

GEL 12V 100Ah

Specification	
Cells Per Unit	6
Voltage Per Unit	12
Capacity	100Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 28.5 Kg (Tolerance±2%)
Internal Resistance	Approx. 7.5 mΩ
Terminal	F12(M8)/F5(M8)
Max. Discharge Current	1000A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	20.0A
Reference Capacity	C3 68.1AH C5 78.5AH C10 87.7AH C20 100.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.2 V~14.4 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	328±1mm (12.9 inches)
Width	172±1mm (6.77 inches)
Height	215±1mm (8.46 inches)
Total Height	220±1mm (8.66 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

F12 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	145.0	95.4	55.9	33.4	23.1	19.1	16.1	11.0	9.12	5.50
1.65V	142.1	93.8	55.6	33.2	23.0	19.0	16.0	10.9	9.03	5.30
1.70V	139.8	93.0	55.1	32.9	22.8	18.9	15.9	10.8	8.95	5.15
1.75V	134.7	93.2	54.6	32.7	22.7	18.8	15.7	10.7	8.86	5.00
1.80V	125.6	92.5	53.3	32.1	22.1	18.3	15.4	10.6	8.77	4.70
1.85V	114.0	87.4	50.7	30.7	21.1	17.4	14.8	10.1	8.51	4.50

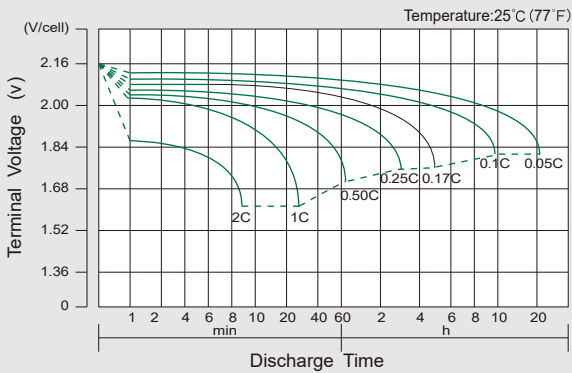
Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	264	178	108	65.7	45.8	38.0	32.0	21.9	18.2	9.73
1.65V	259	176	107	65.3	45.8	37.9	31.9	21.8	18.1	9.56
1.70V	256	177	107	64.9	45.6	37.9	31.8	21.6	17.9	9.38
1.75V	247	177	106	64.5	45.4	37.5	31.4	21.5	17.7	9.20
1.80V	231	176	104	63.6	44.2	36.7	30.9	21.1	17.5	9.03
1.85V	211	167	99.2	61.3	42.3	34.9	29.5	20.2	17.0	8.50

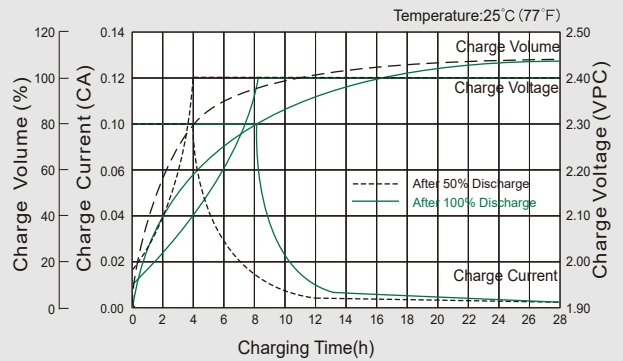
Note: The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

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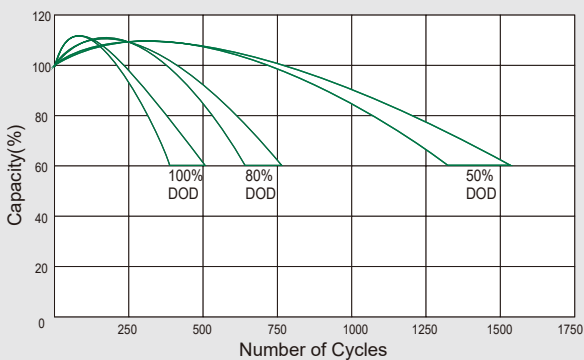
Discharge Characteristics Curve



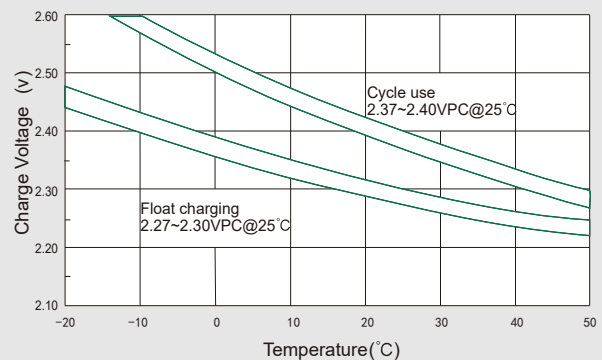
Charge Characteristic Curve for Cycle Use(IU)



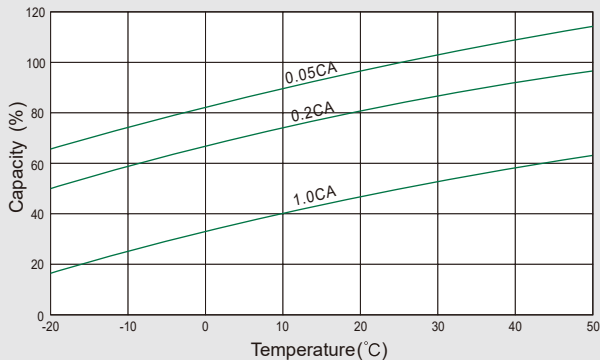
Cycle Life in Relation to Depth of Discharge



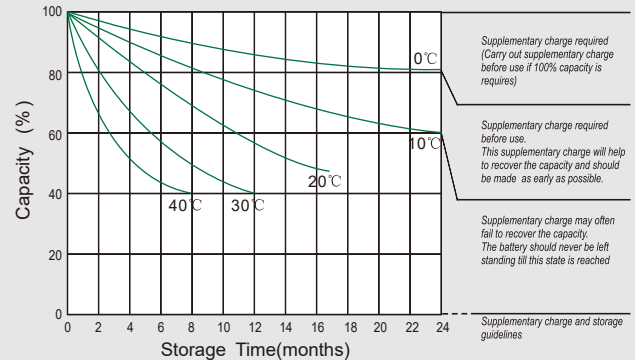
Relationship Between Charging Voltage and Temperature



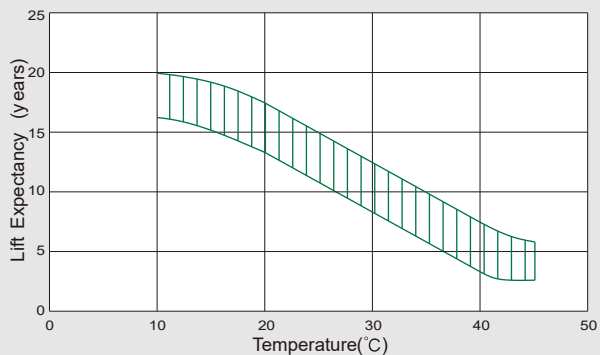
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



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

