# AGM260-12 (12V260Ah)

AGM260-12 is AGM Deep cycle battery with 10 years floating design life, specially designed for frequent cyclic discharge usage. By using strong grid and specific paste plate, it makes battery have 30% more cyclic life time than standby series. It is applicable for solar energy system, golf cart, electric wheelchair, etc..

## Specification

| | |
|---|---|
| **Cells Per Unit** | 6 |
| **Voltage Per Unit** | 12 |
| **Capacity** | 260Ah@10hr-rate to 1.80V per cell @25°C |
| **Weight** | Approx. 74.0 Kg |
| **Max. Discharge Current** | 2600 A (5 sec) |
| **Internal Resistance** | Approx. 3.5 mΩ |
| **Operating Temperature Range** | Discharge: -20°C~60°C<br>Charge: 0°C~50°C<br>Storage: -20°C~60°C |
| **Normal Operating Temperature Range** | 25°C±5°C |
| **Float charging Voltage** | 13.6 to 13.8 VDC/unit Average at 25°C |
| **Recommended Maximum Charging Current Limit** | 78 A |
| **Equalization and Cycle Service** | 14.6 to 14.8 VDC/unit Average at 25°C |
| **Self Discharge** | Beaut Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using. |
| **Terminal** | Terminal F14 |
| **Container Material** | A.B.S. (UL94-HB) |

CE

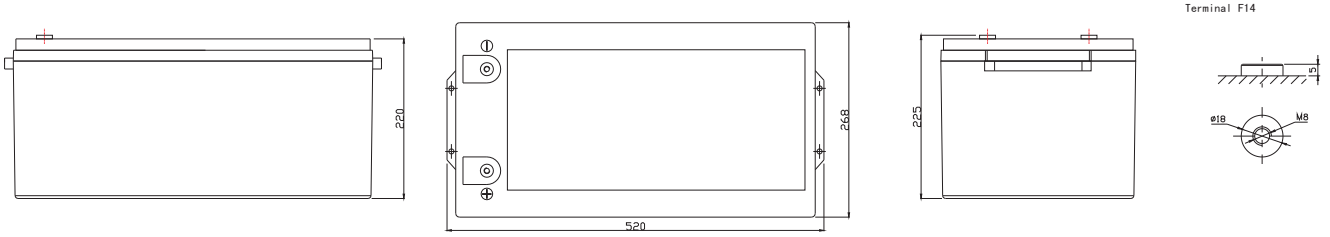
G4M20206-0910-E-16

DNV UKAS QUALITY MANAGMENT

ISO9001:2000 Certificate

## Dimensions

**Unit: mm** Dimension: 520(L)×268(W)×220(H)




### Constant Current Discharge Characteristics: A (25°C)

| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 2HR | 3HR | 4HR | 5HR | 8HR | 10HR | 20HR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.60V | 708.7 | 530.8 | 448.1 | 292.9 | 169.0 | 101.1 | 69.90 | 57.28 | 46.89 | 32.30 | 27.31 | 15.02 |
| 10.0V | 688.2 | 505.1 | 438.9 | 288.1 | 168.2 | 100.4 | 69.63 | 57.02 | 46.61 | 32.03 | 27.05 | 14.75 |
| 10.2V | 667.8 | 487.3 | 432.0 | 285.5 | 166.7 | 99.60 | 69.09 | 56.75 | 46.34 | 31.77 | 26.78 | 14.47 |
| 10.5V | 599.6 | 449.6 | 411.3 | 278.4 | 165.1 | 98.84 | 68.82 | 56.22 | 45.78 | 31.51 | 26.52 | 14.20 |
| 10.8V | 541.2 | 410.0 | 379.2 | 266.2 | 161.2 | 97.07 | 66.95 | 54.90 | 44.96 | 30.98 | 26.26 | 13.93 |
| 11.1V | 462.1 | 366.4 | 340.1 | 249.4 | 153.1 | 92.76 | 64.00 | 52.24 | 43.03 | 29.67 | 25.47 | 13.11 |

### Constant Power Discharge Characteristics: W (25°C)

| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 2HR | 3HR | 4HR | 5HR | 8HR | 10HR | 20HR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.60V | 7330 | 5653 | 4929 | 3339 | 1953 | 1192 | 831.8 | 682.8 | 559.4 | 385.6 | 326.3 | 180.1 |
| 10.0V | 7185 | 5480 | 4850 | 3299 | 1948 | 1186 | 832.1 | 681.9 | 557.9 | 383.8 | 324.3 | 177.0 |
| 10.2V | 7103 | 5335 | 4795 | 3275 | 1933 | 1178 | 828.4 | 680.5 | 556.0 | 381.3 | 321.4 | 173.7 |
| 10.5V | 6467 | 4968 | 4574 | 3199 | 1916 | 1170 | 825.2 | 674.1 | 549.4 | 378.1 | 318.2 | 170.4 |
| 10.8V | 5890 | 4580 | 4228 | 3066 | 1880 | 1155 | 802.7 | 658.8 | 539.5 | 371.8 | 315.1 | 167.1 |
| 11.1V | 5173 | 4141 | 3806 | 2880 | 1800 | 1112 | 768.1 | 626.9 | 516.3 | 356.1 | 305.6 | 157.3 |

All mentioned values are average values.

# AGM260-12

12V260Ah

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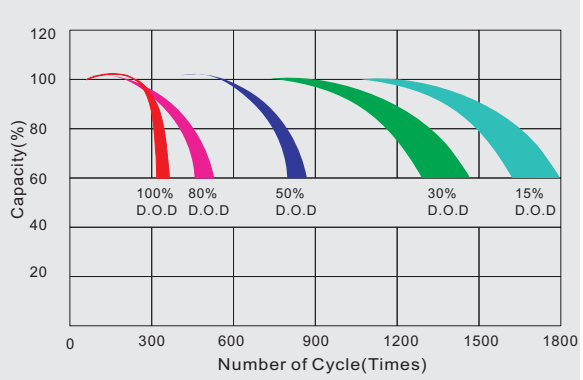
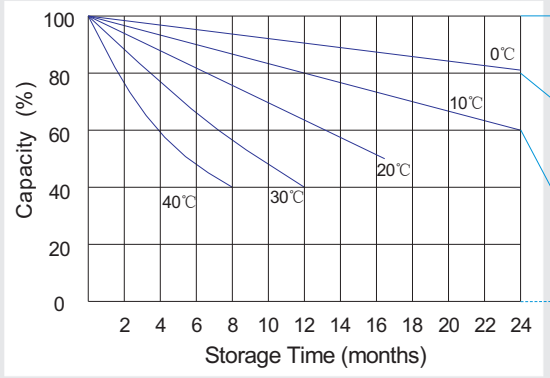
## Life characteristics of cyclic use




## Storage characteristic



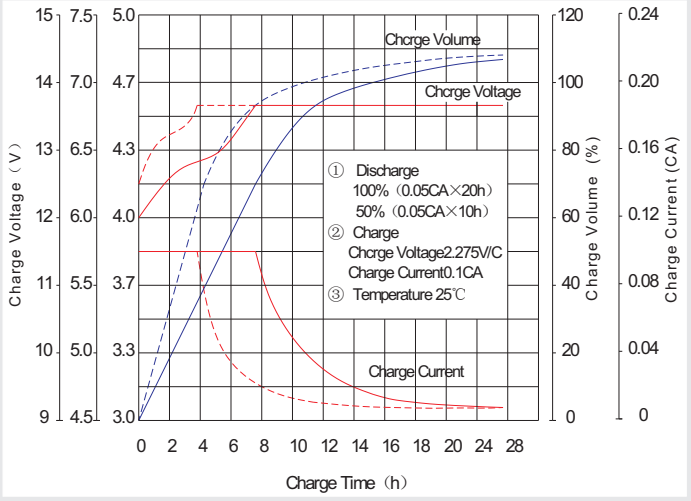

Supplementary charge required (Carry out supplementary charge before use if 100% capacity is requires)

Supplementary charge required before use. This supplementary charge will help to recover the capacity and should be made as early as possible.

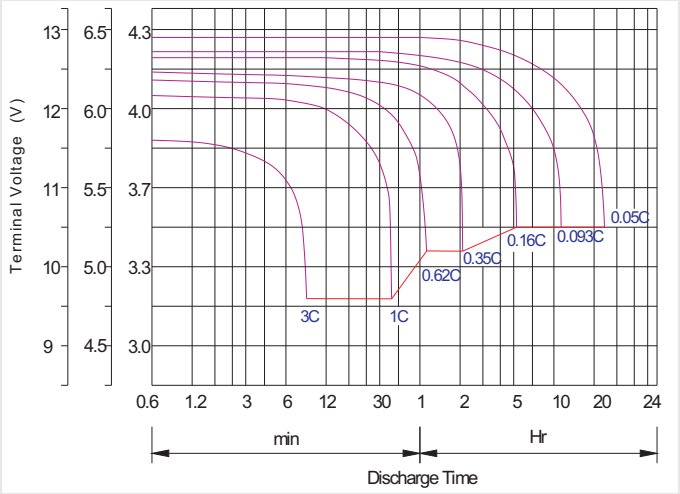
Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached

Supplementary charge and storage guidelines

## Charge characteristic curve for cyclic use




## Discharge characteristic curve




## Capacity Factors With Different Temperature

| Battery Type | | -20℃ | -10℃ | 0℃ | 5℃ | 10℃ | 20℃ | 25℃ | 30℃ | 40℃ | 45℃ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| GEL Battery | 6V&12V | 50% | 70% | 83% | 85% | 90% | 98% | 100% | 102% | 104% | 105% |
| | 2V | 60% | 75% | 85% | 88% | 92% | 99% | 100% | 103% | 105% | 106% |
| AGM Battery | 6V&12V | 46% | 66% | 76% | 83% | 90% | 98% | 100% | 103% | 107% | 109% |
| | 2V | 55% | 70% | 80% | 85% | 92% | 99% | 100% | 104% | 108% | 110% |

## Discharge Current VS. Discharge Voltage

| Final Discharge Voltage V/cell | 1.75V | 1.70V | 1.60V |
|---|---|---|---|
| Discharge Current (A) | (A) ≤0.2C | 0.2C< (A) <1.0C | (A) ≥1.0C |

## Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method:

| | |
|---|---|
| Constant Voltage | -0.2Cx2h+2.4~2.45V/Cellx24h,Max. Current 0.3CA |
| Constant Current | -0.2Cx2h+0.1CAx12h |
| Fast | -0.2Cx2h+0.3CAx4.0h |

## Maintenance & Cautions

**Cycle service**

※ Avoid battery over discharge, especially battery sereis connection use.

※ Charged with recommend voltage, ensure battery can be full recharged.

In general, recharge capacity should be 1.1-1.15 times discharge capacity.

※ Effect of temperature on cycle charge voltage: -4mV/℃/Cell.

※ There are a number of factors that will affect the length of cyclic service.

The most significant are depth of discharge, ambient temperature, discharge rate, and the manner in which the battery is recharged.

Generally specking, the most important factors is depth of discharge.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