

# GEL 2V 500Ah



Specification	
Cells Per Unit	1
Voltage Per Unit	2
Capacity	500Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 30.5 Kg (Tolerance±2%)
Internal Resistance	Approx. 1.0 mΩ
Terminal	F10(M8)
Max. Discharge Current	2500A(5 sec)
Design Life	20 years (floating charge)
Maximum Charging Current	100.0A
Reference Capacity	C3 390.0AH C5 432.0AH C10 500.0AH C20 530.0AH
Float Charging Voltage	2.27 V~2.30 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	2.37 V~2.40 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	Value
Length	242±1mm (9.53 inches)
Width	172±1mm (6.77 inches)
Height	330±1mm (13.0 inches)
Total Height	353±1mm (13.9 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

F10 TERMINAL

Unit: mm

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

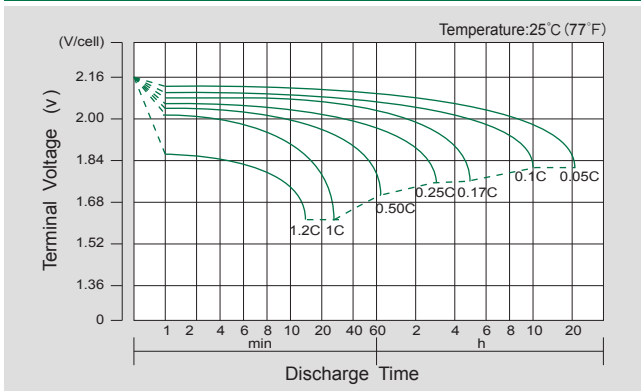
F.V/Time	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	631.5	489.0	327.0	200.5	146.5	112.5	90.0	66.5	52.0	28.0
1.65V	600.5	469.5	323.0	193.5	140.5	110.0	89.0	63.5	51.5	27.5
1.70V	560.0	442.5	317.0	190.5	137.0	107.5	87.5	62.5	51.0	27.0
1.75V	497.0	398.0	291.5	180.0	130.0	104.0	86.5	60.5	50.5	26.5
1.80V	428.0	362.5	275.0	171.5	125.0	100.0	85.0	59.5	50.0	26.0
1.85V	362.0	326.5	254.0	162.0	119.0	97.5	80.0	56.5	48.5	24.5

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

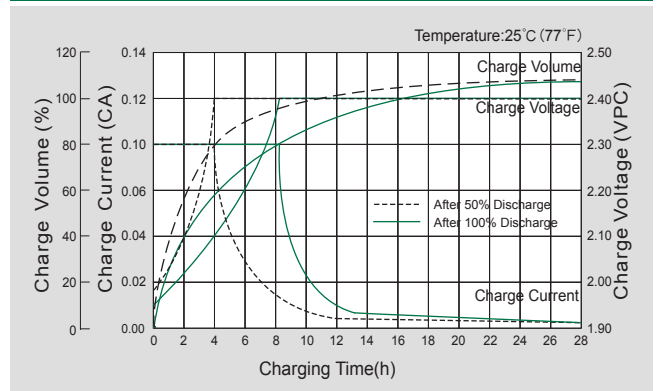
F.V/Time	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	1106	891.0	609.0	375.5	273.0	198.0	178.5	126.5	103.5	56.0
1.65V	1077	886.0	605.5	370.0	267.5	195.0	177.0	125.5	102.5	55.0
1.70V	1017	838.5	599.5	364.5	263.5	194.5	175.0	123.5	102.0	54.0
1.75V	905.5	756.0	562.5	345.5	254.0	184.5	172.5	119.5	101.0	53.0
1.80V	784.0	689.5	535.0	329.5	243.5	184.0	169.5	117.5	100.0	52.0
1.85V	668.5	621.5	496.0	312.0	232.0	170.5	160.0	111.5	97.0	49.0

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

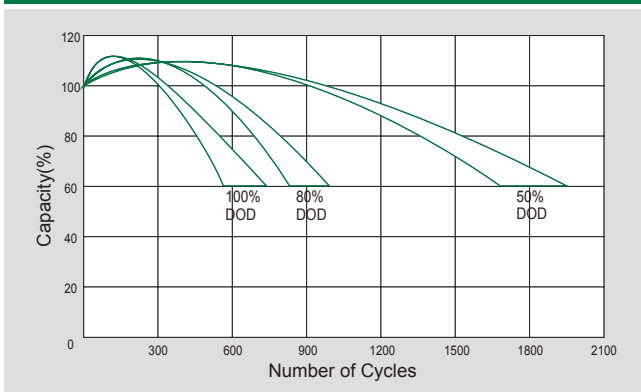
## Discharge Characteristics Curve



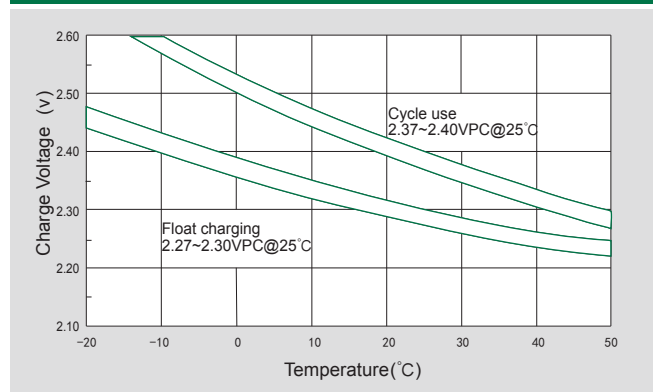
## Charge Characteristic Curve for Cycle Use(IU)



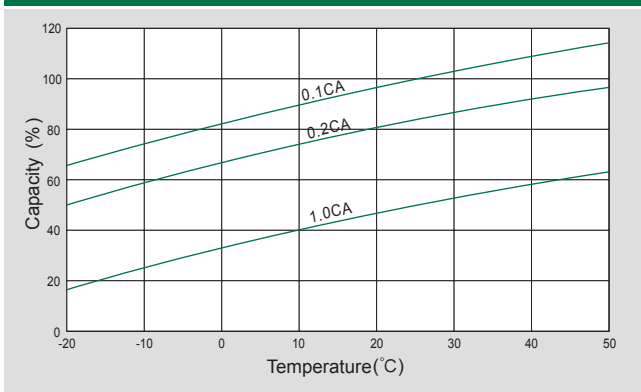
## Cycle Life in Relation to Depth of Discharge



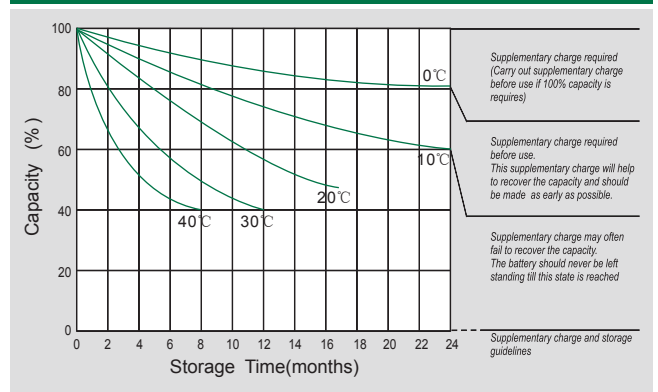
## Relationship Between Charging Voltage and Temperature



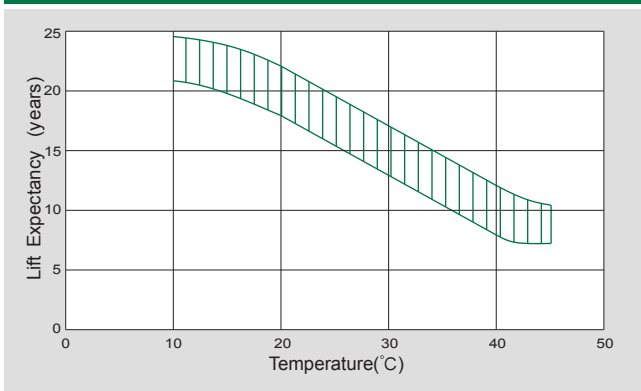
## Temperature Effects on Capacity



## Storage Characteristics



## Effect of Temperature on Long Term Life



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

