

## EDC12-14 (12V 14Ah)

### Specifications

Nominal Voltage	12V	
Nominal Capacity(20 Hr)	14Ah	
Dimension	Length	152±1mm( 5.98 inches)
	Width	99±1mm( 3.90 inches)
	Containeriner Height	96±1mm( 3.78 inches)
	Total Height (With terminal)	102±1mm( 4.02 inches)
	Approx Weight	Approx3.8kgs( 8.38 lbs)
Design life	8 years	
Terminal	F2	
Container Material	ABS	
Rated Capacity	14.0Ah/0.36A	(20hr, 1.75V/Cell, 25 °C/77°F)
	13.2Ah/1.32A	(10hr, 1.80V/Cell, 25 °C/77°F)
	12.0Ah/2.40A	(5hr, 1.75V/Cell, 25 °C/77°F)
	9.14Ah/9.14A	(1hr, 1.60V/Cell, 25 °C/77°F)
Max. Discharge Current	210A(5s)	
Internal Resistance	Appro≤15.0mΩ	
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 3.78 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	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	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
<b>1.60V</b>	58.0	36.6	26.9	15.97	11.64	9.14	5.78	3.96	2.64	1.77	1.40	0.740
<b>1.67V</b>	54.9	35.1	26.3	15.70	11.45	8.84	5.68	3.88	2.60	1.74	1.38	0.726
<b>1.70V</b>	52.0	33.2	26.0	15.49	11.31	8.56	5.56	3.82	2.54	1.70	1.36	0.714
<b>1.75V</b>	49.6	31.7	24.6	14.98	11.01	8.30	5.46	3.74	2.50	1.69	1.34	0.700
<b>1.80V</b>	45.8	29.5	22.9	14.38	10.65	8.06	5.26	3.60	2.40	1.64	1.32	0.692

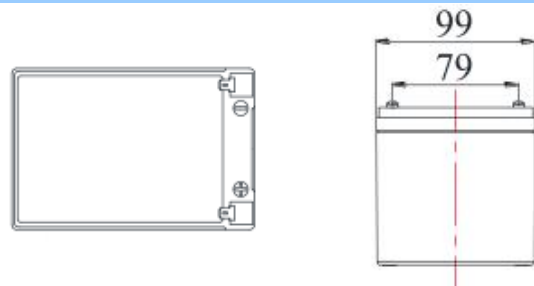
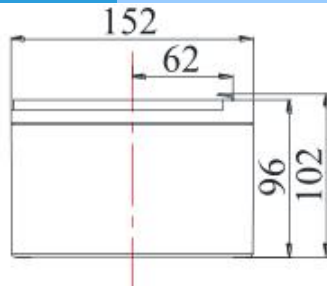
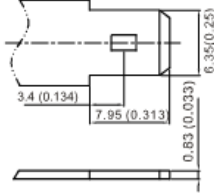
### Constant Power Discharge (Watts) at 25 °C ( 77F )

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
<b>1.60V</b>	104.06	70.32	52.00	31.06	22.72	17.98	11.34	7.81	5.23	3.53	2.81	1.476
<b>1.67V</b>	99.72	67.47	51.00	30.62	22.42	17.36	11.14	7.67	5.13	3.49	2.78	1.454
<b>1.70V</b>	95.62	63.82	50.42	30.28	22.20	16.74	10.93	7.52	5.05	3.43	2.76	1.436
<b>1.75V</b>	91.60	60.93	47.84	29.36	21.66	16.12	10.73	7.38	4.94	3.40	2.71	1.406
<b>1.80V</b>	85.40	56.99	44.72	28.28	21.00	15.50	10.30	7.09	4.76	3.31	2.69	1.400

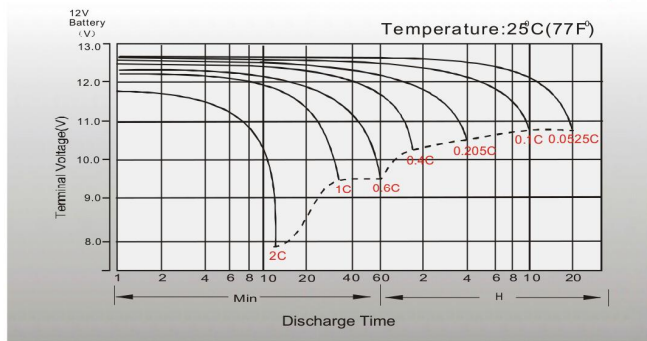
EDC12-14 (12V 14Ah)

Dimensions

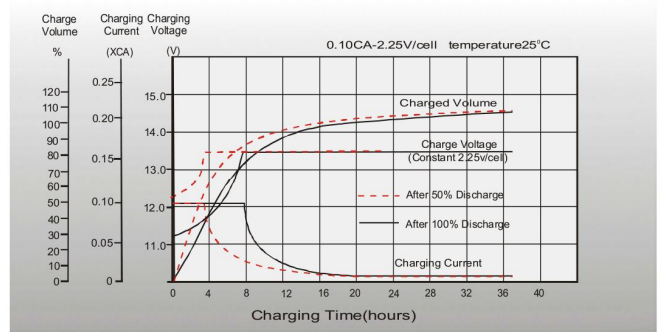
F2 Terminal  
Unit: mm [inches]



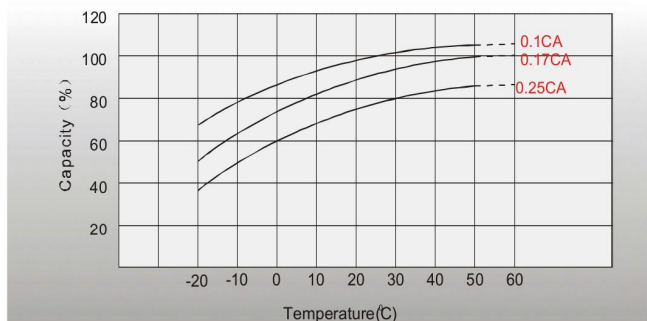
Discharge Characteristics



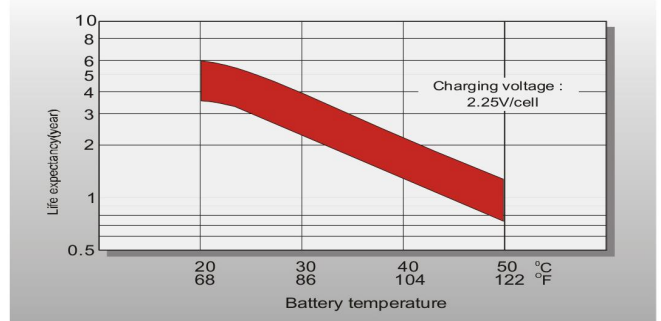
Float Charging Characteristics



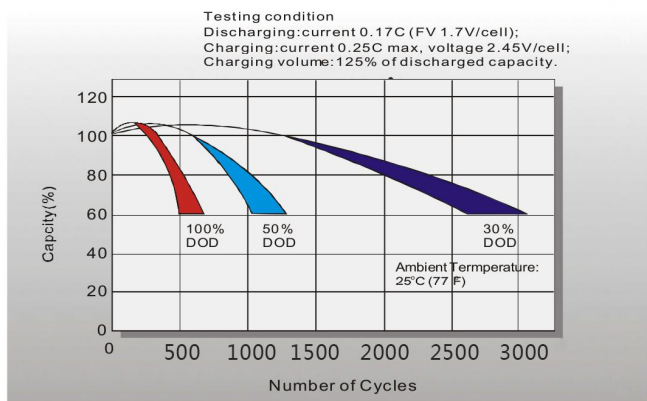
Temperature Effects in Relation to Battery Capacity



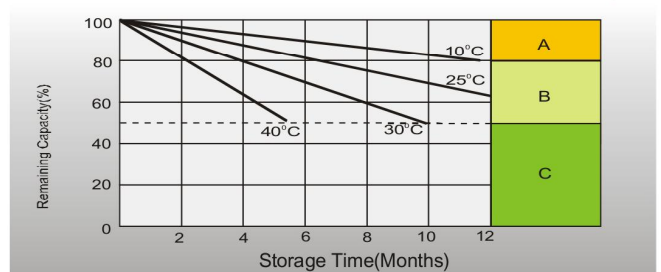
Effect of Temperature on Long Term Float Life



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.