

# GEL 12V 200Ah



Specification	
Cells Per Unit	6
Voltage Per Unit	12
Capacity	200Ah@10hr-rate to 1.80V per cell @25°C
Weight	56kg
Internal Resistance	Approx. 3.5 mΩ
Terminal	F1 / F 2
Max. Discharge Current	3000A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	40.0A
Reference Capacity	C10 200AH C3 144.7AH C1 110.1AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.4 V~14.9 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -40°C~60°C Charge: -20°C~50°C 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**

Length	522±1mm (20.6 inches)
Width	240±1mm (9.45 inches)
Height	219±1mm (8.62 inches)
Total Height	224±1mm (8.82 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

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

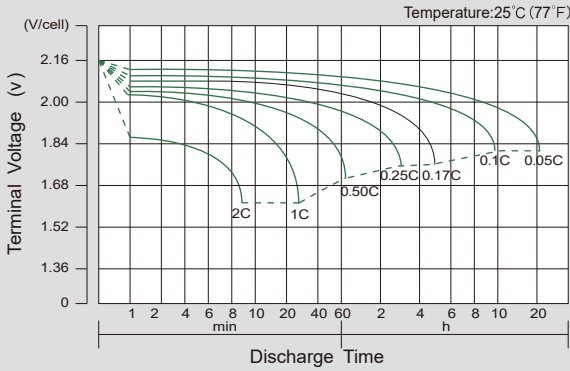
F.V/Time	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	273.6	183.4	111.8	66.9	46.2	37.9	31.0	21.4	18.1	11.0
1.65V	268.0	181.8	111.3	66.4	46.1	37.7	30.8	21.2	17.9	10.6
1.70V	263.8	180.7	110.2	65.9	45.7	37.5	30.7	21.0	17.7	10.3
1.75V	254.1	177.9	109.2	65.4	45.5	37.2	30.3	20.8	17.5	10.0
1.80V	237.0	171.7	106.6	64.2	44.3	36.3	29.7	20.5	17.4	9.40
1.85V	215.0	162.4	101.3	61.4	42.3	34.6	28.5	19.6	16.8	9.00

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

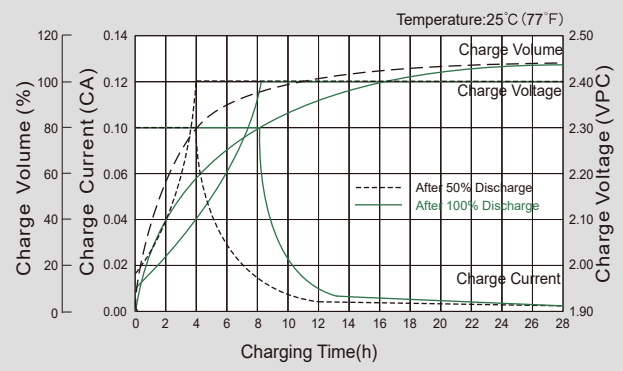
F.V/Time	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	502	348	215	131	91.8	75.3	61.7	42.5	36.0	19.5
1.65V	494	344	215	131	91.7	75.2	61.5	42.3	35.8	19.1
1.70V	488	345	213	130	91.3	75.0	61.3	42.0	35.4	18.8
1.75V	471	341	211	129	91.0	74.3	60.6	41.7	35.1	18.4
1.80V	440	330	207	127	88.5	72.6	59.5	41.0	34.7	18.1
1.85V	401	313	198	123	84.7	69.1	56.9	39.3	33.7	17.0

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

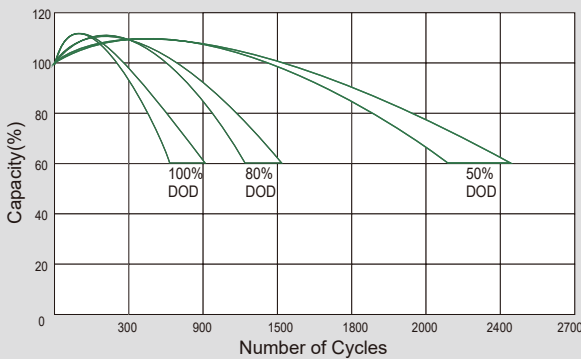
## Discharge Characteristics Curve



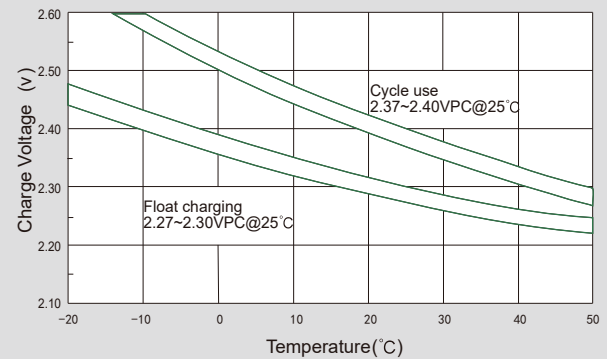
## Charge Characteristic Curve for Cycle Use(IU)



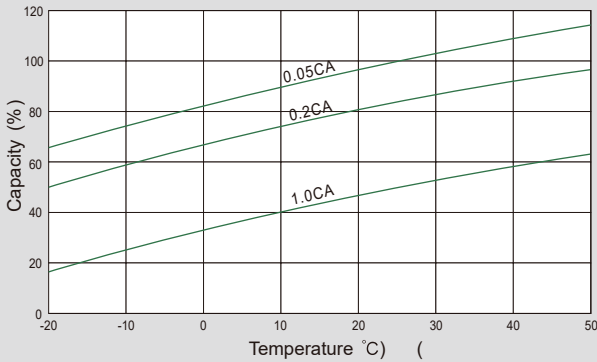
## Cycle Life in Relation to Depth of Discharge



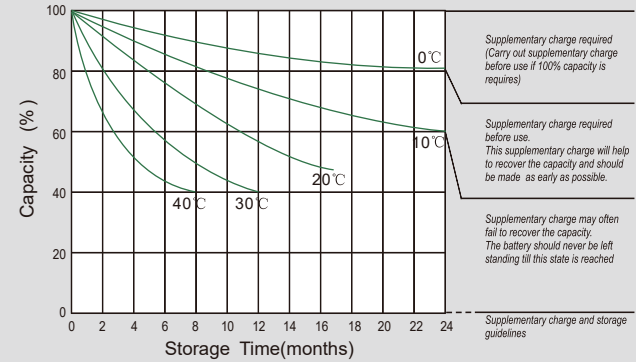
## Relationship Between Charging Voltage and Temperature



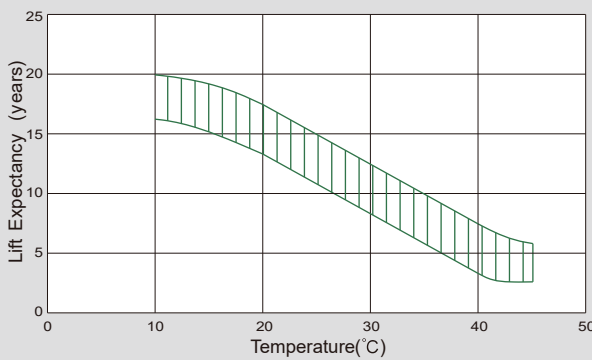
## Temperature Effects on Capacity



## Storage Characteristics



## Effect of Temperature on Long Term Life



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

