



PCA200-12 BATTERY

AGM DEEP CYCLE

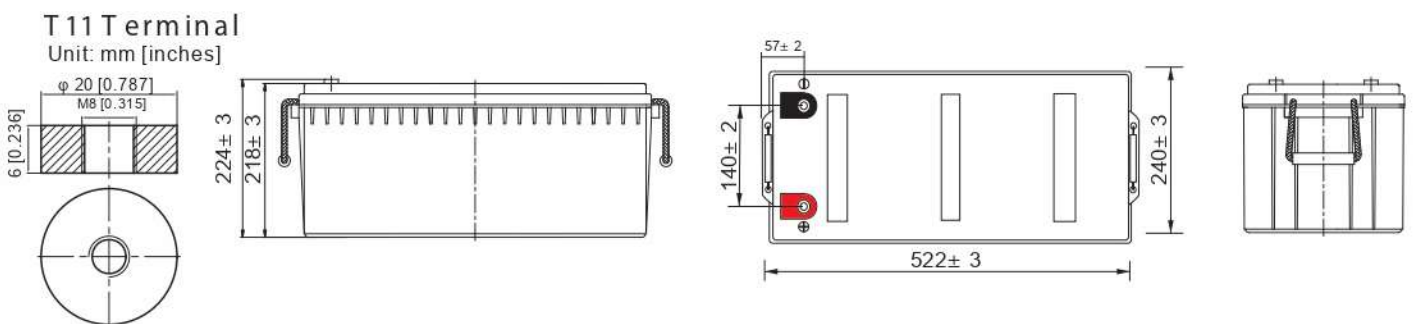
SPECIFICATION

| | | |
|----------------------------------|--|-------------------------------|
| Nominal Voltage | 12V | |
| Nominal Capacity(10HR) | 200.0AH | |
| Dimension | Length | 522± 3mm (20.55 inches) |
| | Width | 240± 3mm (9.45 inches) |
| | Container Height | 218± 3mm (8.58 inches) |
| | Total Height (with Terminal) | 224± 3mm (8.81 inches) |
| Approx Weight | Approx 62.2 Kg (137.1 lbs) | |
| Terminal | T11 | |
| Container Material | ABS | |
| Rated Capacity | 214.4 AH/10.7A | (20hr, 1.80V/cell, 25°C/77°F) |
| | 200.0 AH/20.0A | (10hr, 1.80V/cell, 25°C/77°F) |
| | 175.4 AH/35.1A | (5hr, 1.75V/cell, 25°C/77°F) |
| | 159.0 AH/53.0A | (3hr, 1.75V/cell, 25°C/77°F) |
| | 129.2 AH/129.2A | (1hr, 1.60V/cell, 25°C/77°F) |
| Max. Discharge Current | 2000A (5s) | |
| Internal Resistance | Approx 2.7mΩ | |
| Operating Temp. Range | Discharge : -15~50°C (5~122°F) | |
| | Charge : 0~40°C (32~104°F) | |
| | Storage : -15~40°C (5~104°F) | |
| Nominal Operating Temp. Range | 25± 3°C (77± 5°F) | |
| Cycle Use | Initial Charging Current less than 60.0A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C | |
| | Standby Use | |
| Capacity affected by Temperature | No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C | |
| | 40°C (104°F) | 103% |
| Self Discharge | 25°C (77°F) | 100% |
| | 0°C (32°F) | 86% |
| | PCA Prime series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter. | |

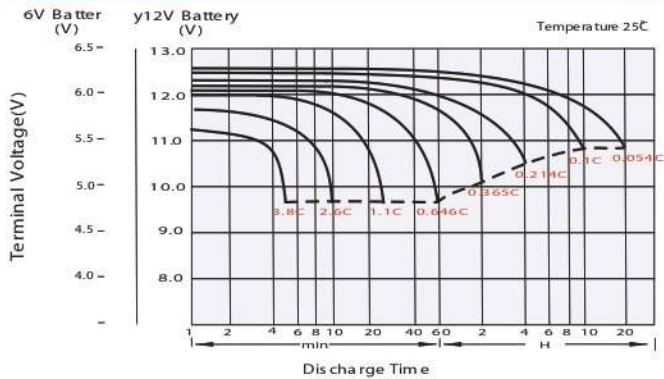
Applications

- Electric tools
- Vehicle in place of walking
- Lawn mowers
- Golf trolleys and golf cart
- Portable apparatus, lights and instruments;
- Electric toys
- Illumination light
- Fire alarms
- Portable power
- Wheelchairs
- Medical equipments.

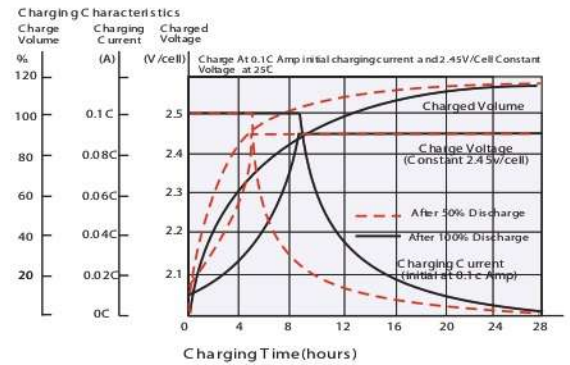
DIMENSIONS



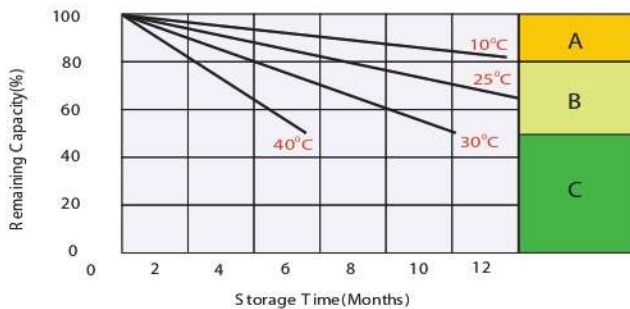
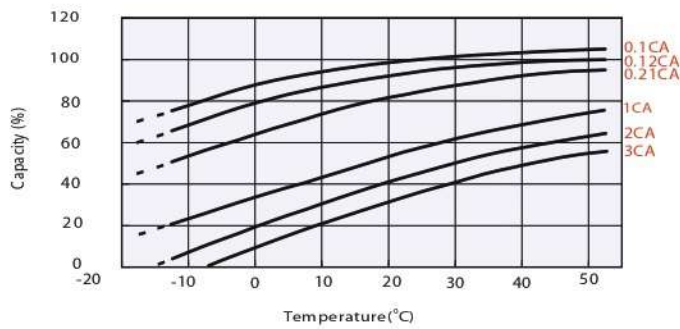
Discharge Characteristics



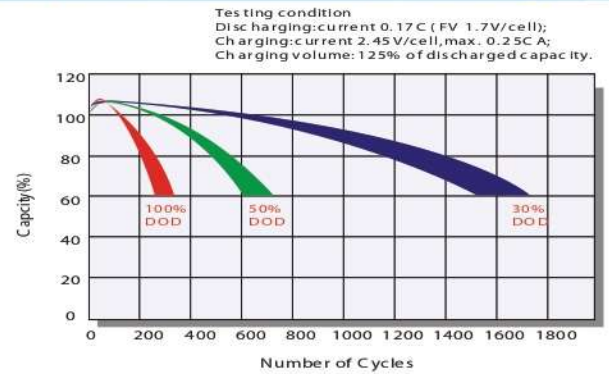
Charging Characteristics (cycle use)



Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics

- A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as be low:
 1. Charged for above 3 days at limited current 0.25C A and constant voltage 2.25V / cell.
 2. Charged for above 20 hours at limited current 0.25C A and constant voltage 2.45V / cell.
 3. Charged for 8~10 hours at limited current 0.05C A.
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

Constant Current Discharge (Amperes) at 25 °C (77 °F)

| F.V/Time | 10min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|------------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|-------|
| 1.85V/cell | 292.8 | 246.4 | 215.3 | 154.9 | 123.0 | 99.9 | 62.0 | 48.4 | 39.2 | 31.8 | 27.8 | 22.7 | 18.9 | 10.62 |
| 1.80V/cell | 374.2 | 297.7 | 254.5 | 182.8 | 143.1 | 111.9 | 67.7 | 52.0 | 41.8 | 34.2 | 29.8 | 24.0 | 20.0 | 10.72 |
| 1.75V/cell | 411.1 | 325.2 | 273.8 | 189.8 | 148.5 | 117.0 | 70.2 | 53.0 | 42.8 | 35.1 | 30.6 | 24.5 | 20.2 | 10.82 |
| 1.70V/cell | 448.1 | 347.2 | 287.7 | 197.5 | 154.4 | 120.7 | 73.0 | 54.5 | 43.9 | 36.0 | 31.2 | 24.8 | 20.4 | 11.02 |
| 1.65V/cell | 483.6 | 369.2 | 305.7 | 208.4 | 158.3 | 124.8 | 75.0 | 56.8 | 45.4 | 37.0 | 31.9 | 25.2 | 20.8 | 11.16 |
| 1.60V/cell | \ | 394.8 | 325.6 | 220.0 | 165.0 | 129.2 | 77.6 | 58.5 | 46.8 | 38.2 | 32.6 | 25.4 | 21.0 | 11.22 |

Constant Power Discharge (Watts/cell) at 25 °C (77 °F)

| F.V/Time | 10min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|
| 1.85V/cell | 546.3 | 464.5 | 410.3 | 297.7 | 238.1 | 193.8 | 120.9 | 94.5 | 76.7 | 62.5 | 54.9 | 44.8 | 37.4 | 21.3 |
| 1.80V/cell | 688.8 | 552.9 | 477.6 | 347.1 | 274.6 | 215.8 | 131.1 | 101.2 | 81.5 | 66.9 | 58.6 | 47.5 | 39.6 | 21.4 |
| 1.75V/cell | 747.5 | 598.1 | 509.6 | 358.5 | 283.6 | 224.9 | 135.6 | 102.8 | 83.2 | 68.6 | 60.1 | 48.3 | 40.0 | 21.6 |
| 1.70V/cell | 803.4 | 633.9 | 532.5 | 371.7 | 294.1 | 231.5 | 140.7 | 105.4 | 85.2 | 70.1 | 61.3 | 48.9 | 40.3 | 22.0 |
| 1.65V/cell | 860.8 | 669.7 | 563.0 | 390.3 | 300.3 | 238.5 | 144.2 | 109.6 | 87.9 | 72.0 | 62.6 | 49.6 | 41.1 | 22.2 |
| 1.60V/cell | \ | 707.6 | 593.6 | 408.1 | 310.2 | 244.9 | 148.1 | 112.4 | 90.3 | 74.0 | 63.8 | 50.0 | 41.5 | 22.3 |

Specifications subject to change without notice.