THE ENERGY DOCTOR®

TED

BATTERY EXPERTS

# TECHNICAL DATA SHEET

## TED 1215EV 12V 15Ah




- Long cycle life: approx. 400–600 cycles 100% DOD. Flame retardant (UL94) HBO.
- Higher energy capacity: +10% compared to standard (patent negative pasting formula).
- Better durability: less then 50% grid corrosion resistance (rare-earth patent alloy).
- Extended performance: 0% acid stratification (nano silica GEL technology).

## PHYSICAL SPECIFICATIONS

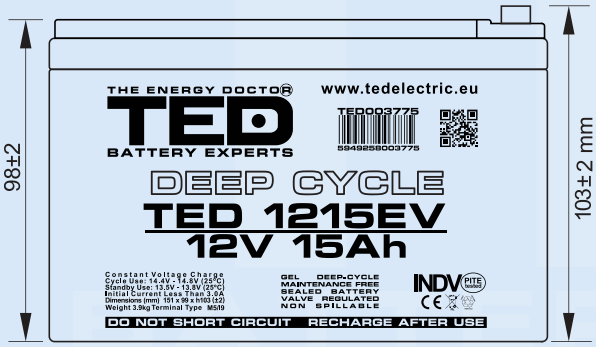
| Model | Dimensions (mm) | | | Weight (kg) | Terminal | Design Life |
|---|---|---|---|---|---|---|
| | Length | Width | Height | | | |
| TED003775 | 151 | 99 | 103 | 3.9 kg | M5/I9 | 20°C (68°F): 5-7 Years |

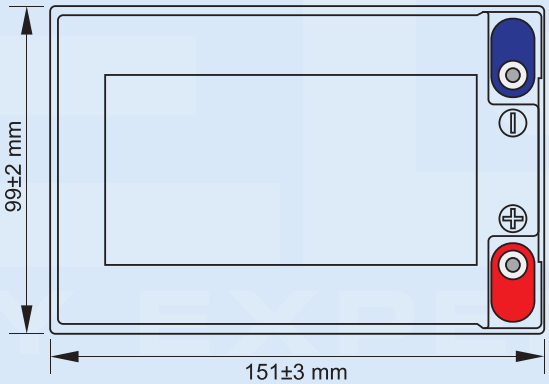
## PRODUCT SPECIFICATIONS

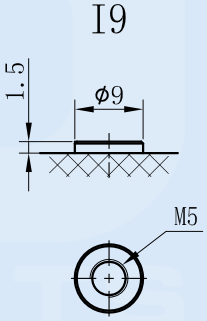
| Nominal Voltage | Rated Capacity25°C/77°C | Operating Temp.Range | Capacity Effected Temp | Capacity vs Storge Time (25°C/77°F) |
|---|---|---|---|---|
| 12V | 15Ah 20hr Rate (1.80V/cell) | Discharge: -15°C ~ 50°C | 40°C (104°F): 106% | 3 months: 90% |
| | 13.2Ah 10hr Rate (1.75V/cell) | Charge: 0°C ~ 40°C | 25°C (77°F): 100% | 6 months: 80% |
| | 12.9Ah 5hr Rate (1.75V/cell) | Storage: -15°C ~ 40°c | 0°C (32°F): 85% | 9 months: 60% |
| | 12Ah 2hr Rate (1.75V/cell) | Optimum: 25°C ± 2°C | -15°C (5°F): 72% | 12 months: 45% |

| Charging Current | Limited Voltage | Floating Voltage |
|---|---|---|
| Limited Current: ≤ 3A (0.2C₂A) | 14.6 ~ 14.8V 25°C (77°F) | 13.6 ~ 13.8V 25°C (77°F) |
| **Container Material** | **Internal Resistance** | **Maximum Discharge Current** |
| ABS UL94-HBO | ~ 12mΩ | 150A |

## PRODUCT DIMENSIONS



THE ENERGY DOCTOR®

TED

BATTERY EXPERTS

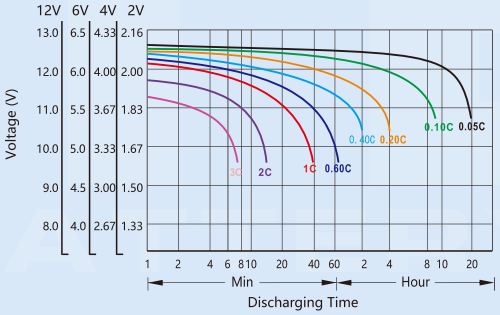
## Constant Current Discharge (A) at 25°C (77°F)

| F.V/Time | 30 min | 45 min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.85V/Cell | 16.0 | 11.5 | 9.08 | 5.19 | 3.63 | 2.81 | 2.33 | 1.99 | 1.55 | 1.26 | 0.689 |
| 1.80V/Cell | 16.6 | 11.8 | 9.35 | 5.37 | 3.71 | 2.90 | 2.43 | 2.06 | 1.59 | 1.29 | 0.750 |
| 1.75V/Cell | 17.1 | 12.2 | 9.70 | 6.00 | 4.04 | 3.03 | 2.58 | 2.16 | 1.64 | 1.32 | 0.726 |
| 1.70V/Cell | 17.5 | 12.5 | 10.0 | 6.04 | 4.08 | 3.11 | 2.60 | 2.21 | 1.68 | 1.36 | 0.742 |
| 1.67V/Cell | 17.9 | 13.0 | 10.4 | 6.10 | 4.14 | 3.18 | 2.68 | 2.25 | 1.71 | 1.38 | 0.749 |
| 1.60V/Cell | 18.4 | 13.3 | 10.6 | 6.30 | 4.28 | 3.27 | 2.71 | 2.31 | 1.76 | 1.42 | 0.755 |

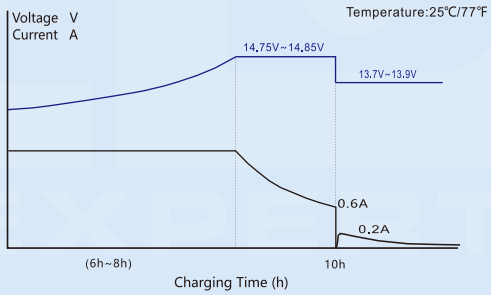
## Constant Power Discharge (W/ce11) at 25°C (77°F)

| F.V/Time | 30 min | 45 min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.85V/Cell | 31.3 | 22.5 | 18.0 | 10.3 | 7.29 | 5.66 | 4.70 | 4.02 | 3.14 | 2.56 | 1.40 |
| 1.80V/Cell | 32.3 | 23.0 | 18.4 | 10.7 | 7.42 | 5.81 | 4.87 | 4.15 | 3.21 | 2.62 | 1.52 |
| 1.75V/Cell | 33.1 | 23.9 | 19.1 | 11.9 | 8.03 | 6.06 | 5.16 | 4.34 | 3.29 | 2.66 | 1.47 |
| 1.70V/Cell | 33.7 | 24.3 | 19.6 | 11.9 | 8.07 | 6.16 | 5.17 | 4.40 | 3.35 | 2.71 | 1.49 |
| 1.67V/Cell | 34.2 | 25.0 | 20.2 | 11.9 | 8.13 | 6.28 | 5.29 | 4.46 | 3.40 | 2.74 | 1.50 |
| 1.60V/Cell | 34.8 | 25.4 | 20.4 | 12.2 | 8.35 | 6.41 | 5.32 | 4.53 | 3.46 | 2.81 | 1.51 |

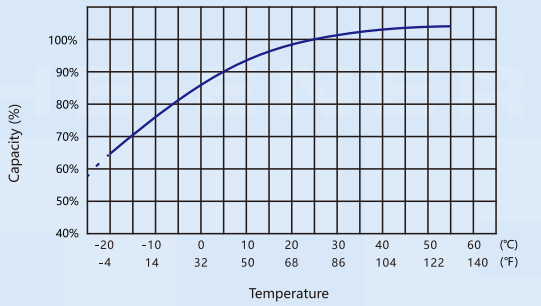
### Discharging Characteristics@25°C(77°F)



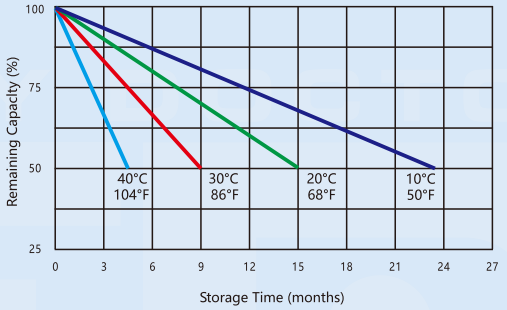

### Charging Characteristics@25°C(77°F)



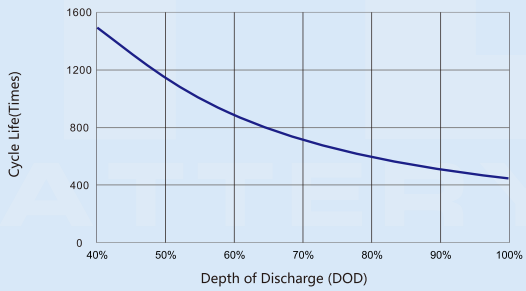

### Capacity vs Temperature




### Self-discharge vs Time




### Cycle Life vs Depth of Discharge@25°C(77°F)




### Cycle Life vs Remaining Capacity@25°C(77°F)

