LUMINOR LEADERTECHNOLOGY

AGM DEEP CYCLE BATTERY LDC

LDC12-145(12V-140Ah)

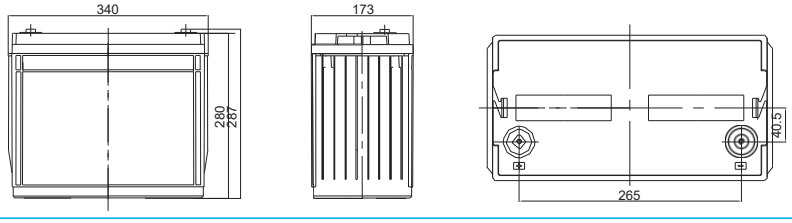
Specification

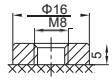
Cells PerUnit	6
Voltage PerUnit	12
Capacity	140h@20hr-rate to 1.75V per cell@25℃
Weight	Approx. 42.0 Kg (Tolerance±3.0%)
Internal Resistance	Approx. 4.4 m Ω
Terminal	F12(M8)
Max. DischargeCurrent	1340A (5sec)
DesignLife	12 years (floating charge)
Max. ChargingCurrent	45.0A
Reference Capacity	C3 108.4AH C5 121.3AH C10 133.1AH C20 140.0AH
Float ChargingVoltage	13.6 V~13.8 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating TemperatureRange	Discharge: -20℃~60℃ Charge: 0℃~50℃ Storage: -20℃~60℃
Normal Operating TemperatureRange	25℃±5℃
SelfDischarge	Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25℃and then recharging is recommended. Monthly Self-discharge ratiois less than 3% at 25℃.Please charged batteries before using.
ContainerMaterial	A.B.S. UL94-HB, UL94-V0Optional.

LDC series is specially designed for frequent discharge deep cycle application. By using the specially designed active material, strong grids and thick plate construction, the LDC series battery offers reliable performance in high load situations and could provide competitive cycle performance. It issuitable for Electric Vehicle and Golf cart, Floor Machines, Forklifts, Aerial lifts, Robotics, Marine, RV, Mobility and Medical Equipment, and most outdoor application.

CE

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 (11.3inches)
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℃)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	309.1	243.1	145.9	81.38	48.47	37.75	29.61	25.19	16.16	13.40	6.945
1.65V	284.7	227.4	138.2	78.61	46.84	36.59	28.73	24.40	16.03	13.27	6.908
1.70V	263.9	213.8	131.1	76.09	45.59	35.05	27.84	23.74	15.78	13.02	6.821
1.75V	242.1	200.3	125.9	73.70	43.85	34.14	27.08	23.08	15.52	12.89	6.700
1.80V	220.3	183.4	121.3	70.42	42.35	33.50	26.45	22.78	15.27	12.76	6.635
1.85V	172.4	151.7	102.8	62.87	38.72	31.18	24.80	20.97	14.38	12.00	6.573

Constant Power Discharge Characteristics : WPC(25℃)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	526.3	424.1	265.2	152.8	91.64	71.69	57.08	47.68	31.49	26.28	13.86
1.65V	506.8	412.3	259.0	150.2	89.16	69.90	55.68	46.39	31.24	26.03	13.74
1.70V	473.0	390.3	246.5	145.8	86.94	67.22	53.91	45.23	30.86	25.52	13.62
1.75V	440.2	368.4	237.9	141.7	83.85	65.56	52.65	44.20	30.35	25.27	13.37
1.80V	405.5	340.5	230.2	135.9	81.94	65.20	51.63	43.61	29.85	25.02	13.25
1.85V	321.7	286.1	197.4	122.1	75.45	60.82	48.60	40.34	28.21	23.63	13.12

(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 capacitytest. The C_{20} should reach 95% after the first cycle and 100% after the third cycle.

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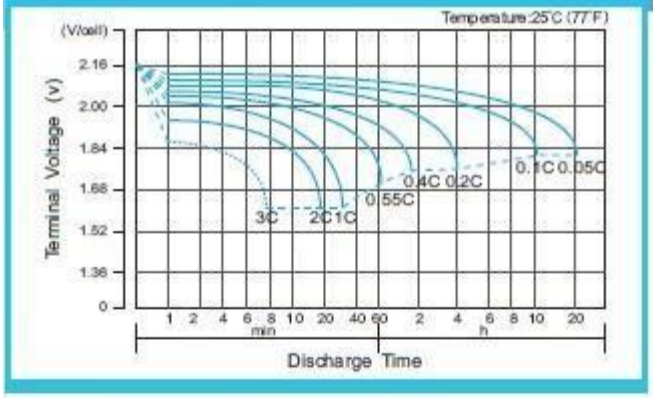
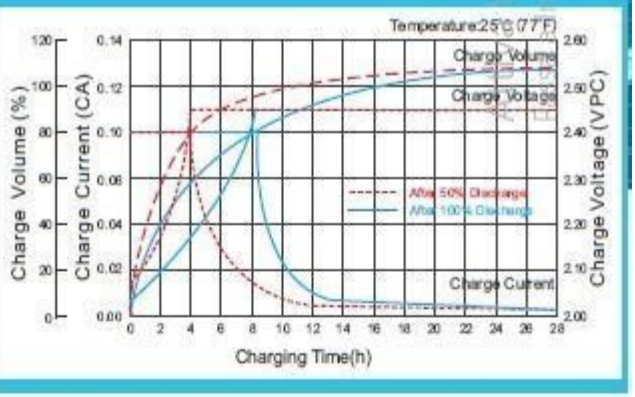
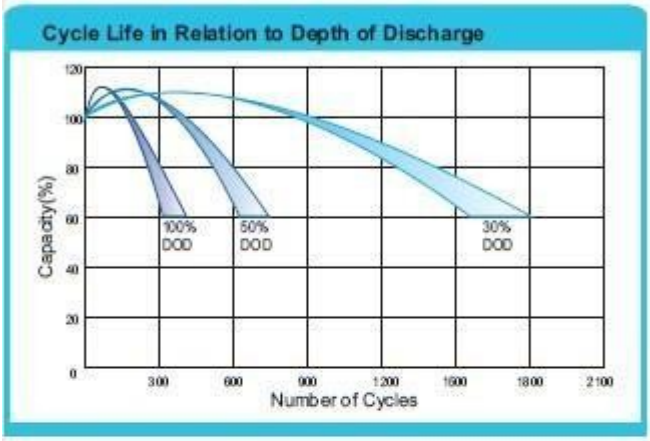
Discharge Characteristics Curve



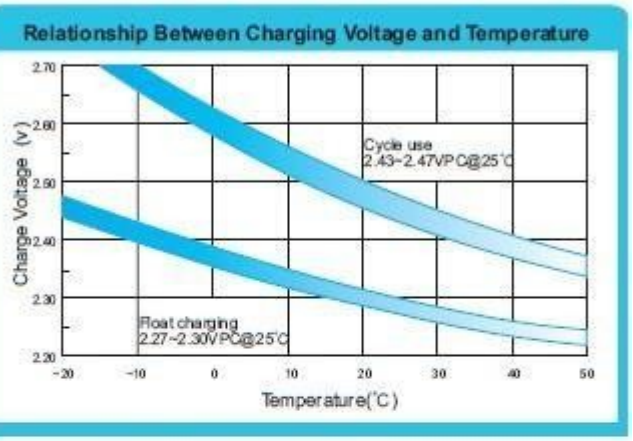
Charge Characteristic Curve for Cycle Use(IU)



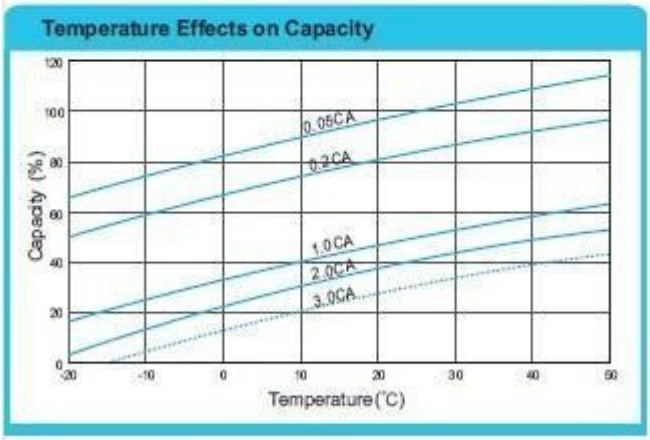
Cycle Life in Relation to Depth of Discharge



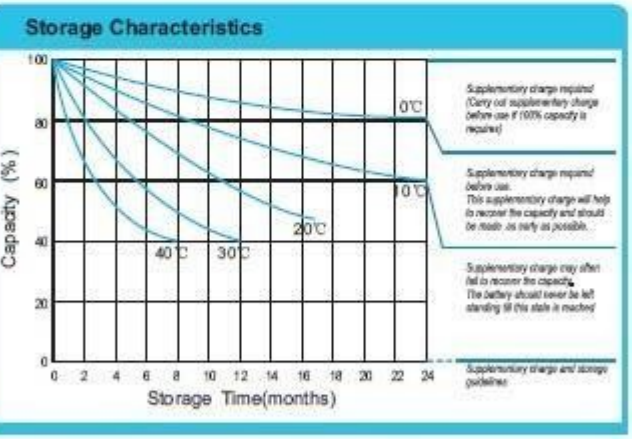
Relationship Between Charging Voltage and Temperature



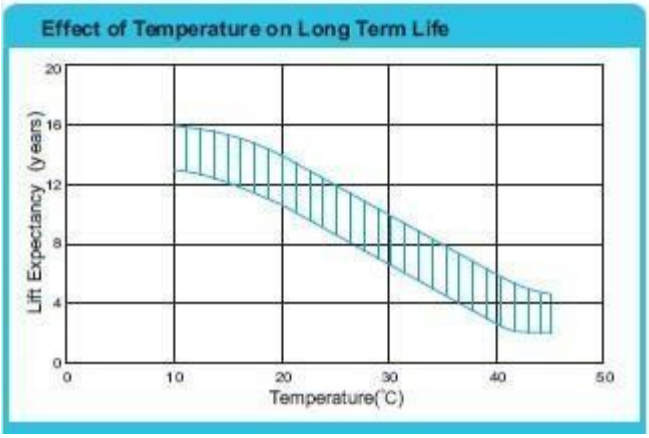
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20℃)