

# DC12-80(12V80Ah)



## Specification

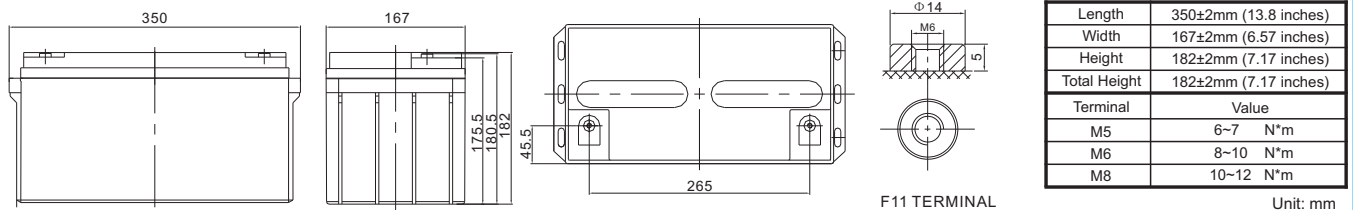
Cells Per Unit	6
Voltage Per Unit	12
Capacity	80Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 24.0 Kg (Tolerance ±2%)
Internal Resistance	Approx. 5.5 mΩ
Terminal	F11(M6)/F5(M8)
Max. Discharge Current	800A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	24.0 A
Reference Capacity	C3 59.4AH C5 67.0AH C10 76.0AH C20 80.0AH
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	RITAR 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.



DC (Deep Cycle) series batteries provide superior high integrity and reliability. It is specially designed for frequent cyclic charge and discharge. By using strong grids, thick plate and specially active material are designed for repeated deep-discharge applications. The DC series batteries offer 30% more cyclic life than the standby series. It is suitable for solar and wind renewable energy storage, mobility and medical equipment, V, telecom, broadband and cable TV, UPS systems etc.



## Dimensions



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

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	196.0	146.3	83.9	48.5	28.4	21.1	16.7	14.1	9.63	8.16	4.16
1.65V	189.5	141.9	82.2	47.6	27.9	20.8	16.5	13.9	9.52	8.08	4.12
1.70V	180.9	136.1	79.8	46.4	27.3	20.4	16.2	13.7	9.38	7.97	4.07
1.75V	169.5	128.4	76.7	44.7	26.4	19.8	15.8	13.4	9.18	7.81	4.00
1.80V	154.3	118.0	72.3	42.4	25.2	19.0	15.2	12.9	8.90	7.60	3.90
1.85V	133.5	103.7	66.2	39.2	23.4	17.8	14.3	12.3	8.50	7.29	3.76

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

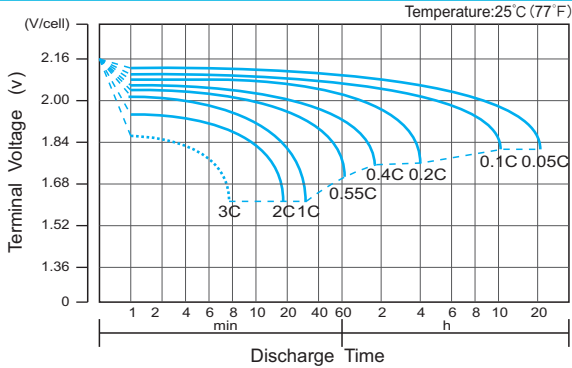
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	333	256	152	90.7	53.8	40.4	32.1	27.2	18.8	16.0	8.18
1.65V	331	253	151	89.9	53.3	40.0	31.9	27.0	18.7	15.9	8.13
1.70V	319	245	148	87.9	52.2	39.3	31.3	26.6	18.4	15.7	8.03
1.75V	305	235	144	85.2	50.8	38.3	30.6	26.1	18.0	15.4	7.91
1.80V	282	219	137	81.2	48.7	36.9	29.6	25.3	17.5	15.0	7.72
1.85V	248	195	126	75.5	45.6	34.7	28.1	24.1	16.8	14.4	7.45

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

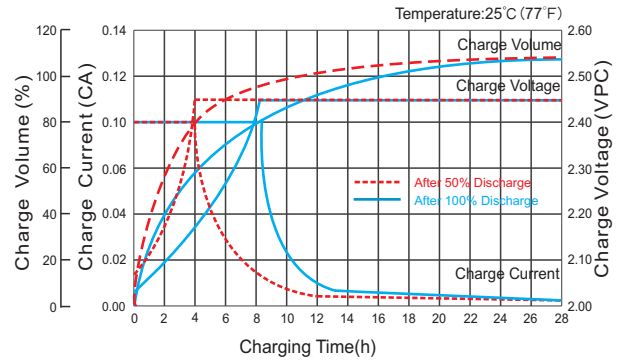
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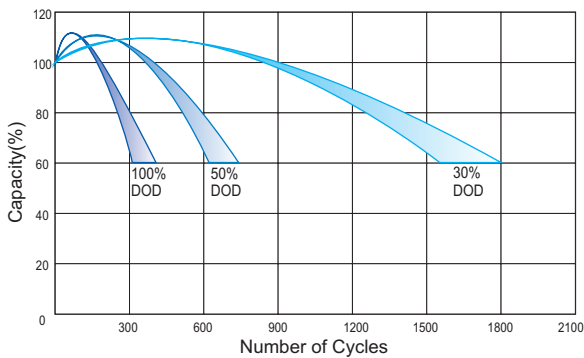
## Discharge Characteristics Curve



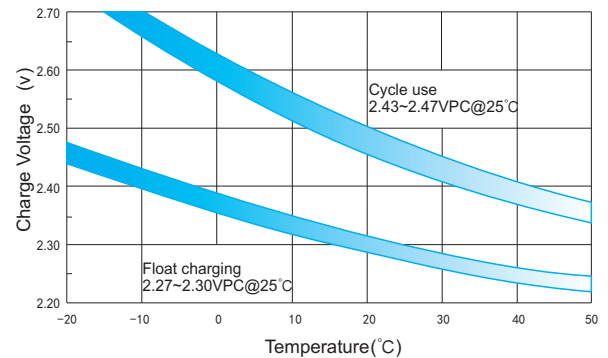
## Charge Characteristic Curve for Cycle Use(IU)



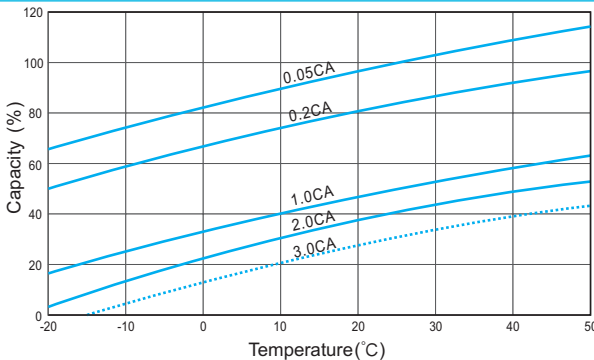
## Cycle Life in Relation to Depth of Discharge



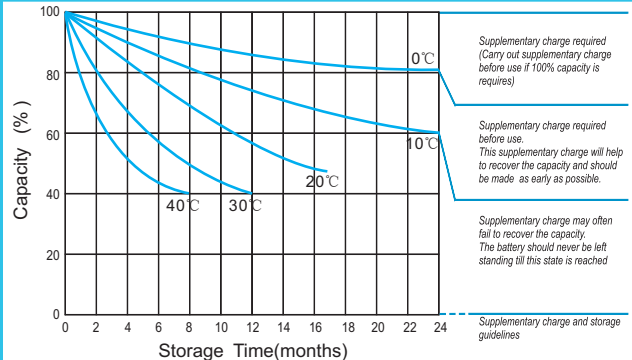
## Relationship Between Charging Voltage and Temperature



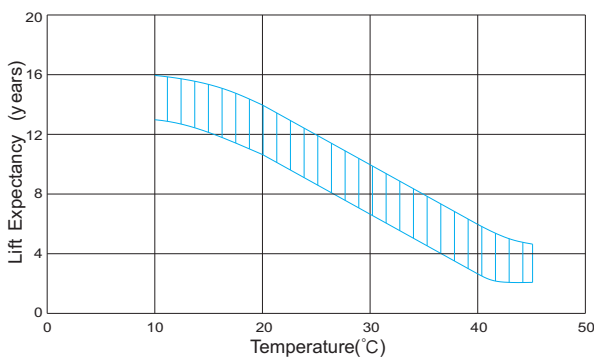
## Temperature Effects on Capacity



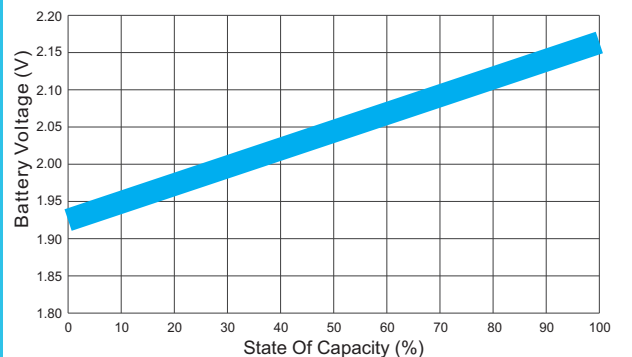
## Storage Characteristics



## Effect of Temperature on Long Term Life



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



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