

## ECLC12-100 (12V 110Ah)

### Specifications

Nominal Voltage	12V	
Nominal Capacity(20 Hr)	110Ah	
Dimension	Length	307±1mm( 12.09 inches)
	Width	169±1mm( 6.65 inches)
	Containeriner Height	211±1mm( 8.30 inches)
	Total Height (With terminal)	215±1mm( 8.46 inches)
	Approx Weight	Approx. 30.5kgs (67.24 lbs)
Design life	10 years	
Terminal	M8	
Container Material	ABS	
Rated Capacity	110.0Ah/5.5A	(20hr, 1.75V/Cell, 25 °C/77°F)
	100.1Ah/10 A	(10hr, 1.80V/Cell, 25 °C/77°F)
	87.5Ah/17.5A	(5hr, 1.75V/Cell, 25 °C/77°F)
	61.2Ah/61.2A	(1hr, 1.60V/Cell, 25 °C/77°F)
Max. Discharge Current	1100A(5s)	
Internal Resistance	Appro≤5.5mΩ	
Operating Temp. Range	Discharge:	-20 °C~50 °C
	Charge:	0 °C~40 °C
	Storage:	-20 °C~50 °C
Nominal Operating Temp. Range	25±3 °C(77±5°F )	
Cycle Use	Initial Charging Current Less than 19.8 A. Voltage 14.4V-15.0V at 25 °C(77°F ) Temp. Coefficient-20mV/C	
	Standby Use No limit on Intital Charging Current Voltage 13.5V-13.8V at 25 °C(77°F ) Temp. Coefficient-20mV/C	
Capacity affected by Temperature	40 °C( 104°F )	103%
	25 °C( 77°F )	100%
	0 °C( 32°F )	86%
Self Discharge	ECLC series batteries may be stored for up to 6 months at25 °C(77°F ) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



### Application

- ◆ All purpose
- ◆ Uninterruptable Power Supply(UPS)
- ◆ Electric Power System(EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and securitysystem
- ◆ Electronic apparatus & equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto controlsystem

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

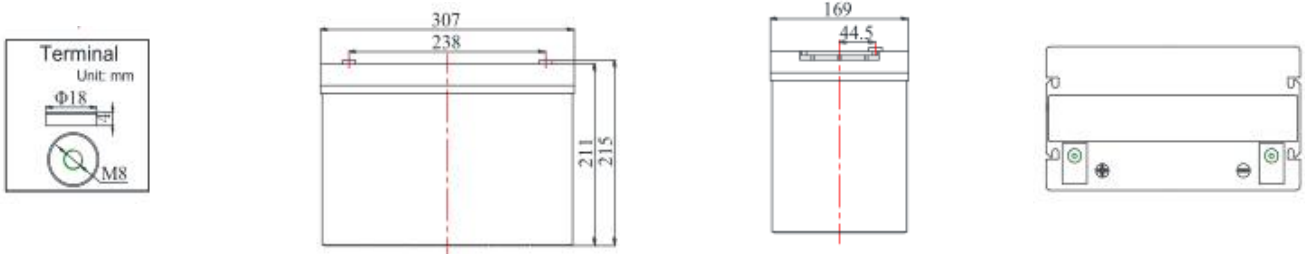
F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	141.6	90.4	66.4	61.2	38.8	27.3	18.5	12.2	10.89	5.83	1.32
1.67V	139.0	88.8	65.2	60.0	38.1	26.7	18.2	12.0	10.67	5.72	1.30
1.70V	136.4	87.1	64.0	58.9	37.4	26.3	17.8	11.8	10.45	5.61	1.27
1.75V	133.9	85.5	62.8	57.8	36.6	25.7	17.5	11.6	10.34	5.50	1.24
1.80V	128.7	82.2	60.4	55.6	35.2	24.8	16.8	11.1	10.01	5.45	1.22

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

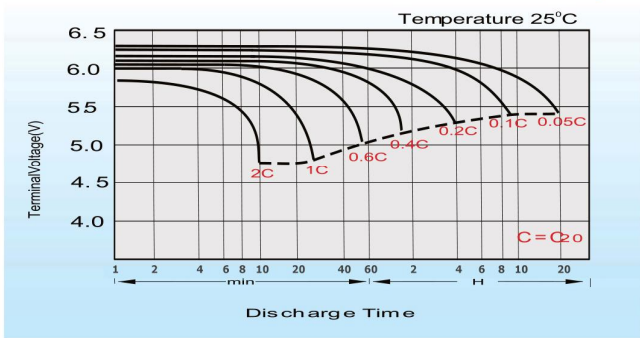
F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	272.5	174.0	127.9	117.4	74.6	52.4	35.6	23.4	21.0	11.4	2.54
1.67V	267.5	170.8	125.5	115.3	73.3	51.5	35.0	23.1	20.6	11.1	2.49
1.70V	262.6	167.6	123.2	113.1	71.9	50.5	34.3	22.7	20.2	11.1	2.44
1.75V	257.6	164.5	120.9	111.0	70.5	49.5	33.7	22.2	19.8	10.9	2.40
1.80V	247.7	158.2	116.3	106.7	67.9	47.6	32.5	21.3	19.0	10.6	2.35

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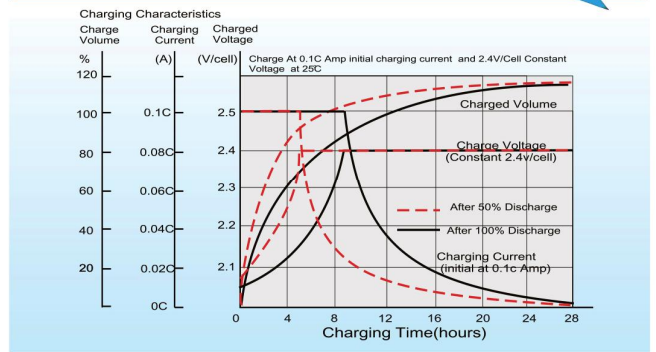
## Dimensions



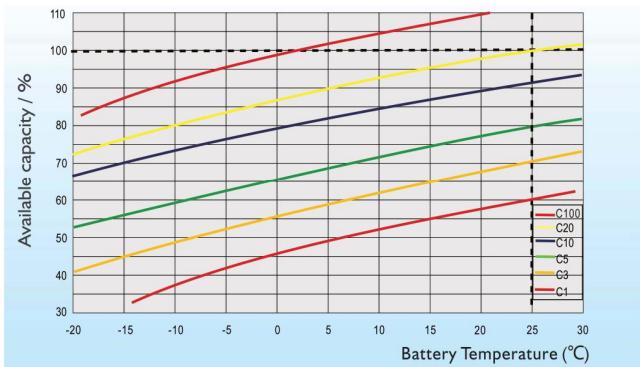
## Discharge Characteristics



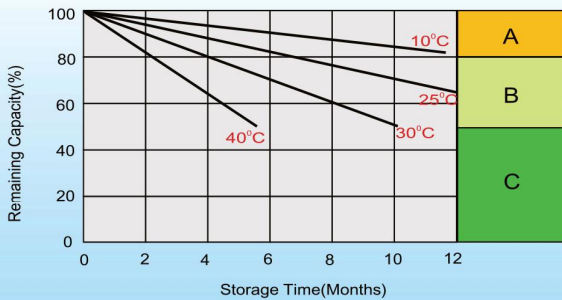
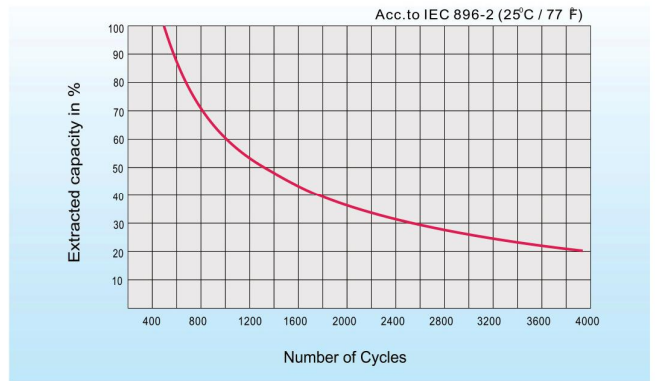
## Charging Characteristics



## 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.)
- B** Supplementary charge required before use. Optional charging way as below:
  1. Charged for above 3 days at limited current 0.25CA and constant volatge 2.25V/cell.
  2. Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.
  3. Charged for 8-10hours 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.