

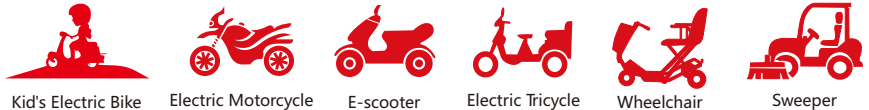
TNEP 12-41[12V41Ah]



Product Features

| Deep Cycle Long Life Series 400~600 Cycle Times @100%DOD | | |
|--|--|---|
| ↑10% Capacity Improve the content and utilization of active substances, Direct Bar-welding | Carbon Fiber | Rare-earth alloy |
| | ↑15% Discharge Power Positive Carbon Fiber | ↓50% Grid Corrosion Rare-earth patent alloy |

Product Applications



Physical Specification

| Model | Dimensions (mm/inch) | | | | Weight (kg/lbs) | Terminal | Container |
|-----------|----------------------|---------|----------|--------------|-----------------|----------|---|
| TNEP12-41 | Length | Width | Height | Total Height | 10.0/22.05 | I10 | ABS UL94-HB (Optional: FR ABS UL94-V0) |
| | 267/10.51 | 77/3.03 | 170/6.69 | 175/6.89 | | | |

Product Specifications

| Nominal Voltage | Rated Capacity 25°C/77°C | Operating Temp. Range | Capacity Effected Temp | Capacity vs Storage Time |
|-----------------|--|---|--|---|
| 12V | 41Ah 20hr Rate (1.80V/cell) 39Ah 10hr Rate (1.75V/cell) 37Ah 5hr Rate (1.75V/cell) 36Ah 3hr Rate (1.75V/cell) | Discharge: -15~50°C (5~122°F) Charge: 0~40°C (32~104°F) Storage: -15~40°C (5~104°F) Optimum: 25±3°C (77±5°F) | 40°C (104°F): 106% 25°C (77°F): 100% 0°C (32°F): 85% -15°C (5°F): 72% | Three months : 90% Six months : 80% Nine months : 60% |

Constant Current Discharge (A)@25°C (77°F)

| F.V/Time | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|------------|-------|-------|------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 44.0 | 31.3 | 25.1 | 14.4 | 11.1 | 8.67 | 6.96 | 5.92 | 4.57 | 3.73 | 1.98 |
| 1.80V/cell | 45.5 | 32.3 | 25.9 | 14.8 | 11.6 | 8.92 | 7.23 | 6.14 | 4.70 | 3.82 | 2.05 |
| 1.75V/cell | 46.7 | 33.5 | 26.8 | 15.8 | 12.0 | 9.24 | 7.40 | 6.27 | 4.83 | 3.90 | 2.09 |
| 1.70V/cell | 47.9 | 34.3 | 27.8 | 16.0 | 12.3 | 9.56 | 7.70 | 6.58 | 4.95 | 4.00 | 2.14 |
| 1.68V/cell | 48.9 | 35.4 | 28.7 | 16.2 | 12.4 | 9.65 | 7.88 | 6.61 | 5.06 | 4.07 | 2.15 |
| 1.60V/cell | 50.2 | 36.5 | 29.3 | 16.7 | 12.9 | 9.94 | 8.05 | 6.81 | 5.18 | 4.20 | 2.17 |

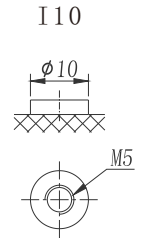
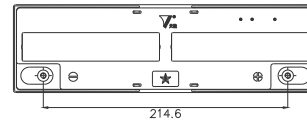
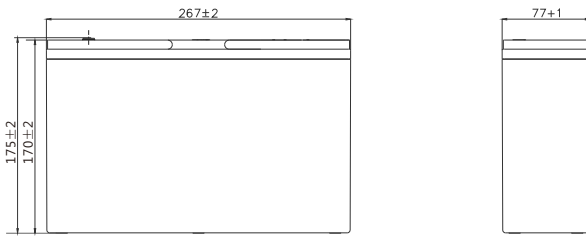
Constant Power Discharge (W/cell)@25°C (77°F)

| F.V/Time | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|------------|-------|-------|------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 85.8 | 61.6 | 49.6 | 28.6 | 22.4 | 17.5 | 14.0 | 12.0 | 9.25 | 7.56 | 4.04 |
| 1.80V/cell | 88.5 | 63.2 | 51.0 | 29.5 | 23.1 | 17.9 | 14.5 | 12.4 | 9.48 | 7.73 | 4.16 |
| 1.75V/cell | 90.6 | 65.4 | 52.7 | 31.3 | 23.9 | 18.5 | 14.8 | 12.6 | 9.72 | 7.85 | 4.22 |
| 1.70V/cell | 92.3 | 66.6 | 54.2 | 31.6 | 24.3 | 19.0 | 15.3 | 13.1 | 9.90 | 8.01 | 4.30 |
| 1.68V/cell | 93.5 | 68.2 | 55.8 | 31.7 | 24.4 | 19.0 | 15.6 | 13.1 | 10.0 | 8.09 | 4.31 |
| 1.60V/cell | 95.2 | 69.7 | 56.4 | 32.5 | 25.1 | 19.5 | 15.8 | 13.4 | 10.2 | 8.30 | 4.32 |

TNEH 12-41 [12V41Ah]

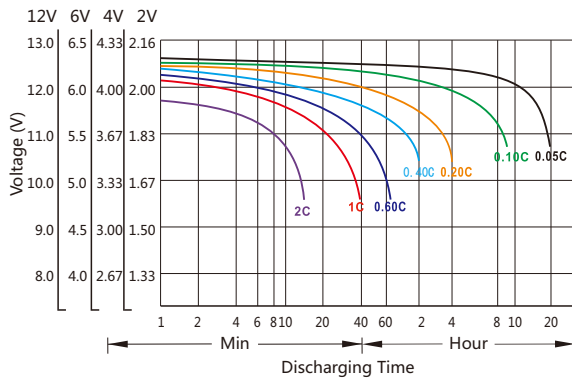


Battery Dimensions(mm)

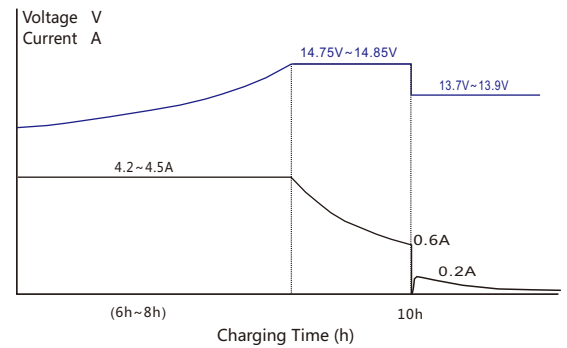


Electrical Characteristics

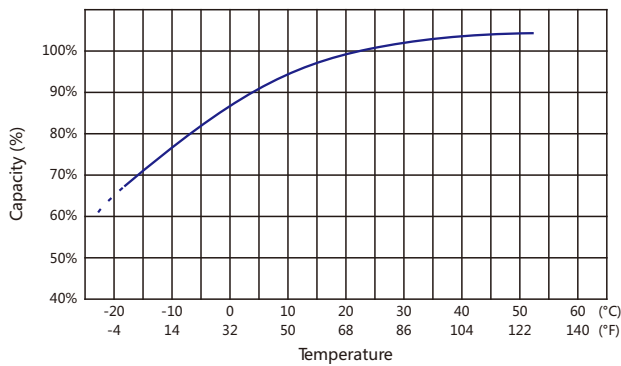
Discharging Characteristics@25°C(77°F)



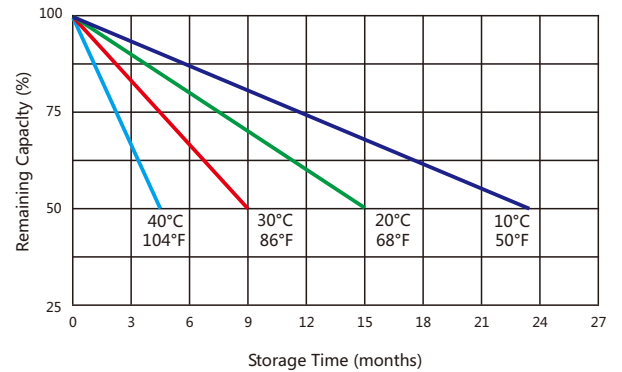
Charging Characteristics (25°C)



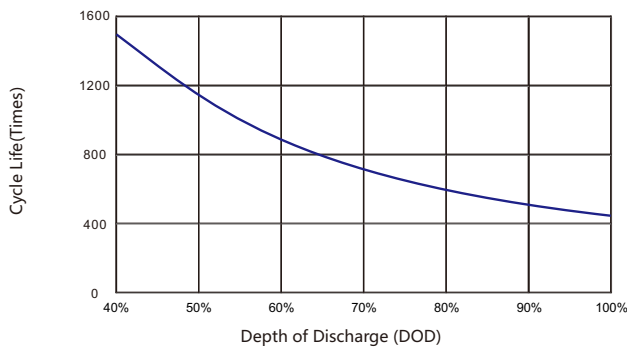
Capacity vs Temperature



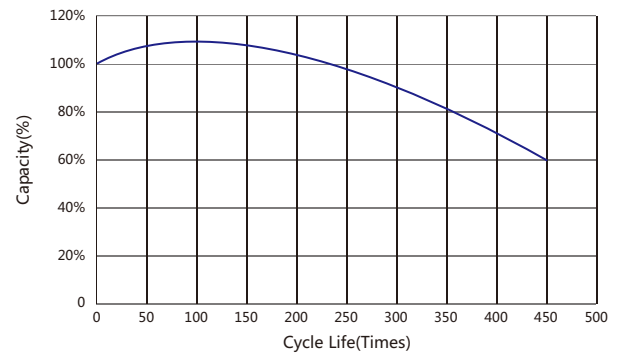
Self-discharge vs Time



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



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



Usage and Maintenance

| Limited Current | Limited Voltage | Limited Voltage |
|----------------------------------|---|---|
| Limited current : $\leq 0.2C_5A$ | 14.75~14.85V@25°C(77°F) Temp.Coefficient: -24mV/°C | 13.7~13.9V@25°C(77°F) Temp.Coefficient: -18mV/°C |