

UP70-12



| Specification | | |
|-------------------------------------|--|-------------------------------|
| Nominal Voltage | 12V | |
| Nominal Capacity (10HR) | 70.0AH | |
| Dimension | Length | 348±3mm (13.70 inches) |
| | Width | 167±2mm (6.57 inches) |
| | Container Height | 178±2mm (7.01 inches) |
| | Total Height (with Terminal) | 178±2mm (7.01 inches) |
| | Approx Weight | Approx 24.0 Kg (52.9 lbs) |
| Terminal | T6 | |
| Container Material | ABS | |
| Rated Capacity | 75.0 AH/3.75A | (20hr, 1.80V/cell, 25°C/77°F) |
| | 70.0 AH/7.00A | (10hr, 1.80V/cell, 25°C/77°F) |
| | 60.9 AH/12.2A | (5hr, 1.75V/cell, 25°C/77°F) |
| | 54.6 AH/18.2A | (3hr, 1.75V/cell, 25°C/77°F) |
| | 43.4 AH/43.4A | (1hr, 1.60V/cell, 25°C/77°F) |
| Max. Discharge Current | 840A (5s) | |
| Internal Resistance | Approx 6.6mΩ | |
| 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 21.0A.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 | 81.9 | 68.9 | 61.1 | 50.7 | 39.1 | 33.5 | 21.7 | 16.3 | 13.3 | 11.2 | 9.84 | 7.89 | 6.78 | 3.62 |
| 1.80V/cell | 93.7 | 77.3 | 67.6 | 55.0 | 42.2 | 35.3 | 23.3 | 17.5 | 14.2 | 11.9 | 10.4 | 8.30 | 7.00 | 3.75 |
| 1.75V/cell | 106.4 | 87.2 | 74.7 | 59.8 | 46.0 | 38.5 | 24.2 | 18.2 | 14.7 | 12.2 | 10.7 | 8.58 | 7.19 | 3.84 |
| 1.70V/cell | 120.2 | 96.7 | 82.4 | 65.3 | 49.6 | 40.7 | 25.5 | 19.2 | 15.3 | 12.9 | 11.3 | 8.94 | 7.46 | 3.94 |
| 1.65V/cell | 129.1 | 103.6 | 87.7 | 68.9 | 52.5 | 42.1 | 26.5 | 19.9 | 15.9 | 13.3 | 11.7 | 9.25 | 7.67 | 4.06 |
| 1.60V/cell | 142.0 | 113.4 | 95.2 | 73.5 | 54.5 | 43.4 | 27.1 | 20.4 | 16.3 | 13.6 | 11.9 | 9.41 | 7.83 | 4.13 |

| 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 | 152.9 | 129.9 | 116.4 | 97.6 | 76.0 | 65.2 | 42.5 | 32.1 | 26.4 | 22.2 | 19.5 | 15.7 | 13.6 | 7.24 |
| 1.80V/cell | 172.9 | 143.9 | 126.8 | 104.4 | 81.3 | 68.5 | 45.4 | 34.3 | 27.9 | 23.5 | 20.6 | 16.5 | 14.0 | 7.48 |
| 1.75V/cell | 193.3 | 160.3 | 138.8 | 112.5 | 87.8 | 74.3 | 47.0 | 35.5 | 28.7 | 23.9 | 21.2 | 17.0 | 14.3 | 7.66 |
| 1.70V/cell | 213.4 | 175.3 | 152.1 | 122.2 | 94.3 | 78.4 | 49.4 | 37.3 | 30.0 | 25.3 | 22.2 | 17.7 | 14.9 | 7.85 |
| 1.65V/cell | 227.1 | 186.3 | 160.6 | 127.9 | 98.9 | 80.5 | 51.0 | 38.6 | 31.0 | 26.0 | 22.9 | 18.3 | 15.3 | 8.09 |
| 1.60V/cell | 244.2 | 200.7 | 172.6 | 135.5 | 102.2 | 82.5 | 52.0 | 39.4 | 31.6 | 26.5 | 23.3 | 18.6 | 15.6 | 8.21 |



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Dimensions

■ T6 Terminal

Unit: mm [inches]

±16 [0.63]

M6 [0.236]

6 [0.236]

176±2

348±3

143±2

167±2

2-M6

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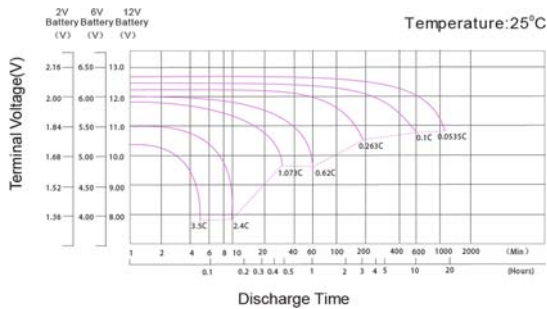
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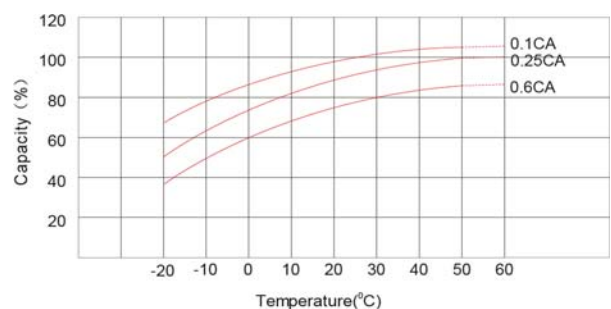
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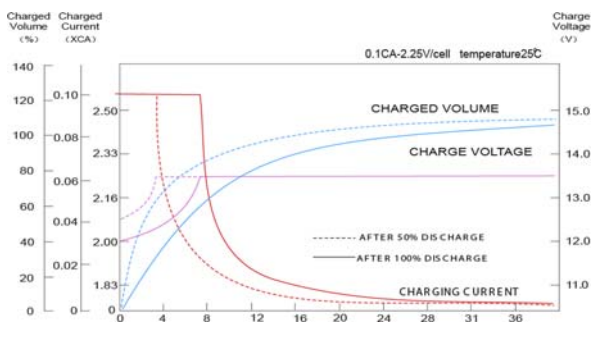
Discharge Characteristics



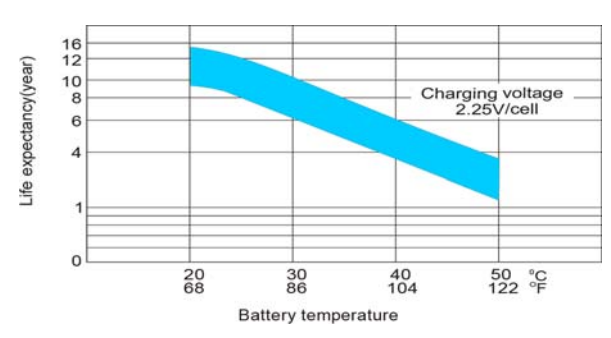
Temperature Effects in Relation to Battery Capacity



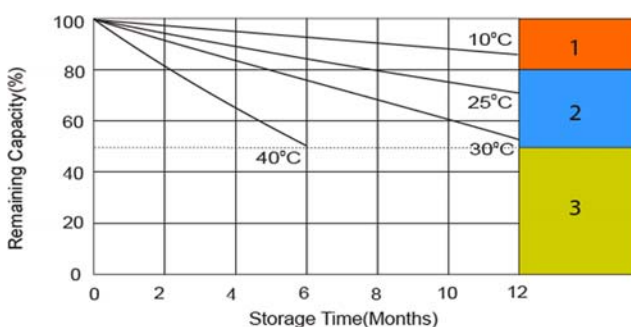
Float Charging Characteristics



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 volatge 2.25V/cell.
2. Charged for above 20hours at limited current 0.25CA and constant volatge 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.



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