

# GEL 12V 150Ah



## Specification

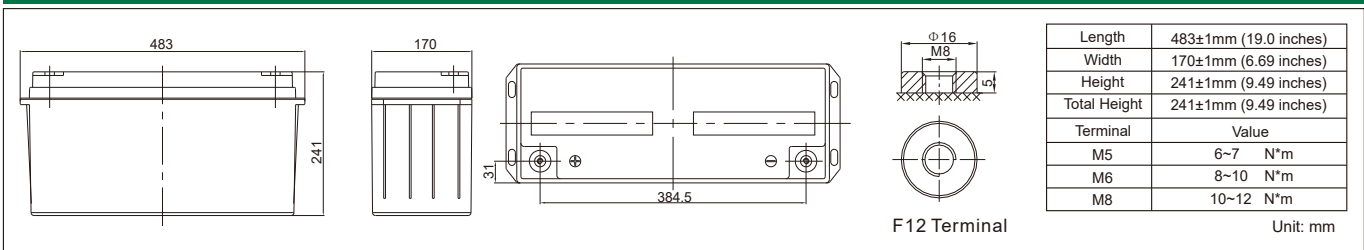
Cells Per Unit	6
Voltage Per Unit	12
Capacity	150Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 44.5Kg (Tolerance±1.5%)
Internal Resistance	Approx. 6 mΩ
Terminal	F12(M8)/F5(M8)
Max. Discharge Current	1500A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	30.0A
Reference Capacity	C3 102.3AH C5 113.5AH C10 130.0AH C20 150.0AH
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



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

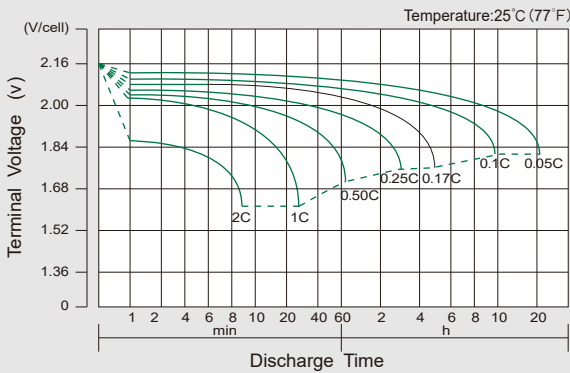
F.V/Time	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	205.2	137.5	83.8	50.2	34.7	28.4	23.3	16.0	13.5	8.25
1.65V	201.0	136.4	83.5	49.8	34.5	28.3	23.1	15.9	13.4	7.95
1.70V	197.9	135.5	82.7	49.4	34.3	28.2	23.0	15.8	13.3	7.73
1.75V	190.6	133.4	81.9	49.0	34.1	27.9	22.7	15.6	13.2	7.50
1.80V	177.7	128.8	80.0	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)

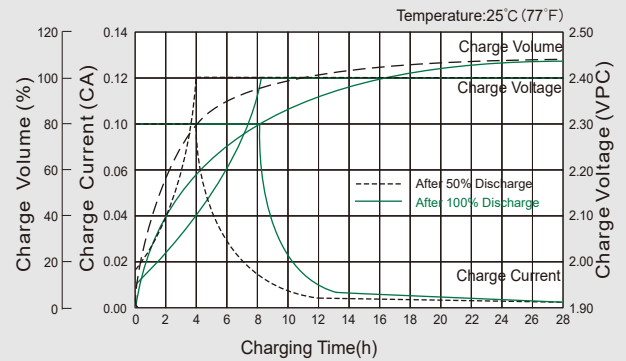
F.V/Time	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	376	261	161	98.6	68.8	56.5	46.3	31.9	27.0	14.6
1.65V	370	258	161	98.0	68.8	56.4	46.1	31.7	26.8	14.3
1.70V	366	259	160	97.4	68.5	56.3	46.0	31.5	26.6	14.1
1.75V	353	255	158	96.7	68.2	55.7	45.4	31.3	26.3	13.8
1.80V	330	247	155	95.5	66.4	54.5	44.6	30.7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

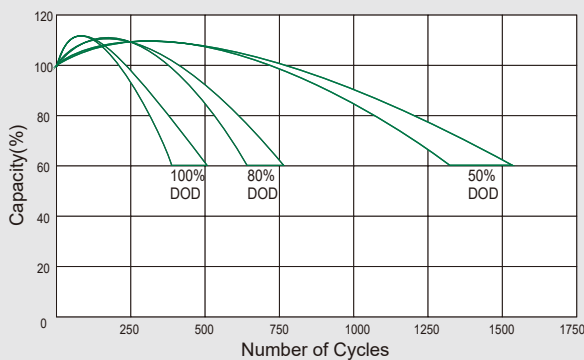
## Discharge Characteristics Curve



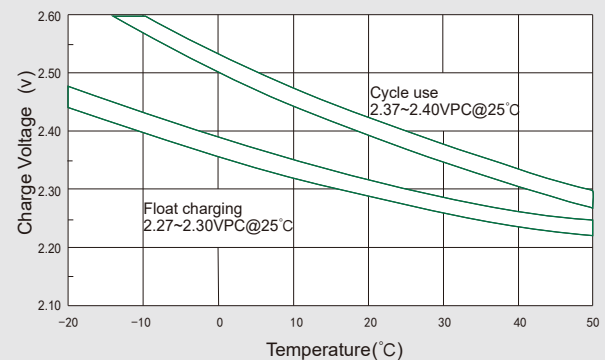
## Charge Characteristic Curve for Cycle Use(IU)



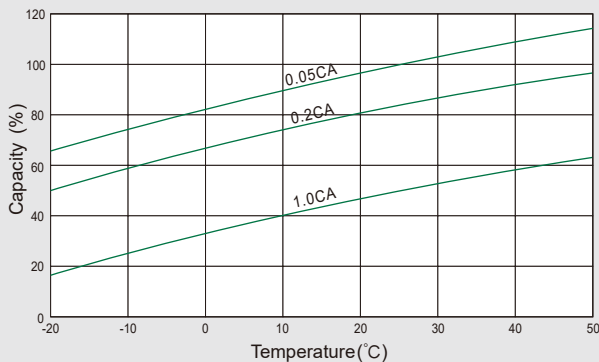
## Cycle Life in Relation to Depth of Discharge



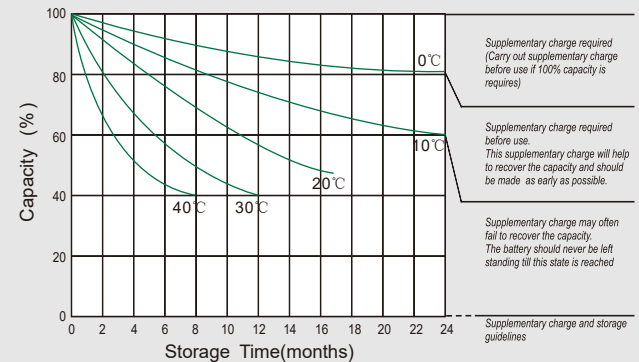
## Relationship Between Charging Voltage and Temperature



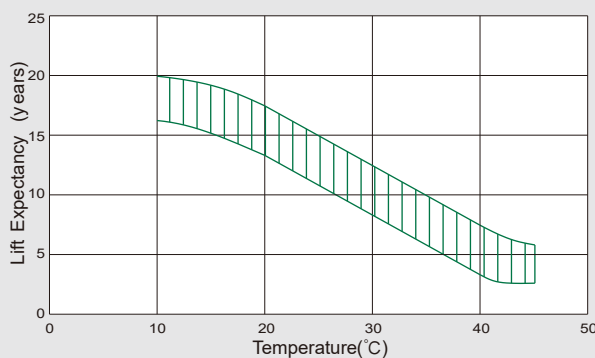
## Temperature Effects on Capacity



## Storage Characteristics



## Effect of Temperature on Long Term Life



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

