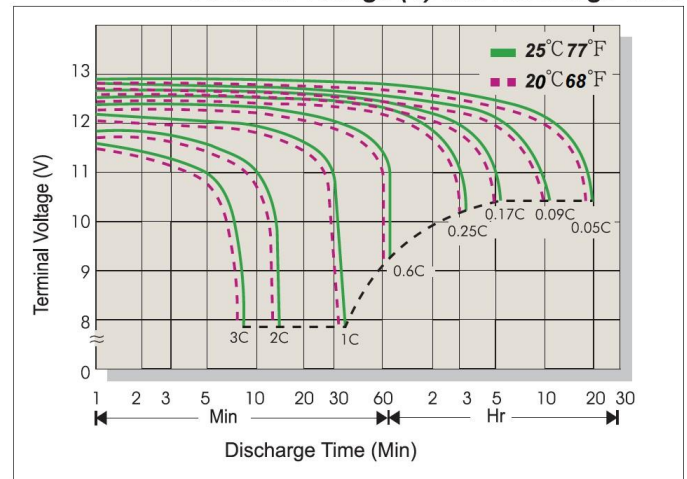
### Cycle Service Life



### 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°C(77°F)	2.45	2.40~2.50	0.3C
Standby	25°C(77°F)	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%