

## Specification Sheet

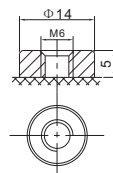
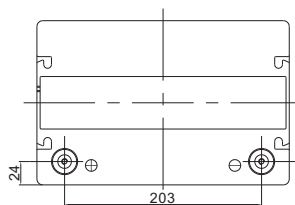
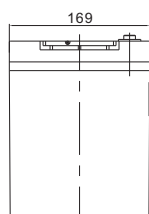
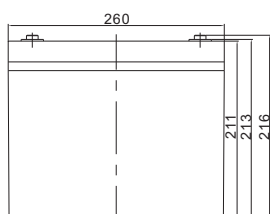
## Deep Cycle Gel Battery

## DG12-80 (12V80Ah)

Cells Per Unit	6
Voltage Per Unit	12
Capacity	80Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 23 Kg (Tolerance ±2%)
Internal Resistance	Approx. 5.6 mΩ
Terminal	F11(M6)/F15(M6)
Max. Discharge Current	750A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	16 A
Reference Capacity	C3 57.5AH C5 65.4AH C10 80.0AH C20 81.8AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C ±5°C
Self Discharge	Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



## Dimensions



F11 TERMINAL

Length	260±2mm (10.2 inches)
Width	169±2mm (6.65 inches)
Height	211±2mm (8.31 inches)
Total Height	216±2mm (8.50 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	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	216.5	159.2	118.8	68.18	39.40	23.07	19.17	13.60	12.99	7.82	7.62	3.98
1.65V	208.5	153.9	115.3	66.75	38.65	22.68	18.91	13.41	12.95	7.74	7.59	3.97
1.70V	198.0	147.0	110.6	64.86	37.67	22.16	18.86	13.16	12.93	7.62	7.57	3.90
1.75V	184.2	137.7	104.3	62.29	36.32	21.45	18.83	12.82	12.88	7.46	7.55	3.86
1.80V	165.8	125.4	95.9	58.75	34.47	20.46	15.42	12.34	10.51	7.23	7.50	3.57
1.85V	140.9	108.4	84.24	53.76	31.83	19.05	14.46	11.66	9.98	6.91	5.93	3.35

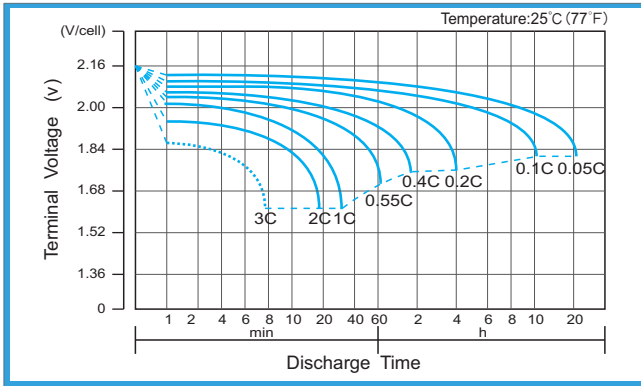
### Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	367	271	208	124	73.7	43.7	32.8	26.1	22.1	15.3	13.0	6.65
1.65V	363	269	206	123	73.0	43.3	32.5	25.9	21.9	15.2	12.9	6.60
1.70V	349	259	199	120	71.4	42.4	31.9	25.5	21.6	14.9	12.8	6.53
1.75V	330	247	191	117	69.2	41.3	31.1	24.9	21.2	14.7	12.5	6.42
1.80V	302	229	178	111	66.0	39.6	29.9	24.1	20.5	14.3	12.2	6.27
1.85V	261	202	158	103	61.4	37.0	28.2	22.8	19.6	13.6	11.7	6.05

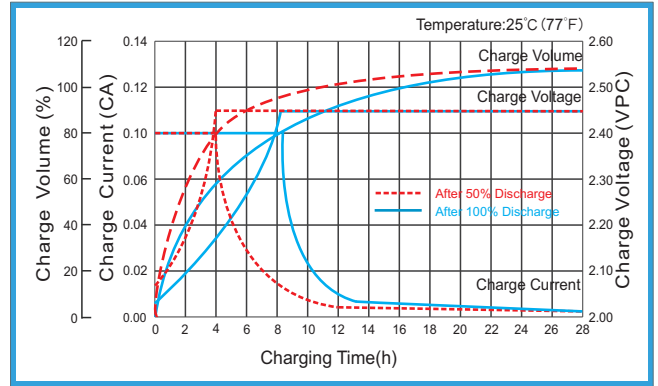
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

# DG12-80 (12v80Ah-10HR)

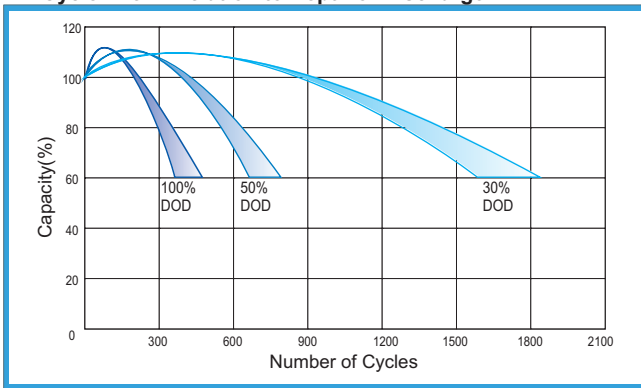
**Discharge Characteristics Curve**



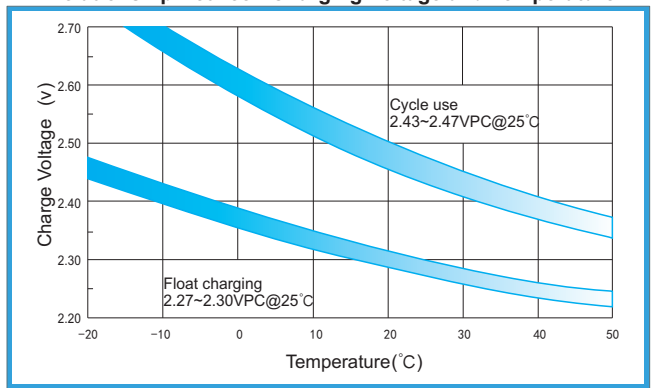
**Charge Characteristic Curve for Cycle Use(IU)**



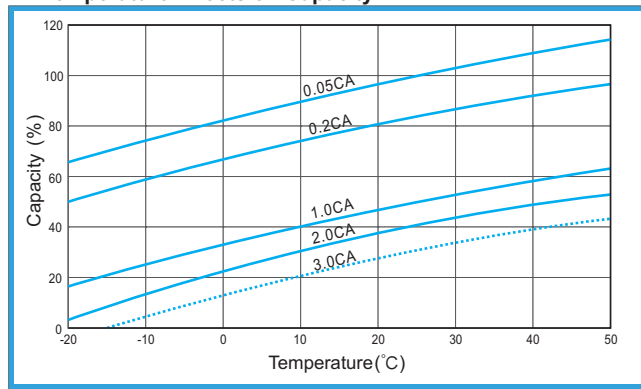
**Cycle Life in Relation to Depth of Discharge**



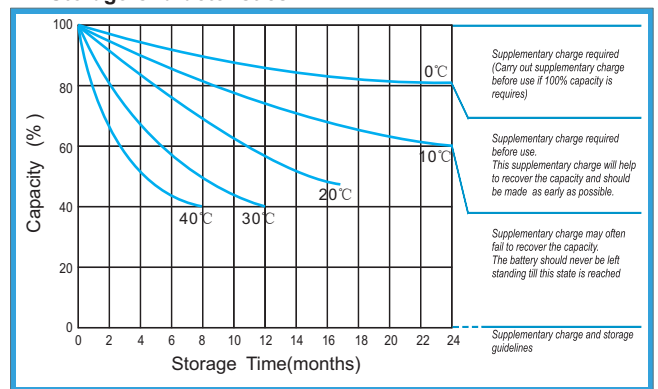
**Relationship Between Charging Voltage and Temperature**



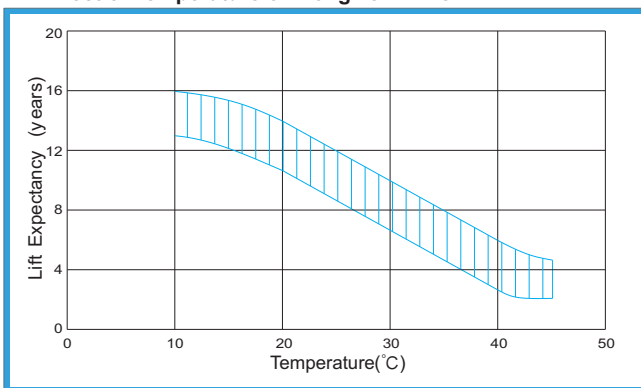
**Temperature Effects on Capacity**



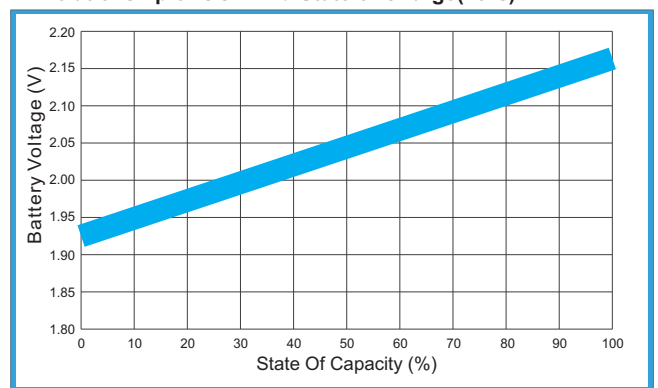
**Storage Characteristics**



**Effect of Temperature on Long Term Life**



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



(Note) All above information shall be changed without prior notice, Starlight reserves the right to explain and update the latest information.