# EDC12-110 (12V 130Ah)

**Deep Cycle Batteries**

## Specifications

| | | |
|---|---|---|
| Nominal Voltage | 12V | |
| Nominal Capacity(20 Hr) | 130Ah | |
| Dimension | Length | 331±1mm( 13.03 inches) |
| | Width | 176±1mm( 6.93 inches) |
| | Containeriner Height | 215±1mm( 8.46 inches) |
| | Total Height (With terminal) | 220±1mm( 8.66 inches) |
| Approx Weight | Approx32.5kgs(71.65 lbs) | |
| Design life | 12 years | |
| Terminal | M8 + AP | |
| Container Material | ABS | |
| Rated Capacity | 130.0Ah/6.50A | (20hr, 1.75V/Cell, 25 ℃/77℉) |
| | 115.7Ah/11.57A | (10hr, 1.80V/Cell, 25 ℃/77℉) |
| | 102.9Ah/20.59A | (5hr, 1.75V/Cell, 25 ℃/77℉) |
| | 73.4Ah/73.40A | (1hr, 1.60V/Cell, 25 ℃/77℉) |
| Max. Discharge Current | 1100A(5s) | |
| Internal Resistance | Appro≤5.5mΩ | |
| Operating Temp. Range | Discharge: -20 ℃~50 ℃ | |
| | Charge: 0 ℃~40 ℃ | |
| | Storage: -20 ℃~50 ℃ | |
| Nominal Operating Temp. Range | 25±3 ℃(77±5℉ ) | |
| Cycle Use | Initial Charging Current Less than 19.8 A. Voltage 14.4V-15.0V at 25 ℃(77℉ ) Temp. Coefficient-20mV/C | |
| Standby Use | No limit on Intital Charging Current Voltage 13.5V-13.8V at 25 ℃(77℉ ) Temp. Coefficient-20mV/C | |
| Capacity affected by Temperature | 40 ℃( 104℉ ) | 103% |
| | 25 ℃( 77℉ ) | 100% |
| | 0 ℃( 32℉ ) | 86% |
| Self Discharge | EDC series batteries may be stored for up to 6 months at25 ℃(77℉ ) 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 security system
- Electronic apparatus & equipment
- Communication power supply
- DC power supply
- Auto controlsystem

## Constant Current Discharge (Amperes) at 25 ℃ ( 77F )

| F.V/Time | 15min | 30min | 45min | 1h | 2h | 3h | 5h | 8h | 10h | 20h | 100h |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.60V | 169.40 | 108.59 | 79.27 | 73.40 | 45.90 | 32.13 | 21.85 | 13.78 | 12.52 | 6.76 | 1.51 |
| 1.67V | 164.09 | 105.19 | 76.79 | 71.10 | 45.00 | 31.50 | 21.42 | 13.50 | 12.28 | 6.53 | 1.49 |
| 1.70V | 160.88 | 103.13 | 75.28 | 69.71 | 44.12 | 30.88 | 21.00 | 13.24 | 12.03 | 6.50 | 1.45 |
| 1.75V | 157.74 | 101.11 | 73.81 | 68.34 | 43.26 | 30.28 | 20.59 | 12.98 | 11.80 | 6.37 | 1.43 |
| 1.80V | 154.60 | 99.10 | 72.34 | 66.98 | 42.39 | 29.68 | 20.18 | 12.73 | 11.57 | 6.25 | 1.40 |

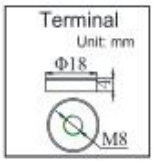
## Constant Power Discharge (Watts) at 25 ℃ ( 77F )

| 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 |

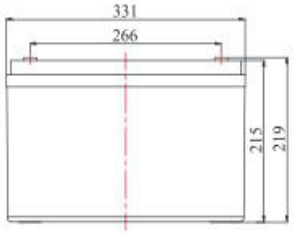
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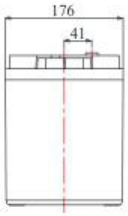
**Deep Cycle Batteries**

## Dimensions

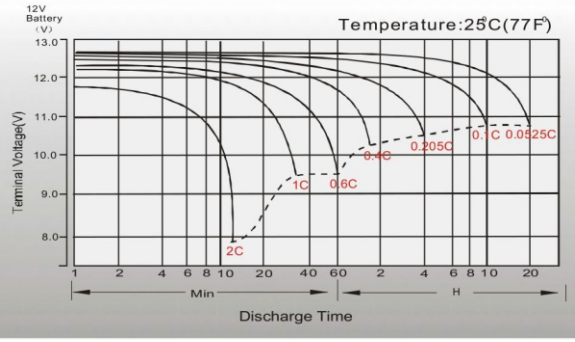




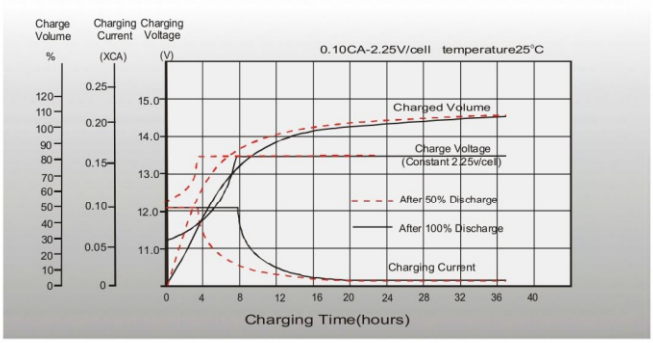



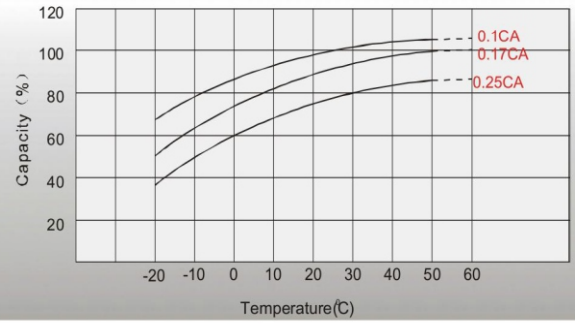

## Discharge Characteristics



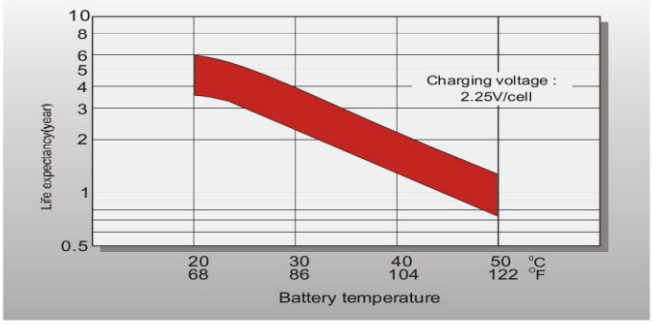

## Float Charging Characteristics



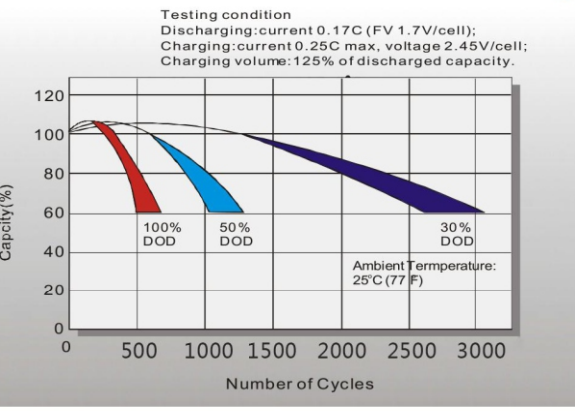

## Temperature Effects in Relation to Battery Capacity



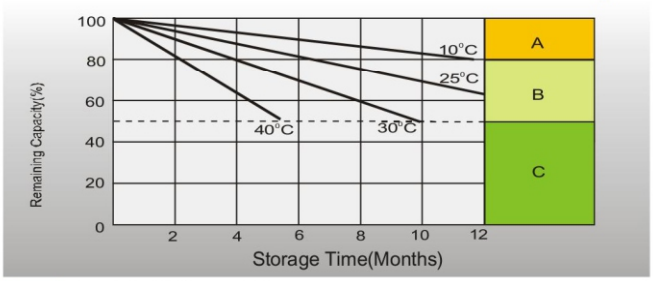

## Effect of Temperature on Long Term Float Life




## 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 limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20 hours at limted current 0.25CA and constant volatge 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.