

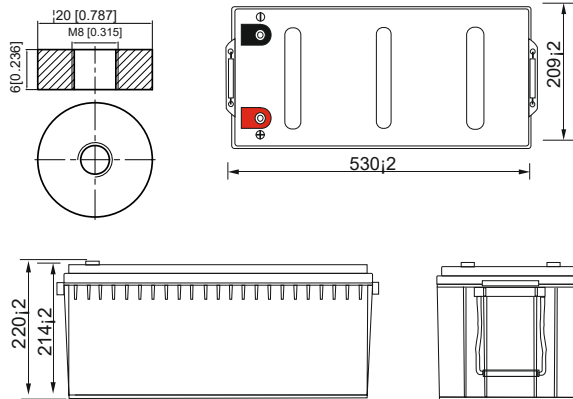
# 12ET180L (12V 180Ah Battery)

Floating Life at 20°C designed for 12+ years

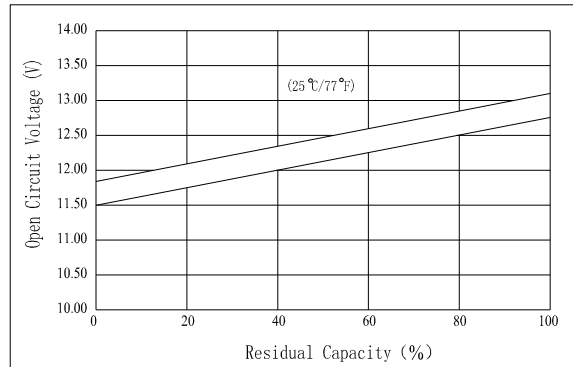
## Dimensions

### T11 Terminal

Unit: mm [inches]



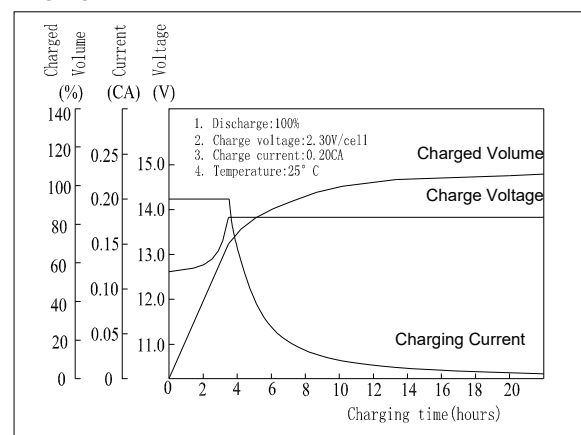
## The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



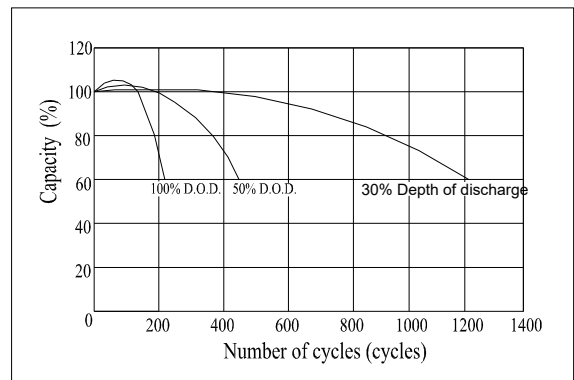
## Specifications

|                                           |              |                            |
|-------------------------------------------|--------------|----------------------------|
| Nominal Voltage                           |              | 12V                        |
| Capacity (20hr@25°C@1.8V/C)               |              | 187Ah                      |
| Dimensions                                | Length       | 530mm (20.87inch)          |
|                                           | Width        | 209mm (8.23inch)           |
|                                           | Height       | 214mm (8.42inch)           |
|                                           | Total Height | 220mm (8.66inch)           |
| Approx. Weight                            |              | 52.8kg (116.4lbs)          |
| Maximum charging current                  |              | 54A                        |
| Maximum discharge current                 |              | 1800A (5sec.)              |
| Internal resistance (Fully charged, 25°C) |              | Approx. 3mΩ                |
| Capacity affected by temperature (10hr)   | 40°C         | 102%                       |
|                                           | 25°C         | 100%                       |
|                                           | 0°C          | 85%                        |
|                                           | -15°C        | 65%                        |
| Self-discharge (25°C)                     | 3 month      | Remaining Capacity: 91%    |
|                                           | 6 month      | Remaining Capacity: 82%    |
|                                           | 12 month     | Remaining Capacity: 65%    |
| Nominal operating temperature             |              | 25°C ±3°C (77°F±5°F)       |
| Operating temperature range               |              | -15°C ~ 50°C (5°F ~ 122°F) |
| Float charging voltage (25°C)             |              | 13.65 to 13.80V            |
| Cyclic charging voltage (25°C)            |              | 14.50 to 14.90V            |
| Terminal material                         |              | Copper                     |

## Charging Characteristics (25°C)



## Cycle Life (25°C)



## Constant Current Discharge Characteristics (Ampere / Battery, 25°C)

| F.V/TIME | 5min  | 10min | 15min | 30min | 1h    | 3h   | 5h    | 10h   | 20h  |
|----------|-------|-------|-------|-------|-------|------|-------|-------|------|
| 9.60V    | 624,5 | 434,3 | 330,0 | 194,4 | 109,8 | 51,7 | 33,75 | 18,94 | 9,81 |
| 10.2V    | 513,4 | 370,6 | 290,2 | 174,6 | 102,6 | 48,2 | 31,79 | 18,36 | 9,63 |
| 10.8V    | 413,5 | 309,5 | 248,9 | 161,6 | 95,1  | 46,0 | 30,22 | 18,00 | 9,36 |

## Constant Power Discharge Characteristics (Watt / Battery, 25°C)

| F.V/TIME | 5min   | 10min  | 15min  | 30min  | 1h     | 3h    | 5h    | 10h    | 20h    |
|----------|--------|--------|--------|--------|--------|-------|-------|--------|--------|
| 9.60V    | 6211,2 | 4428,6 | 3465   | 2127   | 1238,4 | 592,8 | 390,6 | 223,32 | 115,92 |
| 10.2V    | 5302,8 | 3904,2 | 3122,4 | 1939,2 | 1171,8 | 556,8 | 370,2 | 217,26 | 114,06 |
| 10.8V    | 4488   | 3389,4 | 2748,6 | 1819,2 | 1094,4 | 534,6 | 354   | 213,42 | 111,06 |