

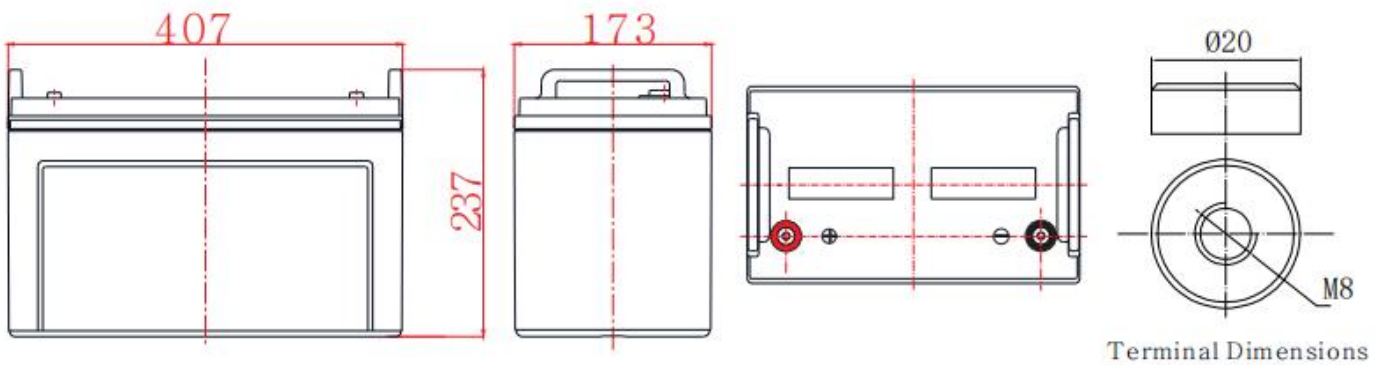
General Features

- ▶ Lead-carbon composite negative plate, both capacitance and battery characteristics
- ▶ Long cycle life, excellent deep cycle discharge ability
- ▶ Excellent charge acceptance ability
- ▶ Optimized capability of instant high-current discharging
- ▶ Strong high and low temperature performance
- ▶ Precision sealing technology



Dimension: 407(L) × 173(W) × 237(H) × 237(TH)

Unit: mm



Terminal Dimensions

| Specification | |
|---|---|
| Nominal Voltage | 12V |
| Nominal Capacity | 120Ah |
| Design life | 10 years |
| Terminal | M8 |
| Approx. Weight | Approx 37.2kg (82.1lbs) |
| Container Material | ABS |
| short-circuit current | 2857A |
| Internal resistance(Full charged at 25°C:) | 4.2 mΩ |
| Self discharge | 3% of capacity declined per month at 25°C |
| Operating Temperature | |
| Discharge: | -20 ~50°C(-4~ 122°F) |
| Charge : | -20 ~50°C(-4~ 122°F) |
| Storage: | -20 ~50°C(-4~ 122°F) |
| Charge Method(25 °C) | |
| Charge current: | Max. 30.0A; Recom. 12A |
| Float charge: 13.5-13.8V | recom. 13.8V(-18mV/ °C) |
| Equalize charge: 13.8-14.1V | recom. 14.1V(-24mV/ °C) |
| Cycle charge: 14.4-15.0V | recom. 14.7V(-30mV/ °C) |

Standards

Executive standard YD/T 799-2010

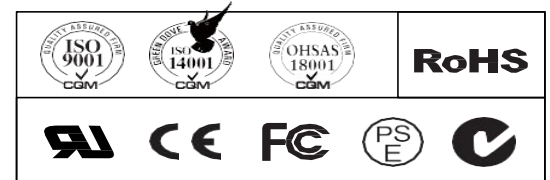
Applications

- ▶ Solar/ wind energy and other new energy storage
- ▶ Hybrid vehicles, electric bicycles and other new energy vehicles
- ▶ Other backup or cycle purposes

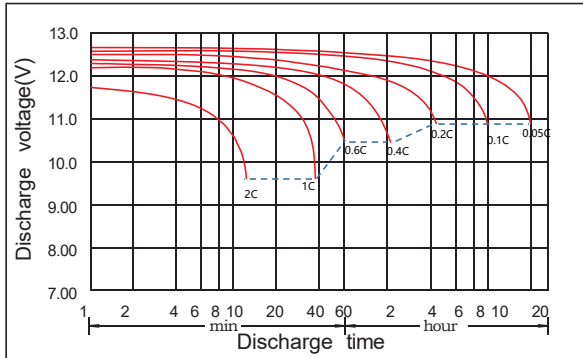
Rated Capacity

| | |
|------------------------------|---------|
| 10Hour Rate (12.0A to 10.8V) | 120.0Ah |
| 3Hour Rate (32.7A to 10.2V) | 98.1Ah |
| 1Hour Rate (74.8A to 9.6V) | 74.8Ah |

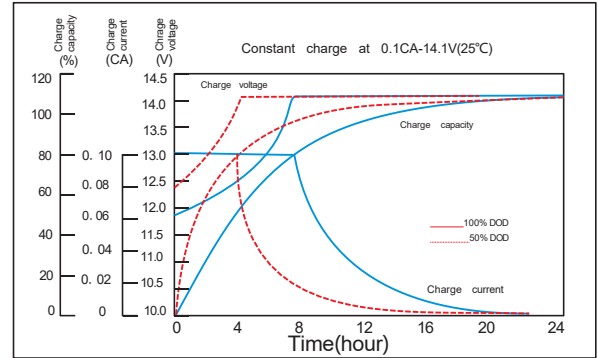
Attain Certificate



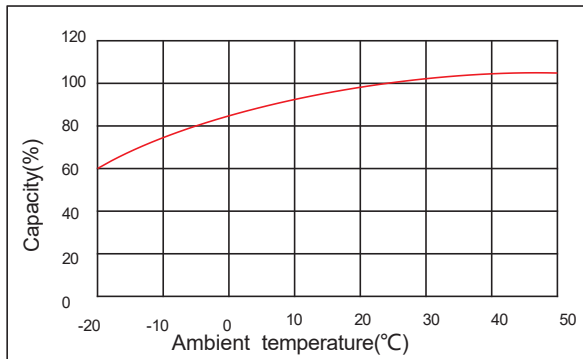
Discharge characteristic



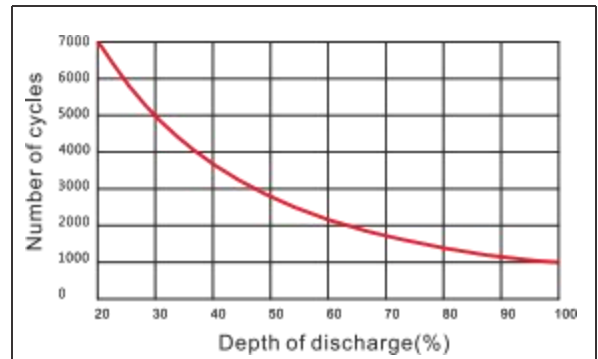
Charging characteristic



The effect of temperature on capacity



The effect of discharge depth on cycle life



Constant Current Discharge Characteristics Unit:A (25°C,77°F)

| FV/Time | 5min | 10min | 15min | 30min | 45min | 1h | 1.5h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|---------|------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 1.60V | 306 | 270 | 204 | 122 | 95.4 | 74.8 | 51.0 | 46.8 | 33.6 | 24.3 | 22.6 | 18.0 | 14.8 | 12.5 | 6.42 |
| 1.65V | 301 | 262 | 194 | 120 | 94.2 | 74.5 | 50.4 | 46.2 | 33.3 | 24.1 | 22.4 | 17.9 | 14.7 | 12.4 | 6.33 |
| 1.70V | 289 | 260 | 192 | 118 | 93.0 | 73.9 | 49.8 | 45.6 | 32.7 | 23.9 | 22.1 | 17.7 | 14.6 | 12.3 | 6.24 |
| 1.75V | 266 | 250 | 190 | 117 | 92.4 | 73.0 | 49.5 | 45.0 | 32.4 | 23.7 | 21.9 | 17.5 | 14.5 | 12.2 | 6.15 |
| 1.80V | 238 | 232 | 173 | 112 | 88.8 | 70.9 | 48.9 | 44.1 | 32.1 | 23.4 | 21.3 | 17.3 | 14.3 | 12.0 | 6.06 |
| 1.85V | 212 | 216 | 157 | 102 | 81.6 | 65.9 | 47.4 | 42.0 | 30.3 | 22.7 | 20.2 | 16.8 | 13.8 | 11.7 | 5.91 |

Constant Power Discharge Characteristics Unit: W/cell (25°C ,77°F)

| FV/Time | 5min | 10min | 15min | 30min | 45min | 1h | 1.5h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|---------|------|-------|-------|-------|-------|-----|------|------|------|------|------|------|------|------|------|
| 1.60V | 520 | 473 | 367 | 220 | 176 | 143 | 98.9 | 90.8 | 65.2 | 47.2 | 43.8 | 35.1 | 28.8 | 24.3 | 12.6 |
| 1.65V | 512 | 458 | 349 | 216 | 174 | 142 | 97.8 | 89.6 | 64.6 | 46.7 | 43.4 | 34.8 | 28.7 | 24.2 | 12.4 |
| 1.70V | 491 | 455 | 345 | 212 | 172 | 141 | 96.6 | 88.4 | 63.4 | 46.2 | 42.9 | 34.3 | 28.5 | 24.0 | 12.2 |
| 1.75V | 452 | 437 | 341 | 210 | 171 | 139 | 96.0 | 87.2 | 62.9 | 45.9 | 42.4 | 34.0 | 28.3 | 23.7 | 12.1 |
| 1.80V | 404 | 406 | 312 | 201 | 164 | 135 | 94.9 | 85.6 | 62.3 | 45.5 | 41.3 | 33.5 | 28.0 | 23.4 | 11.9 |
| 1.85V | 363 | 380 | 284 | 185 | 152 | 126 | 92.4 | 81.9 | 59.1 | 44.3 | 39.4 | 32.8 | 27.0 | 22.9 | 11.6 |