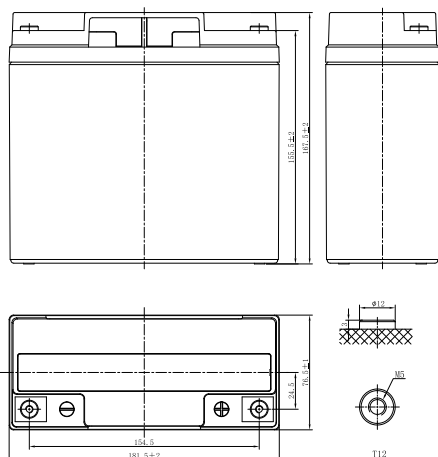




## OT 18-12 (12V-18AH / 85W )

### CHARACTERISTICS



| Item                          |                      | Specifications                |
|-------------------------------|----------------------|-------------------------------|
| Rated Voltage                 |                      | 12V                           |
| Nominal Rate (25°C)           | $W_{15}, 1.67V/cell$ | 85W/cell                      |
| Nominal Capacity (25°C)       | $C_{10}, 1.80V/cell$ | 18.6Ah                        |
| Dimension                     | Length               | 181.5mm (7.15inches)          |
|                               | Width                | 76.5mm (3.01inches)           |
|                               | Container Height     | 167.5mm (6.59inches)          |
|                               | Total Height         | 167.5mm (6.59inches)          |
| Approx Weight                 |                      | 6.00kg (13.2lbs)              |
| Terminal                      |                      | T12/T12-L(M5)                 |
| Container Material            |                      | ABS (UL94 HB or V-0 optional) |
| Short-circuit current         |                      | 520.8A                        |
| Internal Resistance (25°C)    |                      | Approx 14 mΩ (Fully charged)  |
| Operating Temp. Range         | Discharge            | -20~55°C (-4~131°F)           |
|                               | Charge               | -20~40°C (-4~104°F)           |
|                               | Storage              | -15~50°C (5~122°F)            |
| Nominal Operating Temp. Range |                      | 25±3°C (77±5°F)               |
| Max.Charging Current (25°C)   |                      | 0.25C                         |
| Charge voltage (25°C)         | Float Charge         | Equalization Charge           |
|                               | 2.25-2.30V/cell      | 2.30-2.40V/cell               |
| Temp. Coefficient             | -3mV/cell/°C         | -4mV/cell/°C                  |
|                               | 40°C (104°F)         | 106%                          |
| Effect of temp. to Capacity   | 25°C (77°F)          | 100%                          |
|                               | 0°C (32°F)           | 86%                           |
| Self Discharge                |                      | ≤3% per month at 25°C (77°F)  |

### DISCHARGE TABLE

| Constant Current Discharge (Amperes) at 25°C (77°F)  |       |       |       |       |       |       |      |      |      |      |      |      |      |      |
|------------------------------------------------------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| F.V/Time                                             | 5min  | 10min | 15min | 20min | 30min | 45min | 1h   | 1.5h | 2h   | 3h   | 4h   | 5h   | 8h   | 10h  |
| 1.85V/cell                                           | 52.6  | 37.4  | 32.4  | 26.3  | 18.5  | 13.7  | 10.9 | 7.90 | 6.33 | 4.74 | 3.75 | 3.12 | 2.13 | 1.74 |
| 1.80V/cell                                           | 61.4  | 44.1  | 37.7  | 30.3  | 21.0  | 15.4  | 12.1 | 8.65 | 6.88 | 5.12 | 4.04 | 3.36 | 2.28 | 1.86 |
| 1.75V/cell                                           | 66.9  | 47.3  | 39.9  | 31.8  | 21.9  | 16.0  | 12.6 | 8.94 | 7.09 | 5.26 | 4.14 | 3.44 | 2.32 | 1.89 |
| 1.70V/cell                                           | 72.5  | 50.5  | 42.2  | 33.5  | 22.9  | 16.6  | 13.0 | 9.24 | 7.32 | 5.41 | 4.24 | 3.52 | 2.36 | 1.92 |
| 1.67V/cell                                           | 75.8  | 52.5  | 43.5  | 34.4  | 23.4  | 17.0  | 13.3 | 9.41 | 7.44 | 5.50 | 4.30 | 3.56 | 2.39 | 1.94 |
| 1.60V/cell                                           | 83.6  | 56.9  | 46.6  | 36.5  | 24.7  | 17.8  | 13.9 | 9.83 | 7.75 | 5.70 | 4.45 | 3.67 | 2.44 | 1.98 |
| Constant Power Discharge (Watts/cell) at 25°C (77°F) |       |       |       |       |       |       |      |      |      |      |      |      |      |      |
| F.V/Time                                             | 5min  | 10min | 15min | 20min | 30min | 45min | 1h   | 1.5h | 2h   | 3h   | 4h   | 5h   | 8h   | 10h  |
| 1.85V/cell                                           | 114.0 | 78.7  | 64.4  | 50.7  | 35.8  | 26.6  | 21.3 | 15.4 | 12.4 | 9.28 | 7.36 | 6.15 | 4.21 | 3.45 |
| 1.80V/cell                                           | 128.8 | 90.6  | 73.9  | 57.9  | 40.2  | 29.6  | 23.4 | 16.8 | 13.4 | 10.0 | 7.91 | 6.60 | 4.50 | 3.68 |
| 1.75V/cell                                           | 138.9 | 95.6  | 77.2  | 60.1  | 41.6  | 30.5  | 24.1 | 17.2 | 13.7 | 10.2 | 8.08 | 6.73 | 4.57 | 3.73 |
| 1.70V/cell                                           | 147.6 | 100.4 | 81.7  | 62.7  | 43.1  | 31.4  | 24.8 | 17.7 | 14.1 | 10.5 | 8.25 | 6.86 | 4.64 | 3.78 |
| 1.67V/cell                                           | 153.0 | 103.2 | 85.0  | 64.0  | 43.9  | 32.0  | 25.2 | 17.9 | 14.3 | 10.6 | 8.35 | 6.93 | 4.68 | 3.81 |
| 1.60V/cell                                           | 155.2 | 109.9 | 87.7  | 67.2  | 45.8  | 33.3  | 26.2 | 18.6 | 14.8 | 10.9 | 8.58 | 7.12 | 4.78 | 3.88 |

## APPLICATIONS

- UPS
- Hospitals and Testing Laboratories
- Emergency Power Supply
- Industrial Process Control Facilities
- Banks and Financial Markets
- Data and Network Operation Centers

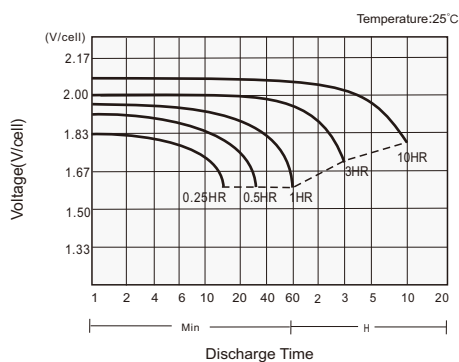
## GENERAL FEATURES

- 6 years design life (25°C)
- Excellent high current performance - optimised for short discharge time
- Advanced AGM technology for superior high-rate power
- Long Life Alloy - minimizing grid growth, reducing gassing, and extending battery life
- Epoxy-sealed posts eliminate leaks
- Optimal energy density - saves floor space

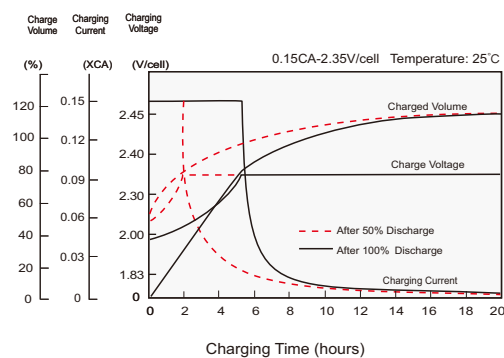
## STANDARDS

- Compliance with IEC 60896 standards
- Classified as "General Purpose" according to Eurobat
- CE,UL ,TSE Approved

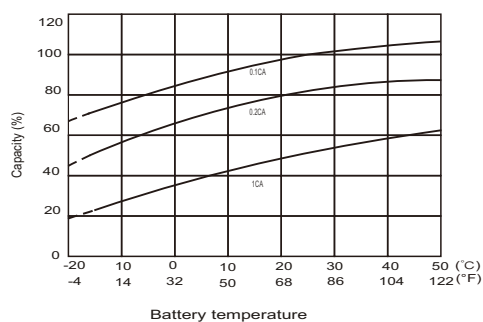
### Discharge Characteristics



### Charging Characteristics



### Effects of Temperature on Capacity



### Self Discharge Characteristics

