

# 6-GFM-150



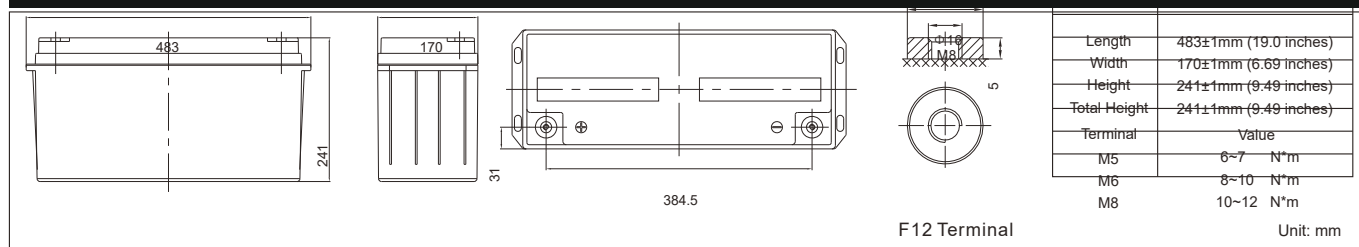
| Specification                      |                                                                    |
|------------------------------------|--------------------------------------------------------------------|
| Cells Per Unit                     | 6                                                                  |
| Voltage Per Unit                   | 12                                                                 |
| Capacity                           | 150Ah@10hr-rate to 1.80V per cell @25°C                            |
| Weight                             | 36.5kg                                                             |
| Internal Resistance                | Approx. 4 mΩ                                                       |
| Terminal                           | F1/F2                                                              |
| Max. Discharge Current             | 2250A (5 sec)                                                      |
| Design Life                        | 15 years (floating charge)                                         |
| Maximum Charging Current           | 37.5A                                                              |
| Reference Capacity                 | C10 150AH<br>C3 108.7AH<br>C1 82.4AH                               |
| Float Charging Voltage             | 13.6 V~13.8 V @ 25°C<br>Temperature Compensation: -3mV/°C/Cell     |
| Cycle Use Voltage                  | 14.4 V~14.9 V @ 25°C<br>Temperature Compensation: -4mV/°C/Cell     |
| Operating Temperature Range        | Discharge: -40°C~60°C<br>Charge: -20°C~50°C<br>Storage: -40°C~60°C |
| Normal Operating Temperature Range | 25°C±5°C                                                           |
| Self Discharge                     | Less than 3% at 25°C per month                                     |
| Container Material                 | A.B.S. UL94-HB, UL94-V0 Optional.                                  |



## Application

- Solar/Wind Power System
- Uninterruptible Power Supplies (UPS)
- Electric Power Systems (EPS)
- Emergency Backup Power Supplies
- Communication Power Supplies
- DC Power Supplies
- Auto Control System

## Dimensions



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

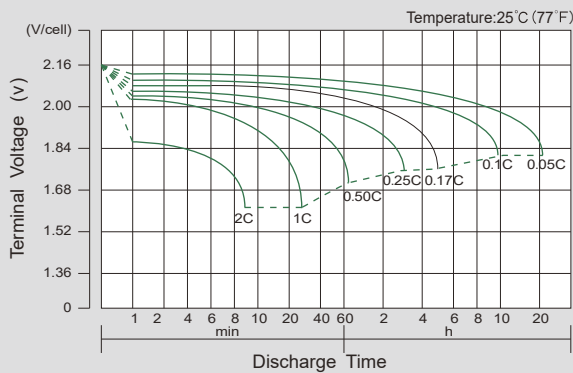
| F.V/Time | 15min | 30min | 1h   | 2h   | 3h   | 4h   | 5h   | 8h   | 10h  | 20h  |
|----------|-------|-------|------|------|------|------|------|------|------|------|
| 1.60V    | 205.2 | 137.5 | 83.8 | 50.2 | 34.7 | 28.4 | 23.3 | 16.0 | 13.5 | 8.25 |
| 1.65V    | 201.0 | 136.4 | 83.5 | 49.8 | 34.5 | 28.3 | 23.1 | 15.9 | 13.4 | 7.95 |
| 1.70V    | 197.9 | 135.5 | 82.7 | 49.4 | 34.3 | 28.2 | 23.0 | 15.8 | 13.3 | 7.73 |
| 1.75V    | 190.6 | 133.4 | 81.9 | 49.0 | 34.1 | 27.9 | 22.7 | 15.6 | 13.2 | 7.50 |
| 1.80V    | 177.7 | 128.8 | 80.0 | 48.2 | 33.2 | 27.2 | 22.3 | 15.4 | 13.0 | 7.05 |
| 1.85V    | 161.3 | 121.8 | 76.0 | 46.0 | 31.8 | 25.9 | 21.3 | 14.7 | 12.6 | 6.75 |

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

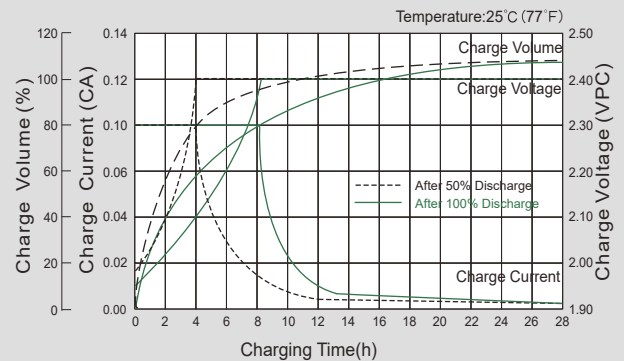
| F.V/Time | 15min | 30min | 1h  | 2h   | 3h   | 4h   | 5h   | 8h   | 10h  | 20h  |
|----------|-------|-------|-----|------|------|------|------|------|------|------|
| 1.60V    | 376   | 261   | 161 | 98.6 | 68.8 | 56.5 | 46.3 | 31.9 | 27.0 | 14.6 |
| 1.65V    | 370   | 258   | 161 | 98.0 | 68.8 | 56.4 | 46.1 | 31.7 | 26.8 | 14.3 |
| 1.70V    | 366   | 259   | 160 | 97.4 | 68.5 | 56.3 | 46.0 | 31.5 | 26.6 | 14.1 |
| 1.75V    | 353   | 255   | 158 | 96.7 | 68.2 | 55.7 | 45.4 | 31.3 | 26.3 | 13.8 |
| 1.80V    | 330   | 247   | 155 | 95.5 | 66.4 | 54.5 | 44.6 | 30.7 | 26.1 | 13.5 |
| 1.85V    | 301   | 234   | 149 | 92.0 | 63.5 | 51.8 | 42.7 | 29.4 | 25.3 | 12.7 |

Note: The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

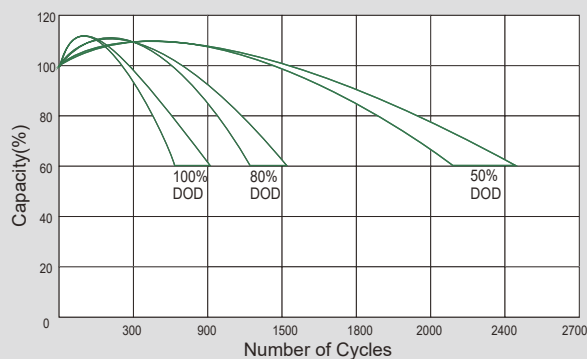
Discharge Characteristics Curve



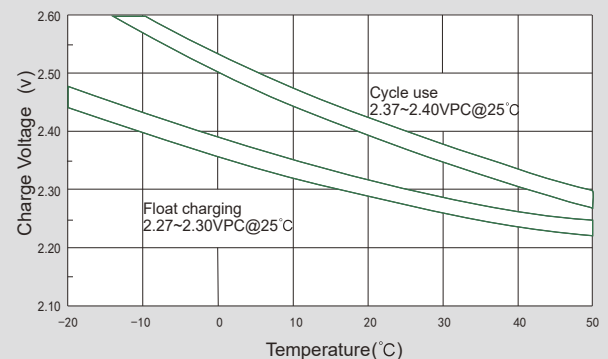
Charge Characteristic Curve for Cycle Use(IU)



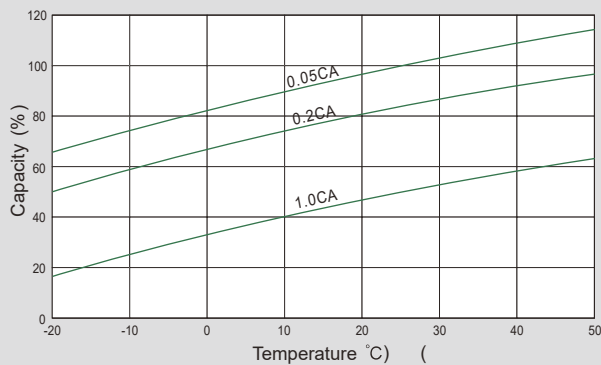
Cycle Life in Relation to Depth of Discharge



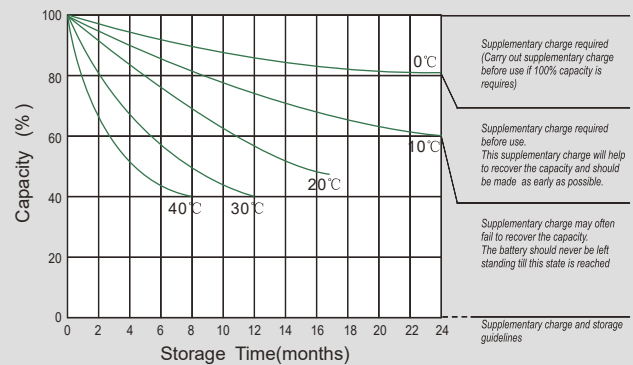
Relationship Between Charging Voltage and Temperature



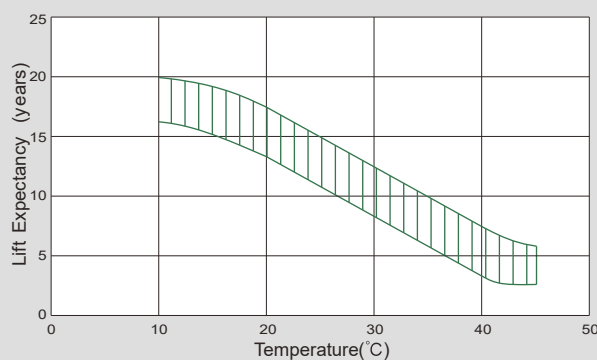
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20°C)

