

# DC12-145(12V145Ah)



## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	145Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 44.0 Kg (Tolerance ± 1.5%)
Internal Resistance	Approx. 4 mΩ
Terminal	F12(M8)/F5(M8)
Max. Discharge Current	1450A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	43.5 A
Reference Capacity	C3 107.7AH C5 121.0AH C10 138.0AH C20 145.0AH
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 charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



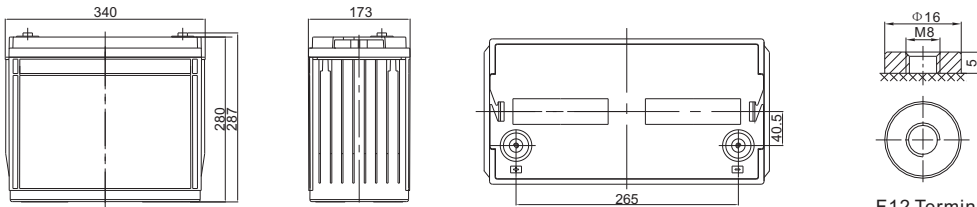
DC (Deep Cycle) series batteries provide superior high integrity and reliability. It is specially designed for frequent cyclic charge and discharge. By using strong grids, thick plate and specially active material are designed for repeated deep-discharge applications. The DC series batteries offer 30% 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.



ISO 9001      ISO 14001      OHSAS 18001



## Dimensions



Length	340±2mm (13.4 inches)
Width	173±2mm (6.81 inches)
Height	280±2mm (11.0 inches)
Total Height	287±2mm (11.3 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

F 12 Terminal

Unit: mm

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

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	310.5	239.3	140.2	83.4	51.0	38.4	30.3	25.6	17.5	14.8	7.53
1.65V	300.1	232.1	137.2	81.8	50.1	37.8	29.9	25.3	17.3	14.6	7.47
1.70V	286.6	222.7	133.3	79.7	48.9	37.0	29.4	24.8	17.0	14.4	7.37
1.75V	268.6	210.1	128.1	76.9	47.4	35.9	28.6	24.2	16.6	14.2	7.25
1.80V	244.4	193.1	120.8	72.9	45.2	34.4	27.5	23.4	16.1	13.8	7.07
1.85V	211.4	169.6	110.5	67.4	42.1	32.3	26.0	22.3	15.4	13.2	6.81

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

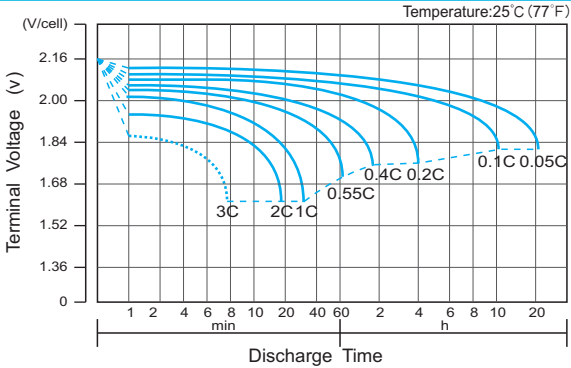
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	556	440	268	164	102	77.1	61.3	51.9	35.9	30.6	15.6
1.65V	551	436	266	163	101	76.4	60.8	51.5	35.6	30.3	15.5
1.70V	532	422	260	159	98.6	75.0	59.8	50.7	35.1	30.0	15.3
1.75V	508	404	252	154	95.9	73.2	58.5	49.7	34.4	29.4	15.1
1.80V	470	376	241	147	92.0	70.4	56.5	48.2	33.5	28.7	14.7
1.85V	414	335	222	137	86.1	66.3	53.5	46.0	32.0	27.5	14.2

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

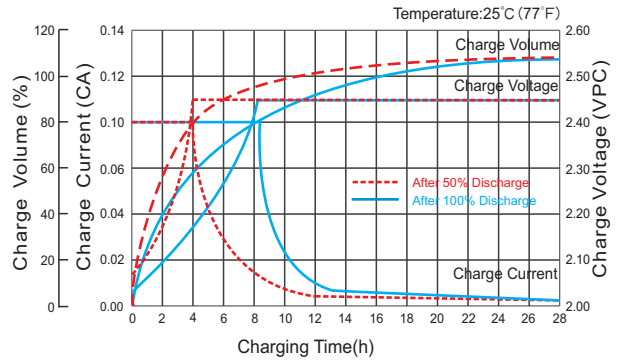
# DC12-145(12V145Ah)



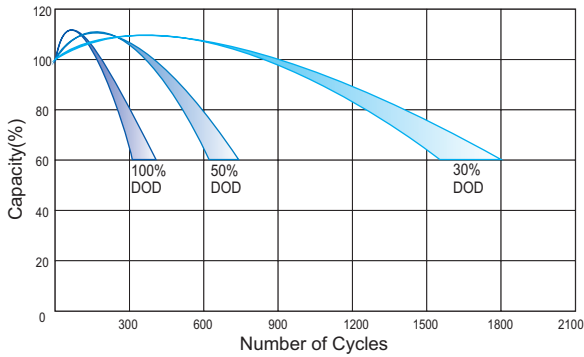
## Discharge Characteristics Curve



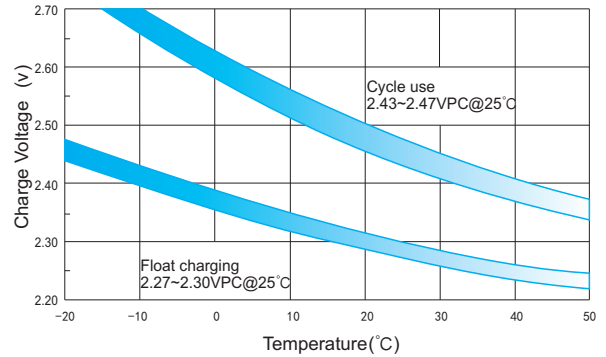
## Charge Characteristic Curve for Cycle Use(IU)



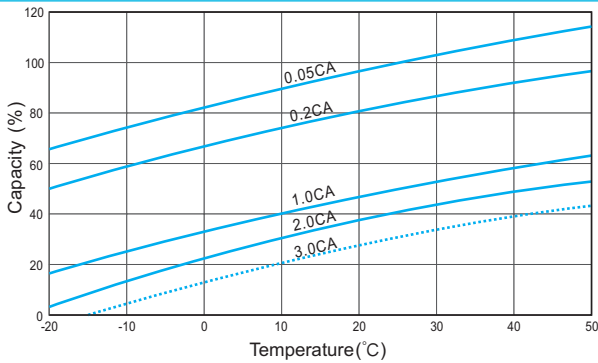
## Cycle Life in Relation to Depth of Discharge



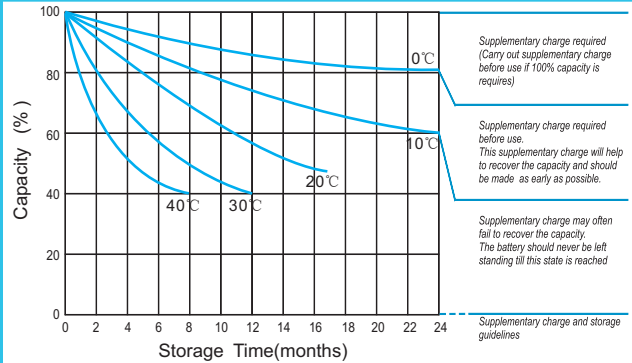
## Relationship Between Charging Voltage and Temperature



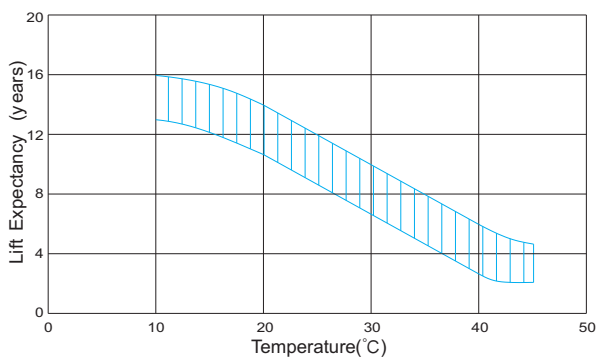
## Temperature Effects on Capacity



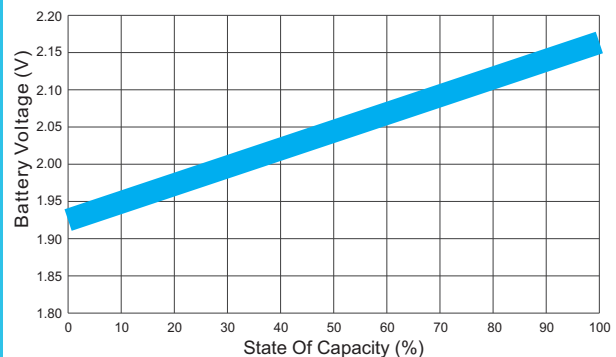
## Storage Characteristics



## Effect of Temperature on Long Term Life



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



For Battery Sales + EPA Battery Recycling and AC / DC Power Services, please contact:  
**Moore & Moore Solutions, Inc.**  
 Phone: 484-302-7009  
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