

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. 43.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 4.0 mΩ
Terminal	F5(M8)/F12(M8)
Max. Discharge Current	1450A (5 sec)
Design Life	12 years (floating charge)
Max. Charging Current	43.5 A
Reference Capacity	C3 110.9AH C5 124.9AH C10 138.1AH 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 discharging. 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 and cable TV etc.



ISO 9001



ISO 14001



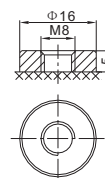
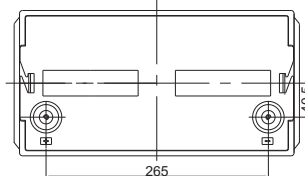
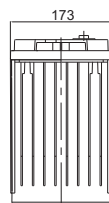
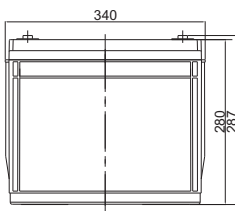
OHSAS 18001



MH 28539



Dimensions



F12 Terminal

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

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	316.9	254.2	156.3	88.07	52.45	40.85	32.05	27.26	17.48	14.50	7.515
1.65V	291.9	237.8	148.1	85.07	50.69	39.60	31.09	26.40	17.35	14.36	7.475
1.70V	270.5	223.6	140.4	82.34	49.34	37.92	30.13	25.69	17.07	14.09	7.381
1.75V	248.2	209.4	134.9	79.75	47.44	36.95	29.31	24.97	16.80	13.95	7.250
1.80V	225.9	191.8	129.9	76.21	45.82	36.25	28.62	24.65	16.52	13.81	7.180
1.85V	176.7	158.7	110.1	68.03	41.90	33.74	26.84	22.69	15.56	12.98	7.113

Constant Power Discharge Characteristics : WPC(25°C)

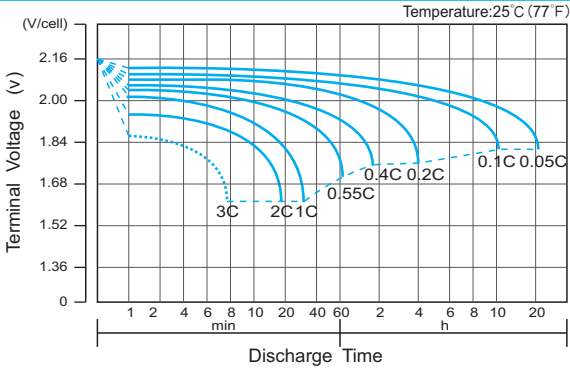
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	539.6	443.5	284.1	165.3	99.16	77.57	61.76	51.60	34.07	28.44	15.00
1.65V	519.5	431.2	277.4	162.5	96.48	75.64	60.26	50.20	33.80	28.16	14.87
1.70V	484.9	408.2	264.0	157.7	94.07	72.74	58.34	48.95	33.39	27.62	14.73
1.75V	451.2	385.2	254.8	153.4	90.73	70.95	56.97	47.83	32.85	27.34	14.47
1.80V	415.7	356.1	246.6	147.1	88.67	70.55	55.87	47.19	32.30	27.07	14.33
1.85V	329.8	299.2	211.5	132.1	81.64	65.81	52.59	43.65	30.53	25.57	14.20

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values. The battery must be fully charged before the capacity test. The C₂₀ should reach 95% after the first cycle and 100% after the third cycle.

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Discharge Characteristics Curve



Charge Characteristic Curve for Cycle Use(IU)



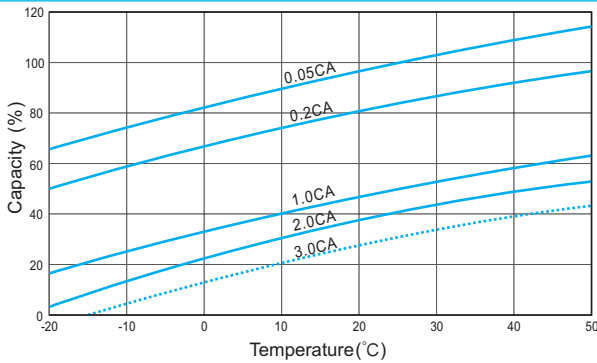
Cycle Life in Relation to Depth of Discharge



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.