

## EDC12-270 (12V 270Ah)

### Specifications

Nominal Voltage	12V	
Nominal Capacity(20 Hr)	270Ah	
Dimension	Length	520±1mm( 20.47 inches)
	Width	268±1mm( 10.55 inches)
	Container Height	220±1mm( 8.66 inches)
	Total Height (With terminal)	224±1mm( 8.82 inches)
Approx Weight	Approx. 77.0kgs (169.75 lbs)	
Design life	12 years	
Terminal	M8	
Container Material	ABS	
Rated Capacity	270.00Ah/7.50A	(13.5, 1.75V/Cell, 25 °C/77°F)
	245.08Ah/24.51A	(10hr, 1.80V/Cell, 25 °C/77°F)
	213.84Ah/42.77A	(5hr, 1.75V/Cell, 25 °C/77°F)
	148.90Ah/148.9A	(1hr, 1.60V/Cell, 25 °C/77°F)
Max. Discharge Current	2700A(5s)	
Internal Resistance	Appro≤2.8mΩ	
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 43.2A. 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	EDC 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
<b>1.60V</b>	334.6	213.7	157.0	144.6	91.8	64.5	43.7	28.9	25.74	13.78	3.12
<b>1.67V</b>	328.6	209.8	154.2	141.7	90.0	63.2	42.9	28.3	25.22	13.52	3.07
<b>1.70V</b>	322.4	205.9	151.3	139.1	88.4	62.1	42.1	27.8	24.70	13.26	2.99
<b>1.75V</b>	316.4	202.0	148.5	136.5	86.6	60.8	41.3	27.3	24.44	13.00	2.94
<b>1.80V</b>	304.2	194.2	142.7	131.3	83.2	58.5	39.8	26.3	23.66	12.87	2.89

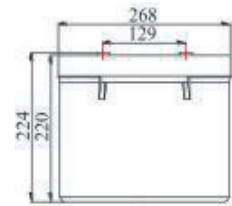
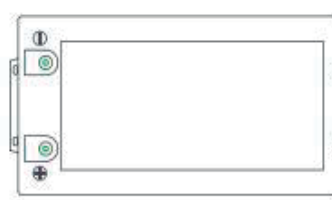
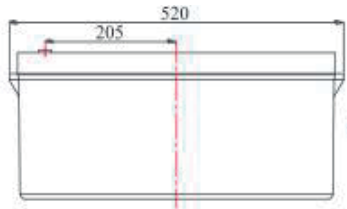
### Constant Power Discharge (Watts) at 25 °C ( 77F )

F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
<b>1.60V</b>	644.0	411.3	302.4	277.4	176.3	123.8	84.2	55.4	49.7	26.9	6.01
<b>1.67V</b>	632.3	403.8	296.7	272.5	173.2	121.7	82.7	54.6	48.6	26.3	5.88
<b>1.70V</b>	620.6	396.2	291.2	267.3	170.0	119.3	81.1	53.6	47.8	26.1	5.77
<b>1.75V</b>	608.9	388.7	285.7	262.3	166.7	117.0	79.6	52.5	46.8	25.7	5.67
<b>1.80V</b>	585.5	373.9	274.8	252.2	160.4	112.6	76.7	50.4	45.0	25.0	5.56

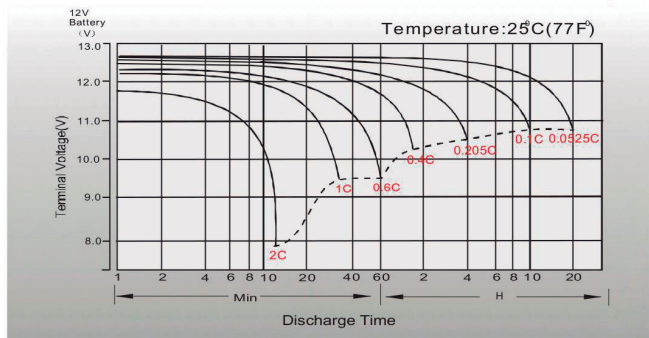
# EDC12-270 (12V 270Ah)

## Deep Cycle Batteries

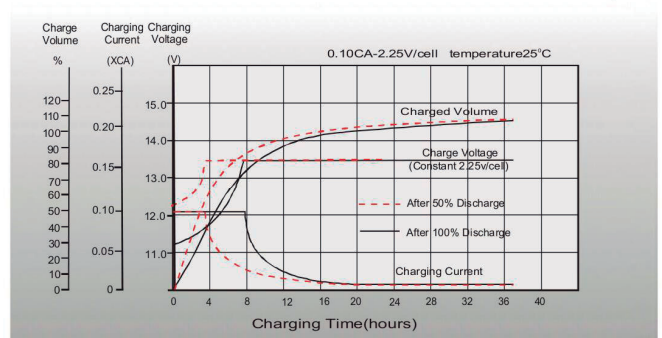
### Dimensions



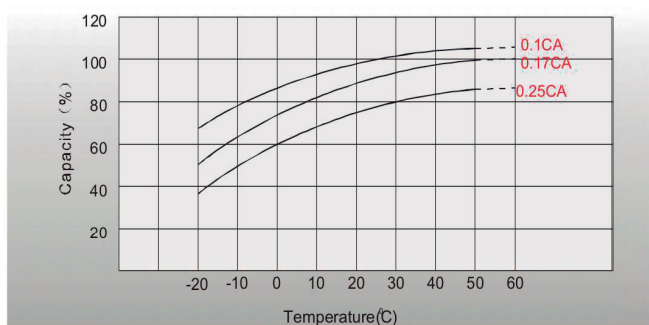
### Discharge Characteristics



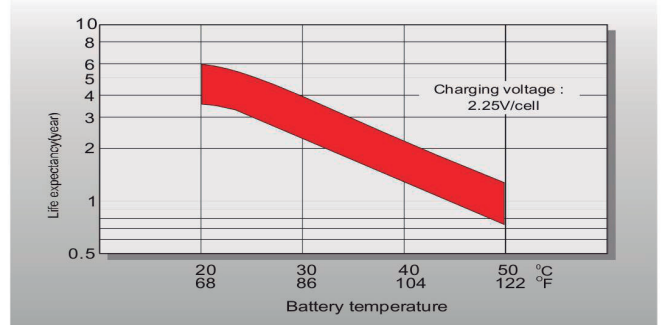
### Float Charging Characteristics



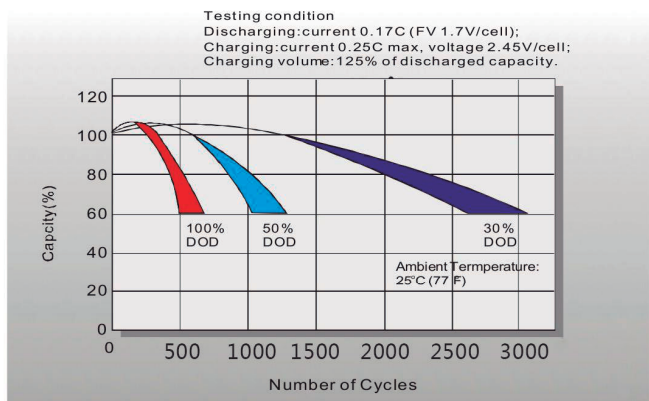
### Temperature Effects in Relation to Battery Capacity



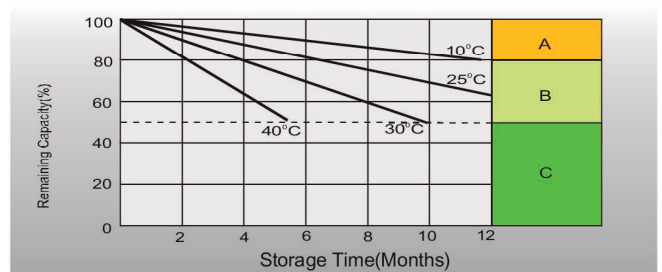
### Effect of Temperature on Long Term Float Life



### 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 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.