



GENERAL FEATURES

- Environmentally friendly
- Able to operate at 60°C
- Integrated design to ensure the best uniformity and reliability
- Long life and high stability under high temp. environment (no air-con needed)
- Use super-C additives: Deep discharge recovery capability

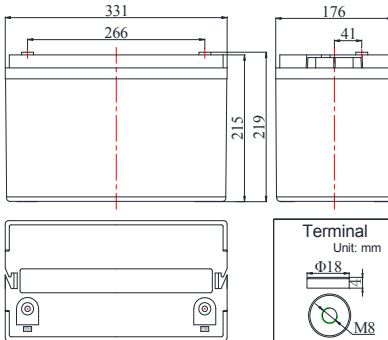
APPLICATIONS

- Solar & Wind energy system
- BTS Stations
- UPS system
- Telecom systems
- Wheel chair & Golf Car
- Marine Equipment
- Railway Systems



DIMENSIONS & WEIGHT

| | |
|------------------|---------|
| Length(mm) | 331±1 |
| Width(mm) | 176±1 |
| Height(mm) | 215±1 |
| Total Height(mm) | 219±1 |
| Weight(kg) | 33.3±3% |



COMPLIED STANDARDS

| | |
|-----------------|--------------|
| IEC 60896-21/22 | JIS C8704 |
| YD/T799 | BS6290 part4 |
| GB/T 19638 | UL 1989 |

TECHNICAL SPECIFICATIONS

Art. no: TRGD12-110

| | | |
|---|-----------------------------|--|
| Nominal Voltage | | 12V(6 cells per unit) |
| Design Floating Life @25°C | | 15 Years |
| Nominal Capacity @25°C(20 hour rate@5.50A,10.50V) | | 110Ah |
| Capacity @25°C | 10 hour rate (10.01A,10.8V) | 100.1Ah |
| | 5 hour rate (17.5A,10.5V) | 87.5Ah |
| | 1 hour rate (61.2A,9.6V) | 61.2Ah |
| Internal Resistance | Full Charged Battery@25°C | ≤6.0mΩ |
| Ambient Temperature | Discharge | -30°C~60°C |
| | Charge | -30°C~60°C |
| | Storage | -30°C~60°C |
| Max.Discharge Current@25°C | | 1100A(5s) |
| Capacity affected by Temperature (10 hr Capacity) | 40°C | 108% |
| | 25°C | 100% |
| | 0°C | 90% |
| | -15°C | 70% |
| Self-Discharge@25°C per Month | | 3% |
| Charge (Constant Voltage) @25°C | Standby Use | Initial Charging Current Less than 19.8A Voltage 13.6-13.8V |
| | Cycle Use | Initial Charging Current Less than 19.8A Voltage 14.4-14.9V |

BATTERY DISCHARGE TABLE

Discharge Constant Current per Cell (Amperes at 25°C)

| F.V/Time | 15min | 30min | 45min | 1h | 2h | 3h | 5h | 8h | 10h | 20h | 100h |
|----------|-------|-------|-------|------|------|------|------|------|-------|------|------|
| 1.60V | 141.6 | 90.4 | 66.4 | 61.2 | 38.8 | 27.3 | 18.5 | 12.2 | 10.89 | 5.83 | 1.32 |
| 1.67V | 139.0 | 88.8 | 65.2 | 60.0 | 38.1 | 26.7 | 18.2 | 12.0 | 10.67 | 5.72 | 1.30 |
| 1.70V | 136.4 | 87.1 | 64.0 | 58.9 | 37.4 | 26.3 | 17.8 | 11.8 | 10.45 | 5.61 | 1.27 |
| 1.75V | 133.9 | 85.5 | 62.8 | 57.8 | 36.6 | 25.7 | 17.5 | 11.6 | 10.34 | 5.50 | 1.24 |
| 1.80V | 128.7 | 82.2 | 60.4 | 55.6 | 35.2 | 24.8 | 16.8 | 11.1 | 10.01 | 5.45 | 1.22 |

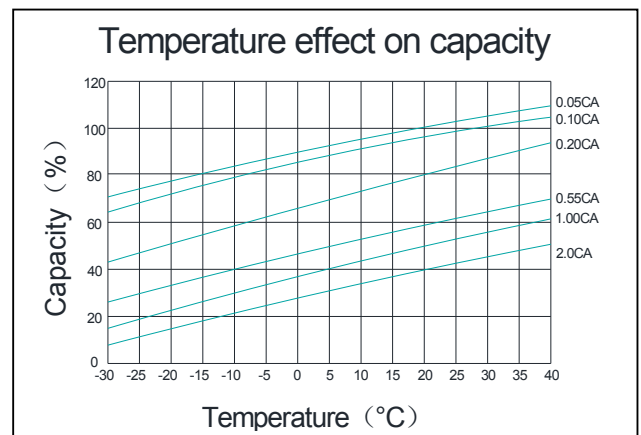
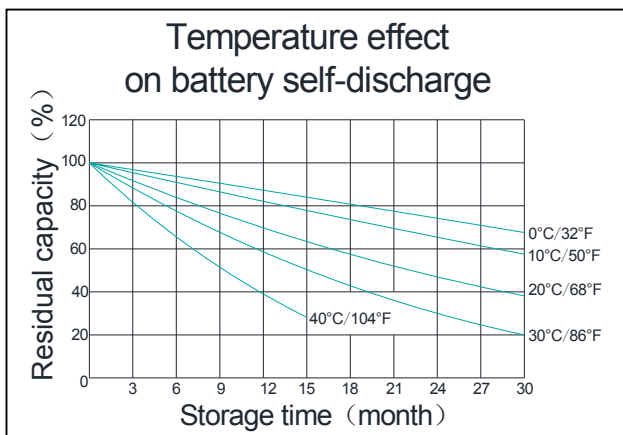
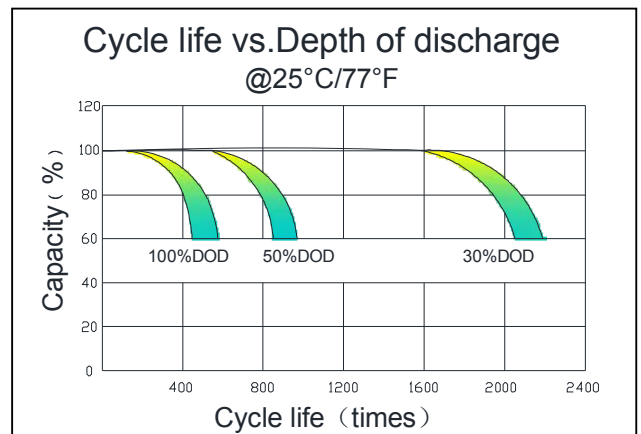
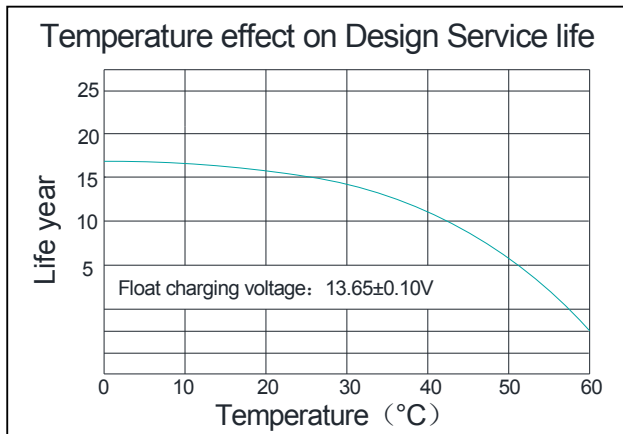
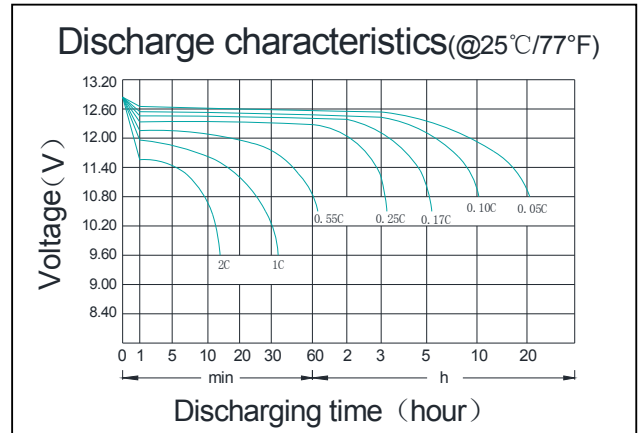
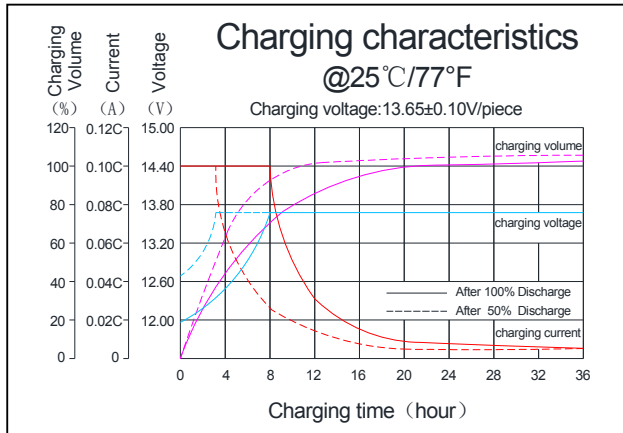
Discharge Constant Power per Cell (Watts at 25°C)

| 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 |





PERFORMANCE CHARACTERISTICS



BATTERY CONSTRUCTION

| Component | Positive plate | Negative plate | Container & Cover | Safety valve | Terminal | Separator | Electrolyte | Pillar seal |
|-----------|--|---|------------------------|-------------------------------------|---|--|---|-----------------------------|
| Features | Thick high Sn low Ca grid with special paste | Balanced Pb-Ca grid for improved recombination efficiency | ABS (UL94-V0 optional) | Flame Si-Rubbeand aging resistanter | Female Copper Insert M8(torque:7 ~9N.m) | Advanced AGM separator for high pressure cell design | Dilute high purity sulphuric acid with fumed Silica gel | Two layers epoxy resin seal |

