

UP55-12



| Specification | | |
|-------------------------------------|--|-------------------------------|
| Nominal Voltage | 12V | |
| Nominal Capacity (10HR) | 55.0AH | |
| Dimension | Length | 228±2mm (8.98 inches) |
| | Width | 137±2mm (5.39 inches) |
| | Container Height | 210±2mm (8.27 inches) |
| | Total Height (with Terminal) | 230±2mm (9.06 inches) |
| | Approx Weight | Approx 17.7 Kg (39.0 lbs) |
| Terminal | T9 | |
| Container Material | ABS | |
| Rated Capacity | 58.8 AH/2.94A | (20hr, 1.80V/cell, 25°C/77°F) |
| | 55.0 AH/5.50A | (10hr, 1.80V/cell, 25°C/77°F) |
| | 47.8 AH/9.57A | (5hr, 1.75V/cell, 25°C/77°F) |
| | 42.9 AH/14.3A | (3hr, 1.75V/cell, 25°C/77°F) |
| | 34.1 AH/34.1A | (1hr, 1.60V/cell, 25°C/77°F) |
| Max. Discharge Current | 660A (5s) | |
| Internal Resistance | Approx 7.5mΩ | |
| Operating Temperature Range | Discharge: | -15~50°C (5~122°F) |
| | Change : | 0~40°C (32~104°F) |
| | Storage : | -15~40°C (5~104°F) |
| Nominal Operating Temperature Range | 25±3°C (77±5°F) | |
| Cycle Use | Initial Charging Current less than 16.5A.Voltage. 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C | |
| Standby Use | No limit on Initial Charging Current Voltage. 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C | |
| Capacity affected by Temperature | 40°C (104°F) | 103% |
| | 25°C (77°F) | 100% |
| | 0°C (32°F) | 86% |
| Self Discharge | Batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. | |

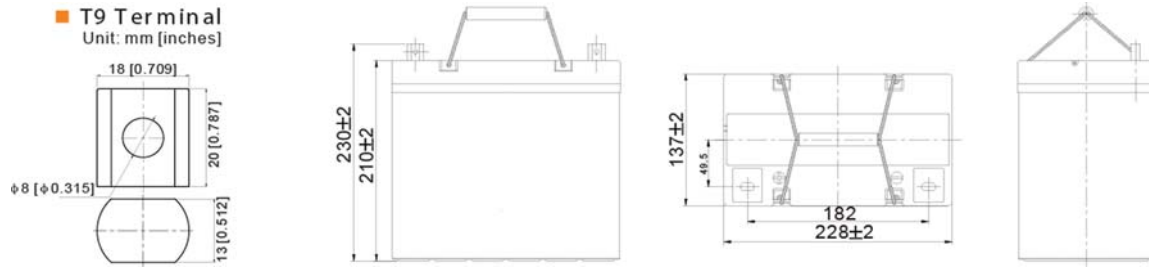
| Constant Current Discharge (Amperes) at 25°C (77°F) | | | | | | | | | | | | | | |
|---|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|
| F.V/Time | 10min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
| 1.85V/cell | 64.4 | 54.1 | 48.0 | 39.8 | 30.7 | 26.3 | 17.0 | 12.8 | 10.5 | 8.82 | 7.73 | 6.20 | 5.33 | 2.84 |
| 1.80V/cell | 73.6 | 60.8 | 53.1 | 43.3 | 33.1 | 27.8 | 18.3 | 13.8 | 11.1 | 9.35 | 8.19 | 6.52 | 5.50 | 2.94 |
| 1.75V/cell | 83.6 | 68.5 | 58.7 | 47.0 | 36.2 | 30.3 | 19.0 | 14.3 | 11.5 | 9.57 | 8.44 | 6.74 | 5.65 | 3.02 |
| 1.70V/cell | 94.5 | 76.0 | 64.8 | 51.3 | 38.9 | 32.0 | 20.0 | 15.1 | 12.0 | 10.1 | 8.85 | 7.03 | 5.86 | 3.09 |
| 1.65V/cell | 101.4 | 81.4 | 68.9 | 54.1 | 41.2 | 33.1 | 20.8 | 15.7 | 12.5 | 10.4 | 9.16 | 7.26 | 6.03 | 3.19 |
| 1.60V/cell | 111.6 | 89.1 | 74.8 | 57.8 | 42.8 | 34.1 | 21.3 | 16.1 | 12.8 | 10.7 | 9.35 | 7.39 | 6.16 | 3.24 |

| Constant Power Discharge (Watts) 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 | 120.2 | 102.1 | 91.5 | 76.7 | 59.7 | 51.2 | 33.4 | 25.2 | 20.7 | 17.5 | 15.3 | 12.4 | 10.7 | 5.69 |
| 1.80V/cell | 135.9 | 113.1 | 99.7 | 82.0 | 63.9 | 53.8 | 35.7 | 26.9 | 21.9 | 18.4 | 16.2 | 13.0 | 11.0 | 5.88 |
| 1.75V/cell | 151.9 | 125.9 | 109.1 | 88.4 | 69.0 | 58.4 | 37.0 | 27.9 | 22.6 | 18.8 | 16.7 | 13.4 | 11.3 | 6.02 |
| 1.70V/cell | 167.7 | 137.8 | 119.5 | 96.0 | 74.1 | 61.6 | 38.8 | 29.3 | 23.5 | 19.9 | 17.4 | 13.9 | 11.7 | 6.17 |
| 1.65V/cell | 178.5 | 146.4 | 126.2 | 100.5 | 77.7 | 63.2 | 40.0 | 30.4 | 24.4 | 20.4 | 18.0 | 14.4 | 12.0 | 6.35 |
| 1.60V/cell | 191.9 | 157.7 | 135.6 | 106.5 | 80.3 | 64.8 | 40.9 | 31.0 | 24.8 | 20.8 | 18.3 | 14.6 | 12.2 | 6.45 |

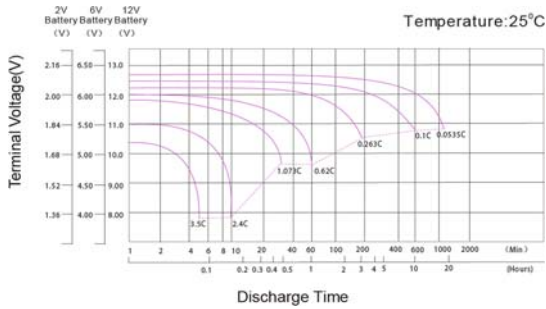


UP55-12

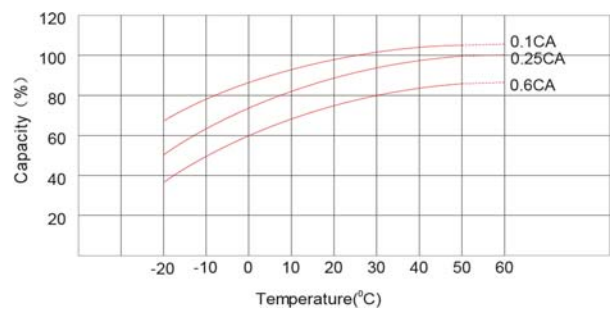
Dimensions



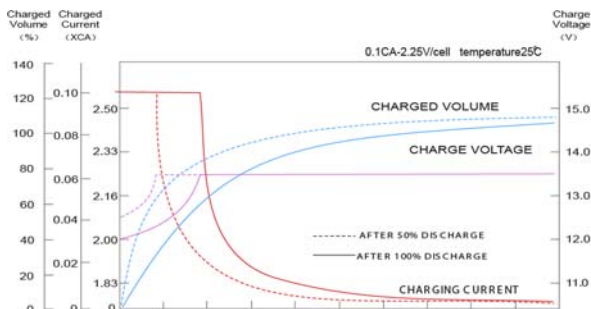
Discharge Characteristics



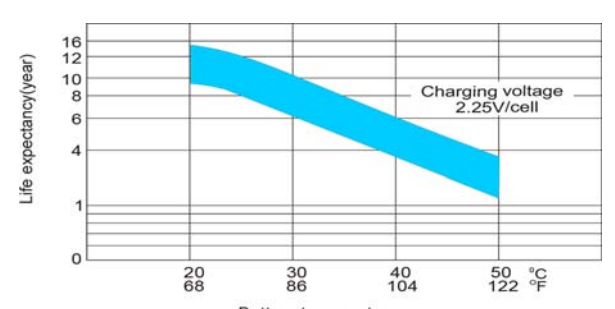
Temperature Effects in Relation to Battery Capacity



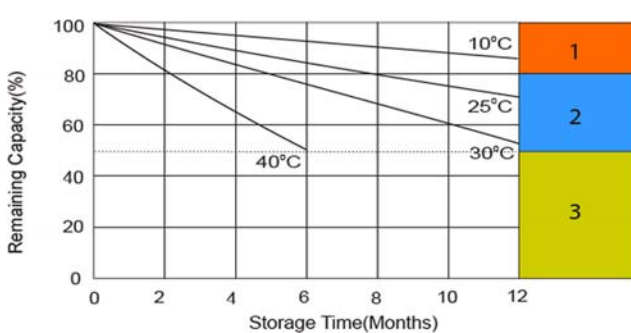
Float Charging Characteristics



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics



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

