



GENERAL FEATURES

- Environmentally friendly
- Thick plate with high Tin low Calcium alloy
- High Reliability and Good Quality
- Deep Discharge Recovery
- High Power Density
- Long Service Life, in Float or Cyclic

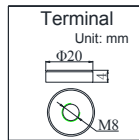
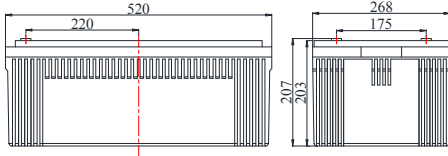
APPLICATIONS

- Solar & Wind energy system
- Cable TV Systems
- Telecom systems
- Wheel chair & Golf Car
- Marine Equipment
- Railway Systems
- Emergency Power System



DIMENSIONS & WEIGHT

| | |
|------------------|---------|
| Length(mm) | 520±1 |
| Width(mm) | 268±1 |
| Height(mm) | 203±1 |
| Total Height(mm) | 207±1 |
| Weight(kg) | 71.0±3% |



COMPLIED STANDARDS

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

TECHNICAL SPECIFICATIONS

Art. no: TRAD12-240

| | | |
|----------------------------------------------------|-----------------------------|-----------------------|
| Nominal Voltage | | 12V(6 cells per unit) |
| Design Floating Life @25°C | | 12 Years |
| Nominal Capacity @25°C(20 hour rate@12.00A,10.50V) | | 240Ah |
| Capacity @25°C | 10 hour rate (21.84A,10.8V) | 218.4Ah |
| | 5 hour rate (38.20A,10.5V) | 191.0Ah |
| | 1 hour rate (133.4A,9.6V) | 133.4Ah |
| Internal Resistance | Full Charged Battery@25°C | ≤3.0mΩ |
| Ambient Temperature | Discharge | -20°C~50°C |
| | Charge | -20°C~50°C |
| | Storage | -20°C~50°C |
| Max.Discharge Current@25°C | | 2400A(5s) |
| Capacity affected by Temperature (10 hr Capacity) | 40°C | 102% |
| | 25°C | 100% |
| | 0°C | 85% |
| | -15°C | 65% |
| Self-Discharge@25°C per Month | | 3% |

| | | |
|---------------------------------|-------------|----------------------------------------------------------------|
| Charge (Constant Voltage) @25°C | Standby Use | Initial Charging Current Less than 43.2A Voltage 13.6-13.8V |
| | Cycle Use | Initial Charging Current Less than 43.2A 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 | 308.9 | 197.3 | 145.0 | 133.4 | 84.7 | 59.5 | 40.3 | 26.6 | 23.76 | 12.72 | 2.88 |
| 1.67V | 303.4 | 193.7 | 142.3 | 130.8 | 83.0 | 58.3 | 39.6 | 26.2 | 23.28 | 12.48 | 2.83 |
| 1.70V | 297.6 | 190.1 | 139.7 | 128.4 | 81.6 | 57.4 | 38.9 | 25.7 | 22.80 | 12.24 | 2.76 |
| 1.75V | 292.1 | 186.5 | 137.0 | 126.0 | 79.9 | 56.2 | 38.2 | 25.2 | 22.56 | 12.00 | 2.71 |
| 1.80V | 280.8 | 179.3 | 131.8 | 121.2 | 76.8 | 54.0 | 36.7 | 24.2 | 21.84 | 11.88 | 2.66 |

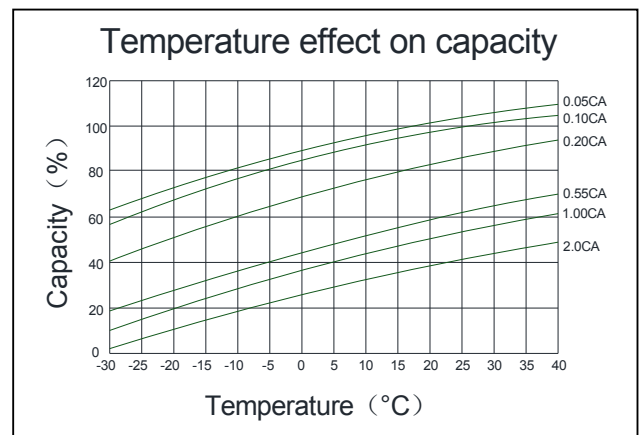
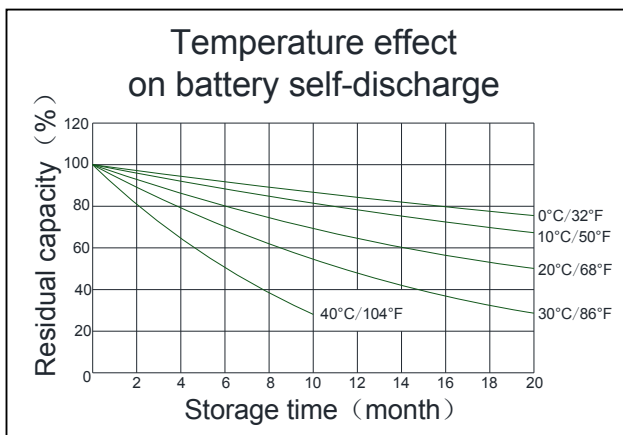
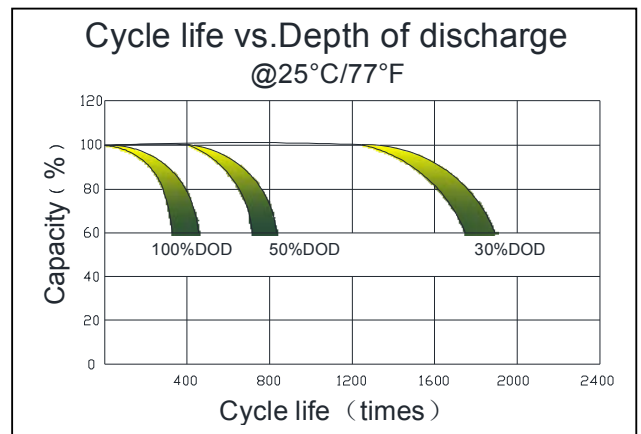
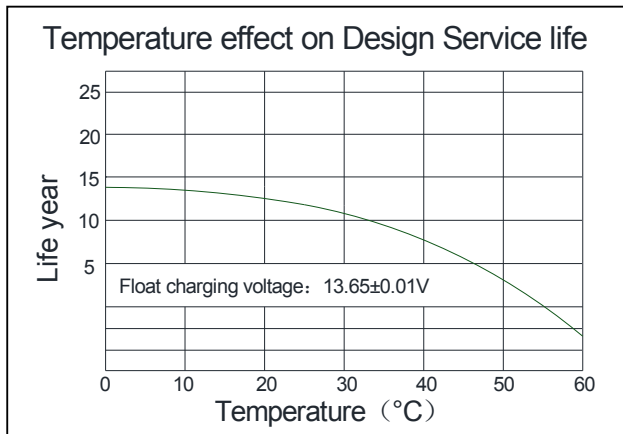
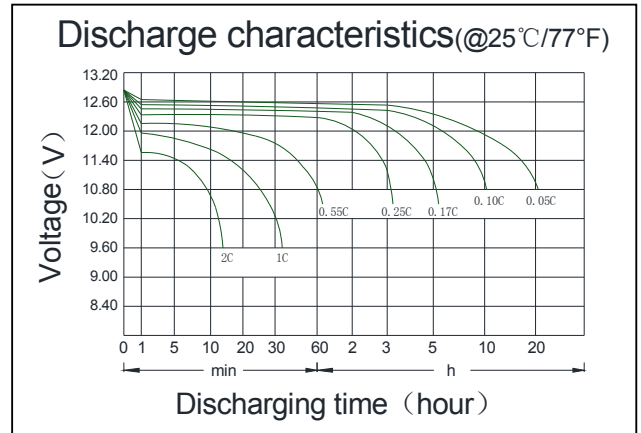
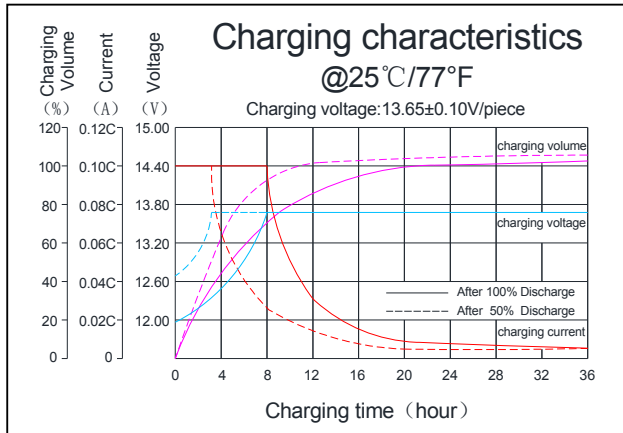
Discharge Constant Power per Cell (Watts at 25°C)

| F.V/Time | 15min | 30min | 45min | 1h | 2h | 3h | 5h | 8h | 10h | 20h | 100h |
|----------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 1.60V | 594.5 | 379.7 | 279.1 | 256.1 | 162.7 | 114.2 | 77.8 | 51.1 | 45.8 | 24.8 | 5.54 |
| 1.67V | 583.7 | 372.7 | 273.8 | 251.5 | 159.8 | 112.3 | 76.3 | 50.4 | 44.9 | 24.3 | 5.42 |
| 1.70V | 572.9 | 365.8 | 268.8 | 246.7 | 157.0 | 110.2 | 74.9 | 49.4 | 44.2 | 24.1 | 5.33 |
| 1.75V | 562.1 | 358.8 | 263.8 | 242.2 | 153.8 | 108.0 | 73.4 | 48.5 | 43.2 | 23.8 | 5.23 |
| 1.80V | 540.5 | 345.1 | 253.7 | 232.8 | 148.1 | 103.9 | 70.8 | 46.6 | 41.5 | 23.0 | 5.14 |





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 resistancer | Female Copper Insert M8(torque:7 ~9N.m) | Advanced AGM separator for high pressure cell design | Dilute high purity sulphuric acid | Two layers epoxy resin seal |

