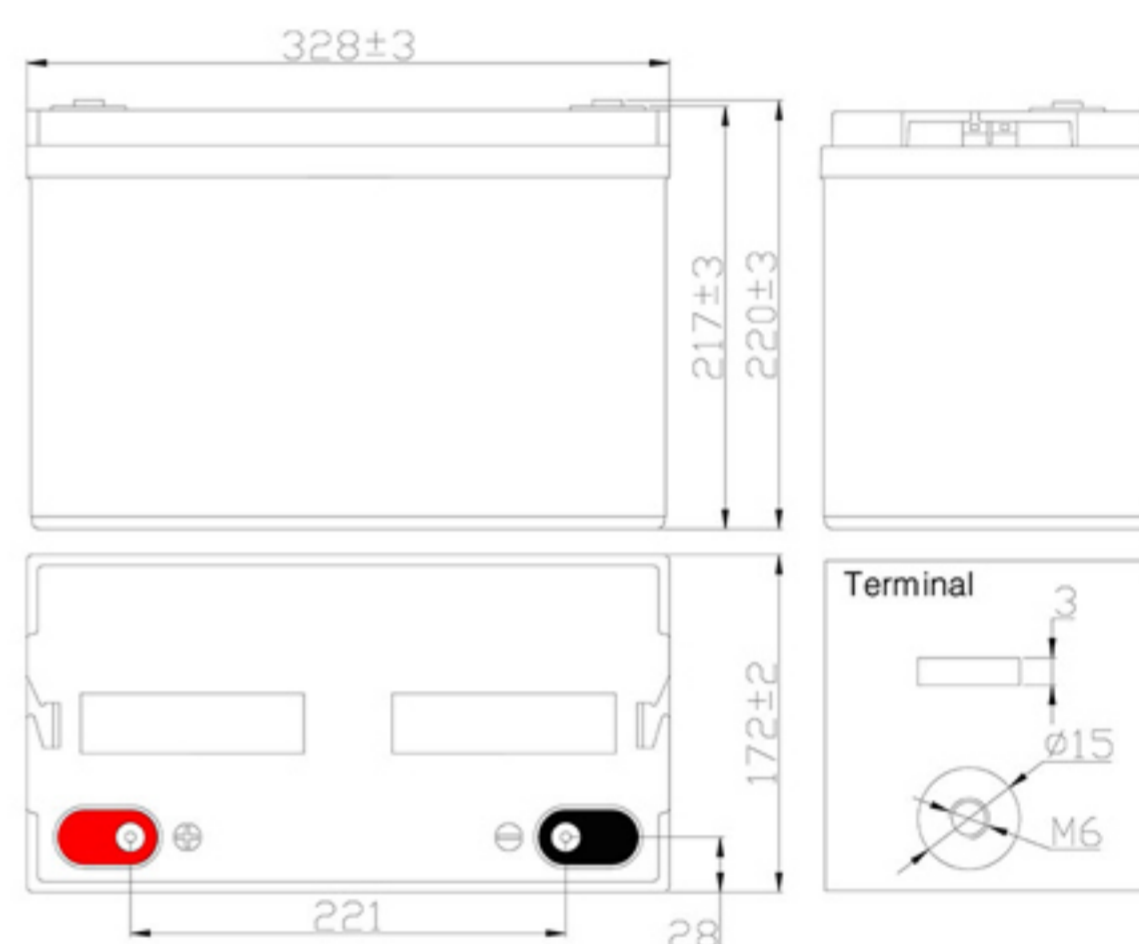


Specification

| | | |
|-----------------------------|---|--------------------------------|
| Nominal Voltage (V) | 12V (6 cells in series) | |
| Rated Capacity | 100.0Ah | (C ₁₀ , 1.80V/cell) |
| Dimensions(mm) | Length | 328 ± 3 mm |
| | Width | 172 ± 2 mm |
| | Height | 217 ± 3 mm |
| | Total Height | 220 ± 3 mm |
| Nominal Capacity @25°C (Ah) | 20 Hour rate (5.450A to 10.8 volts) | 109.0Ah |
| | 10 Hour rate (10.20A to 10.8 volts) | 102.0Ah |
| | 5 Hour rate (17.50A to 10.8 volts) | 87.5Ah |
| | 1 Hour rate (63.30A to 10.5 volts) | 63.3Ah |
| Approx. Weight | 30 kg | |
| Terminal | T12 | |
| Max.Discharge Current | 800A @25°C (5s) | |
| Internal Resistance | 5mΩ @25°C (Full Charged Battery) | |
| DOD 80% | ≥450 Cycles @25°C | |
| Ambient Temperature | Charge: -15°C~50°C | |
| | Discharge: -20°C~60°C | |
| | Storage: -20°C~50°C | |
| Container Material | A.B.S , UL94-HB , UL94-V0 , Optional | |
| Self Discharge | VRLA batteries can be stored for more than 6 months at 25°C. Self-Discharge ratio less than 3% per month at 25°C. Please charge batteries before using. | |


Certification

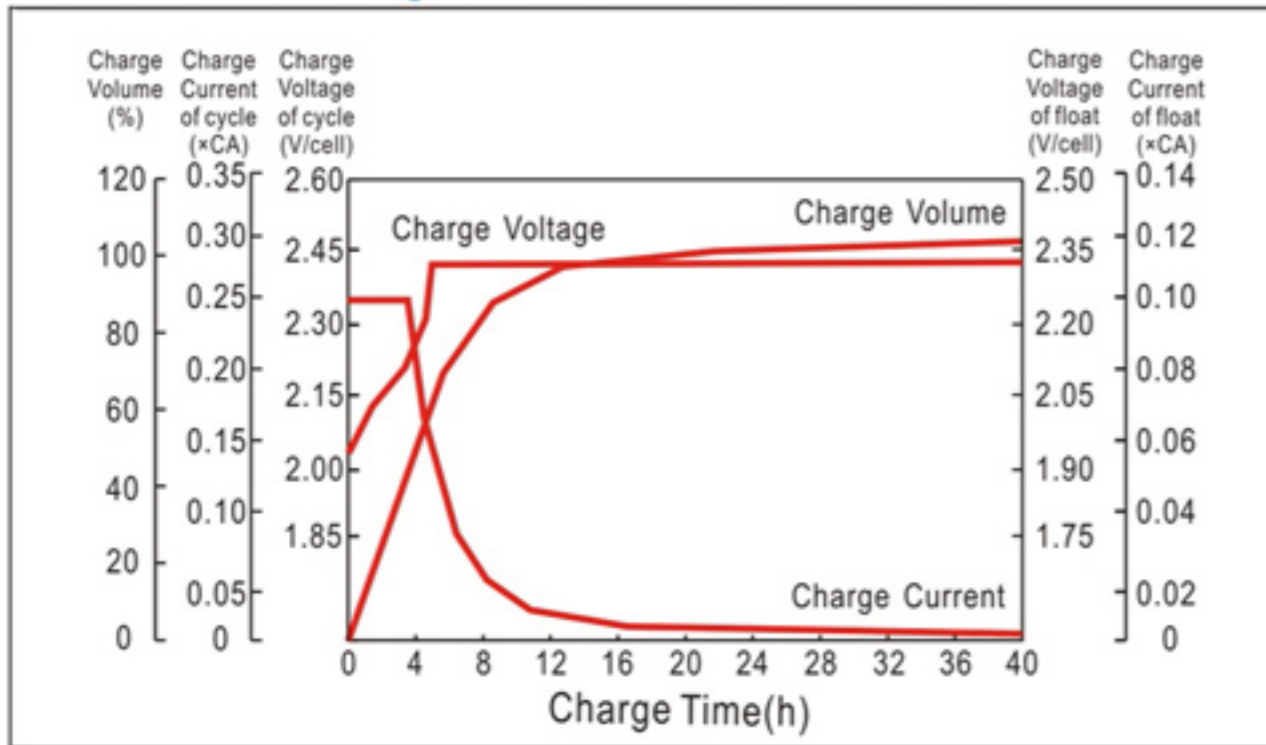
Constant Current Discharge Characteristics (A), (25°C)

| F.V/TIME | 5min | 10min | 15min | 30min | 60min | 2H | 3H | 5H | 8H | 10H | 20H |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V/cell | 340.0 | 226.5 | 181.4 | 112.5 | 65.00 | 38.85 | 27.60 | 18.48 | 12.42 | 10.60 | 5.800 |
| 1.70V/cell | 305.0 | 208.5 | 172.5 | 109.5 | 64.10 | 38.35 | 27.10 | 18.04 | 12.22 | 10.45 | 5.650 |
| 1.75V/cell | 275.0 | 192.5 | 164.5 | 106.5 | 63.30 | 37.85 | 26.80 | 17.77 | 12.10 | 10.35 | 5.550 |
| 1.80V/cell | 245.0 | 175.5 | 154.5 | 102.4 | 62.00 | 37.33 | 26.50 | 17.50 | 11.92 | 10.20 | 5.450 |

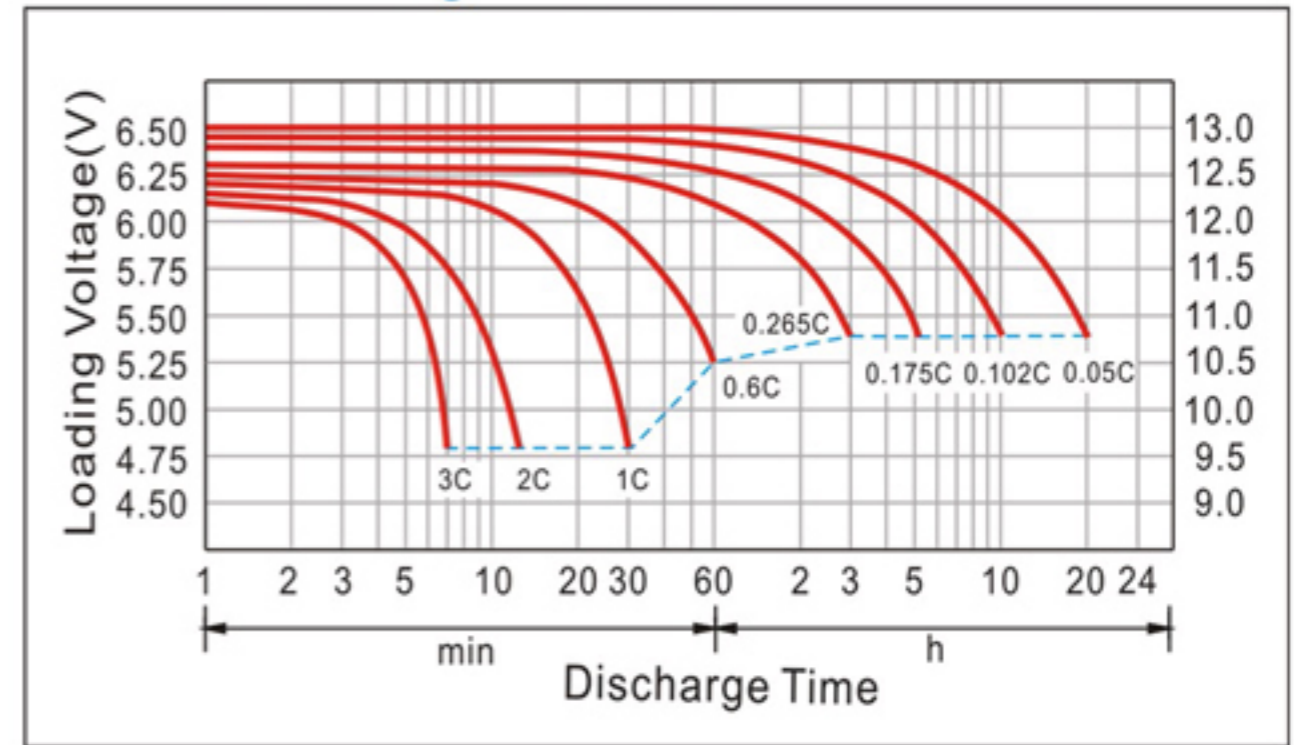
Constant Wattage Discharge Characteristics (Watt), (25°C)

| F.V/TIME | 5min | 10min | 15min | 30min | 60min | 2H | 3H | 5H | 8H | 10H | 20H |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V/cell | 586.5 | 403.9 | 329.5 | 210.0 | 124.6 | 75.76 | 54.74 | 36.74 | 24.72 | 21.11 | 11.59 |
| 1.70V/cell | 538.8 | 378.8 | 317.7 | 206.2 | 123.4 | 75.10 | 53.88 | 35.96 | 24.38 | 20.87 | 11.30 |
| 1.75V/cell | 492.7 | 354.5 | 305.7 | 202.4 | 122.4 | 74.44 | 53.42 | 35.51 | 24.20 | 20.70 | 11.10 |
| 1.80V/cell | 445.1 | 327.6 | 289.7 | 196.3 | 120.4 | 74.04 | 52.96 | 35.00 | 23.84 | 20.40 | 10.90 |

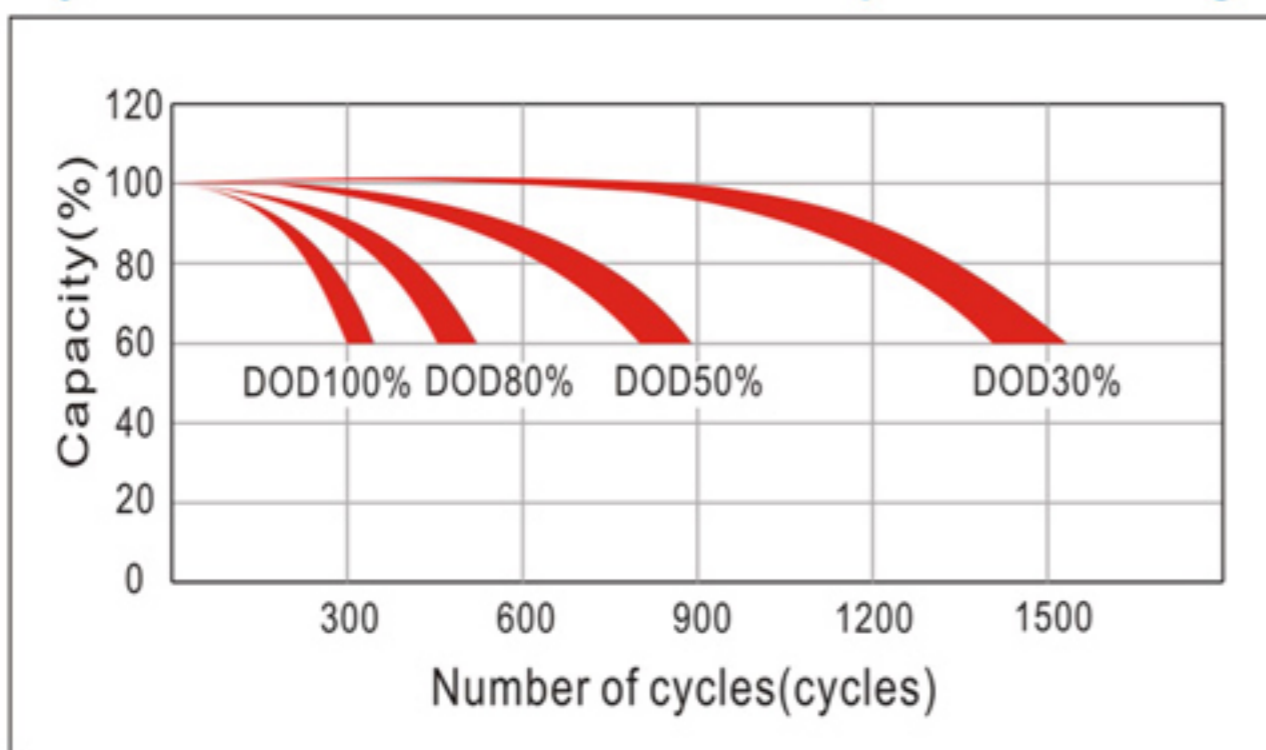
Charge Characteristics Curve



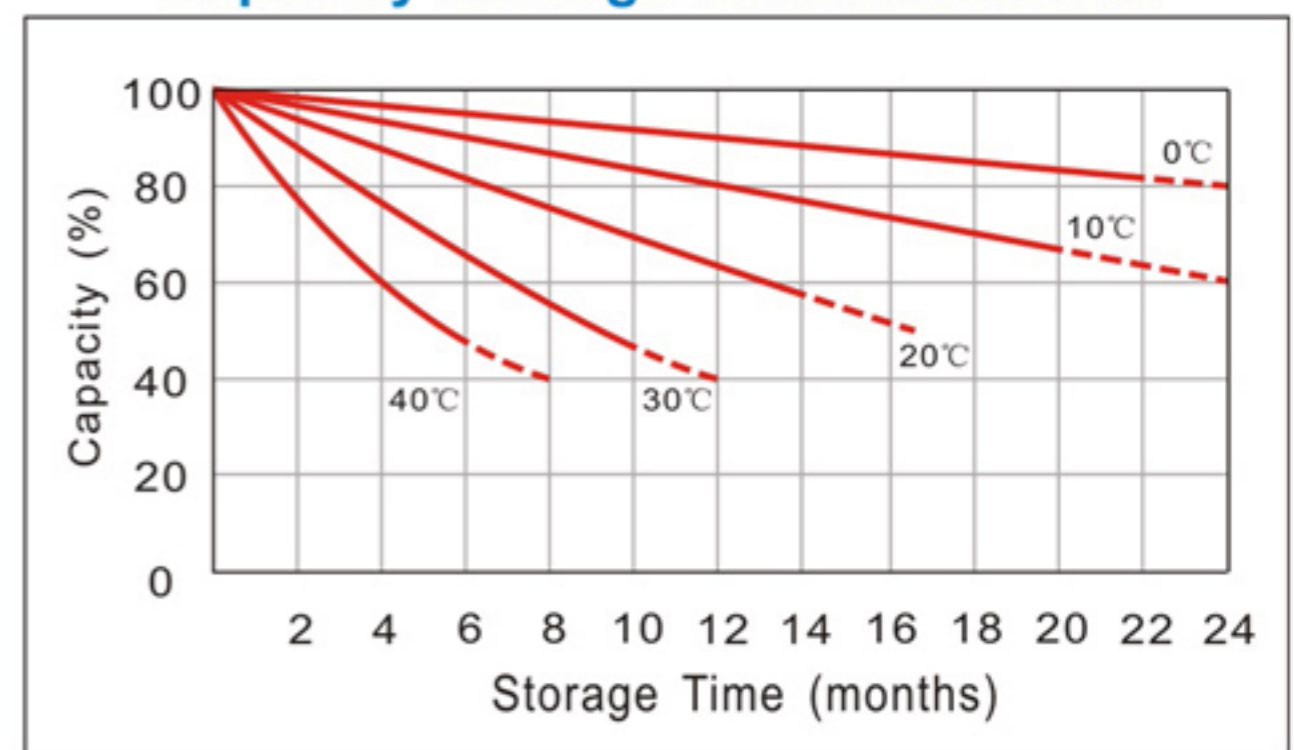
Discharge Characteristics Curve



Cycle service life in relation to depth of discharge



Capacity Storage Characteristics



Capacity Factors with Different Temperature

| Battery type | | -20°C | -10°C | 0°C | 5°C | 10°C | 20°C | 25°C | 30°C | 40°C | 45°C |
|--------------|--------|-------|-------|-----|-----|------|------|------|------|------|------|
| GEL Battery | 6V&12V | 50% | 70% | 83% | 85% | 90% | 98% | 100% | 102% | 104% | 105% |
| | 2V | 60% | 75% | 85% | 88% | 92% | 99% | 100% | 103% | 105% | 106% |
| AGM Battery | 6V&12V | 46% | 66% | 76% | 83% | 90% | 98% | 100% | 103% | 107% | 109% |
| | 2V | 55% | 70% | 80% | 85% | 92% | 99% | 100% | 104% | 108% | 110% |

Maintenance & Cautions

Charging Procedure:

| Application | Charging method | Charge voltage at 25°C | Temperature compensation coefficient of charging voltage | Max.charging current | Temperature |
|--------------------------|--|------------------------|--|----------------------|-------------|
| For standby power source | Constant voltage charging (With current restriction) | 2.25~2.30 V/cell | -3mV/°C/cell | 0.2CA | -15~50°C |
| For cycle service | | 2.40~2.45 V/cell | -4mV/°C/cell | 0.3CA | |

Float service:

Every month, recommend inspection every battery voltage.

Every three months, recommend equalization charge for one time. **Equalization charge method:** Step 1: Discharge: 100% rate capacity discharge. Step 2: Charge: Max. Current 0.3CA, constant voltage 2.40~2.45V/Cell charge 24h.

Cycle service:

Avoid battery over discharge, especially battery series connection use.
Charged with recommend voltage, ensure battery can be full recharged.
In general, recharge capacity should be 1.1~1.15 times discharge capacity.

Length of service life will be directly affected by the number of discharge cycles, depth of discharge, Ambient temperature and charging voltage.

Charge the batteries at least once every six months, if they are stored at 25°C. **Charging Method:**

Constant Voltage : -0.2C × 2h + 2.4~2.45V/cell × 24h , Max. Current 0.25CA

Constant Current : -0.2C × 2h + 0.1C × 12h

Fast : -0.2C × 2h + 0.3C × 4h

Terminal of torque:

| Bolt | M5 | M6 | M8 |
|----------|---------|-----------------------|---------------------|
| Terminal | T3, T10 | T4, T7, T11, T12, T13 | T5, T6, T8, T9, T14 |
| Torque | 6~7N.m | 8~10N.m | 10~12N.m |