



Lead crystal battery

ECLC12-270 (12V 270Ah)

Specifications

Nominal Voltage	12V	
Nominal Capacity(20 Hr)	270Ah	
Dimension	Length	520±1mm(20.47 inches)
	Width	268±1mm(10.55 inches)
	Containeriner Height	220±1mm(8.66 inches)
	Total Height (With terminal)	224±1mm(8.82 inches)
Approx Weight	Approx77.3 kgs(170.42 lbs)	
Design life	18 years	
Terminal	M8	
Container Material	ABS	
Rated Capacity	270.00Ah/7.50A	(13.5, 1.75V/Cell, 25 °C/77°F)
	245.80Ah/24.80A	(10hr, 1.80V/Cell, 25 °C/77°F)
	214.65Ah/42.93A	(5hr, 1.75V/Cell, 25 °C/77°F)
	150.12Ah/150.12A	(1hr, 1.60V/Cell, 25 °C/77°F)
Max. Discharge Current	2700A(5s)	
Internal Resistance	Appro≤3 mΩ	
Operating Temp. Range	Discharge: -30 °C~60 °C	
	Charge: -30 °C~60 °C	
	Storage: -30 °C~60 °C	
Nominal Operating Temp. Range	25±3 °C(77±5°F)	
Cycle Use	Initial Charging Current Less than 43.2A. Voltage 14.4V-14.9V at 25 °C(77°F) Temp. Coefficient-20mV/C	
	No limit on Intital Charging Current Voltage 13.6V-13.8V at 25 °C(77°F) Temp. Coefficient-20mV/C	
Standby Use	40 °C(104°F) 103%	
Capacity affected by Temperature	25 °C(77°F) 100%	
	0 °C(32°F) 86%	
Self Discharge	ECLC series batteries may be stored for up to 10 months at25 °C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



Application

- ◆ Railway and marine systems
- ◆ Electric tools
- ◆ Vehicle in place of walking
- ◆ Lawn mowers
- ◆ Golf trolleys and golf cart
- ◆ Electric toys
- ◆ Portable power
- ◆ Wheelchairs
- ◆ Medical equipments
- ◆ Solar / wind power system



ISO9001 ISO14001

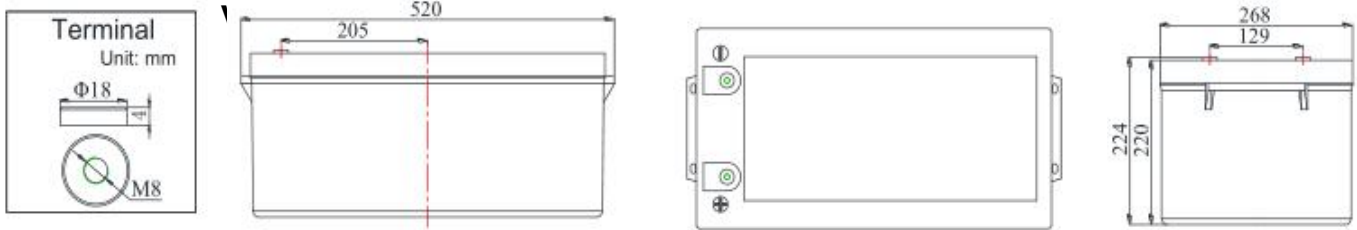
Constant Current Discharge (Amperes) at 25 °C (77F)

F.V/Time	15 min	30 min	45 min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	347.49	221.94	163.08	150.12	95.31	66.96	45.36	29.97	26.73	14.31	3.24
1.67V	341.28	217.89	160.11	147.15	93.42	65.61	44.55	29.43	26.19	14.04	3.19
1.70V	334.80	213.84	157.14	144.45	91.80	64.53	43.74	28.89	25.65	13.77	3.11
1.75V	328.59	209.79	154.17	141.75	89.91	63.18	42.93	28.35	25.38	13.50	3.05
1.80V	316.02	201.77	148.29	136.40	86.43	60.77	41.33	27.28	24.58	13.37	3.00

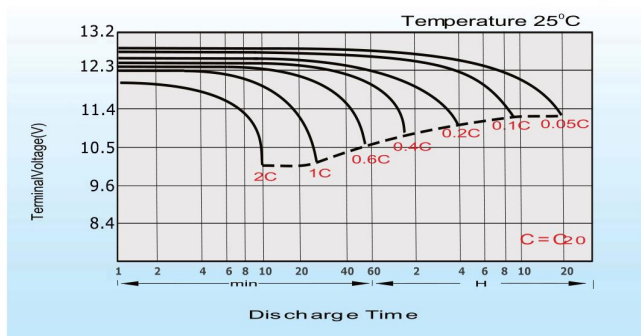
Constant Power Discharge (Watts) at 25 °C (77F)

F.V/Time	15 min	30 min	45 min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	668.79	427.14	314.01	288.09	183.06	128.52	87.48	57.51	51.57	27.81	6.24
1.67V	656.64	419.31	308.07	282.96	179.82	126.36	85.86	56.70	50.49	27.27	6.10
1.70V	644.49	411.48	302.40	277.56	176.58	123.93	84.24	55.62	49.68	27.27	5.99
1.75V	632.34	403.65	296.73	272.43	173.07	121.50	82.62	54.54	48.60	26.73	5.89
1.80V	608.27	388.41	285.50	262.00	166.65	116.95	79.68	52.40	46.73	25.93	5.78

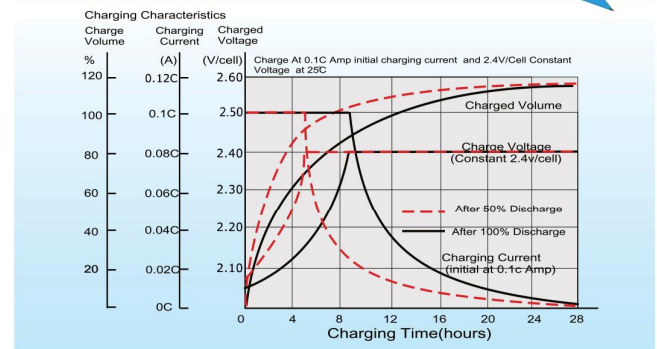
Dimensions



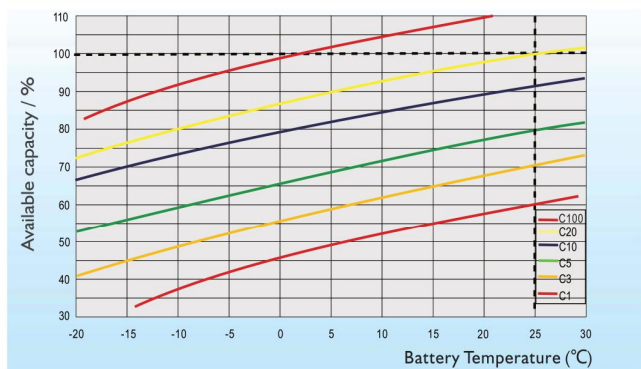
Discharge Characteristics



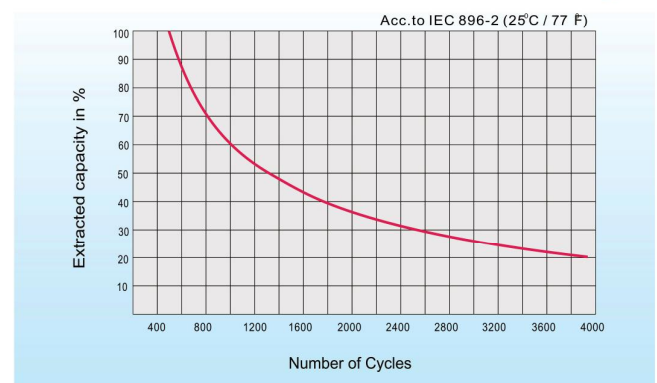
Charging Characteristics



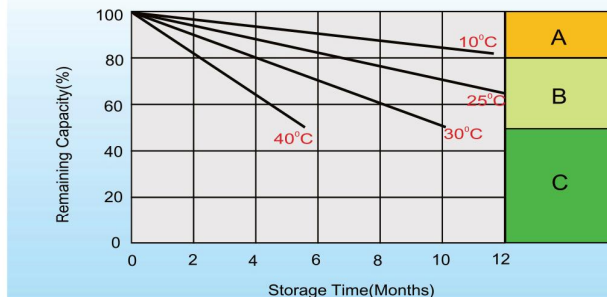
Temperature Effects in Relation to Battery Capacity



Cycle life in Relation to Depth of Discharge



Self-discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

Supplementary charge required before use. Optional charging way as below:

- B**
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
 3. Charged for 8~10 hours at limited current 0.05CA.

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

Specifications subject to change without prior notice.