

UP-G33-12



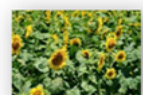
| Specification | | |
|-------------------------------------|--|------------------------------|
| Nominal Voltage | 12V | |
| Nominal Capacity (10HR) | 33.0AH | |
| Dimension | Length | 196±1mm (7.72 inches) |
| | Width | 130±1mm (5.12 inches) |
| | Height | 155±1mm (6.10 inches) |
| | Total Height | 167±1mm (6.57 inches) |
| Approx Weight | 10.1±3% | |
| Terminal | Female Copper Insert M6 (torque:4~6N.m) | |
| Container Material | ABS | |
| Rated Capacity | 35.4 AH | 20 hour rate (1.77A, 10.5V) |
| | 33.0 AH | 10 hour rate (3.30A, 10.80V) |
| | 29.0 AH | 5 hour rate (5.8A, 10.5V) |
| | 21.1 AH | 1 hour rate (21.1A, 9.6V) |
| Max. Discharge Current | 330A (5s) | |
| Internal Resistance | ≤ 11.5mΩ | |
| Operating Temperature Range | Discharge: -30~60°C (-22~140°F) | |
| | Change : -30~60°C (-22~140°F) | |
| | Storage : -30~60°C (-22~140°F) | |
| Nominal Operating Temperature Range | 25°C (77°F) | |
| Cycle Charge | Initial Charging Current Less than 8.25A Voltage 14.4-14.9V | |
| Standby Use | No limit on Initial Charging Current Voltage. 13.6V~13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C | |
| Capacity affected by Temperature | 40°C (104°F) | 108% |
| | 25°C (77°F) | 100% |
| | 0°C (32°F) | 90% |
| | -15°C (5°F) | 70% |
| Self Discharge | Batteries may be stored for up to 9 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 | 15min | 30min | 45min | 1h | 2h | 3h | 5h | 6h | 8h | 10h | 20h |
|------------|-------|-------|-------|------|------|-----|-----|-----|-----|-----|------|
| 1.60V/cell | 59.6 | 35.1 | 26.6 | 21.1 | 12.4 | 9.1 | 6.1 | 5.3 | 4.2 | 3.5 | 1.83 |
| 1.67V/cell | 56.3 | 33.2 | 25.5 | 20.4 | 12.0 | 8.8 | 6.0 | 5.2 | 4.2 | 3.4 | 1.82 |
| 1.70V/cell | 52.8 | 32.3 | 24.6 | 19.6 | 11.6 | 8.6 | 5.9 | 5.1 | 4.1 | 3.4 | 1.79 |
| 1.75V/cell | 49.5 | 30.9 | 23.5 | 18.8 | 11.4 | 8.4 | 5.8 | 5.0 | 4.0 | 3.3 | 1.77 |
| 1.80V/cell | 46.4 | 29.7 | 22.7 | 18.2 | 10.9 | 8.1 | 5.7 | 5.0 | 4.0 | 3.3 | 1.75 |

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

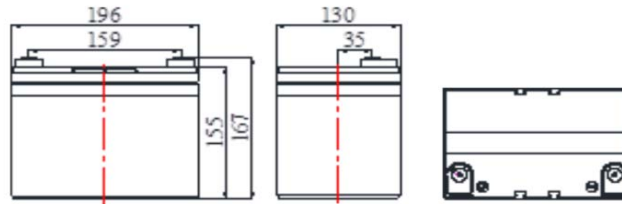
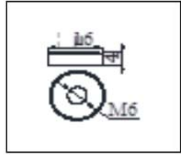
| F.V/Time | 15min | 30min | 45min | 1h | 2h | 3h | 5h | 6h | 8h | 10h | 20h |
|------------|-------|-------|-------|------|------|------|------|------|-----|-----|-----|
| 1.60V/cell | 113.9 | 69.7 | 50.5 | 40.4 | 23.5 | 17.4 | 11.8 | 10.3 | 8.2 | 6.8 | 3.6 |
| 1.67V/cell | 109.0 | 65.3 | 48.7 | 39.3 | 22.8 | 16.9 | 11.6 | 10.2 | 8.1 | 6.7 | 3.6 |
| 1.70V/cell | 101.5 | 63.9 | 47.2 | 38.0 | 22.3 | 16.5 | 11.5 | 10.0 | 8.0 | 6.6 | 3.5 |
| 1.75V/cell | 95.3 | 60.8 | 45.3 | 36.6 | 21.8 | 16.2 | 11.3 | 9.9 | 7.9 | 6.6 | 3.5 |
| 1.80V/cell | 89.4 | 58.3 | 43.8 | 35.4 | 21.1 | 15.7 | 11.1 | 9.7 | 7.8 | 6.5 | 3.5 |



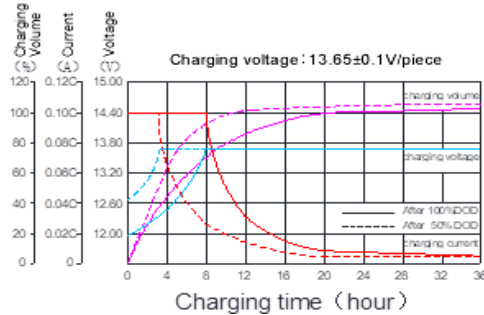
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Dimensions

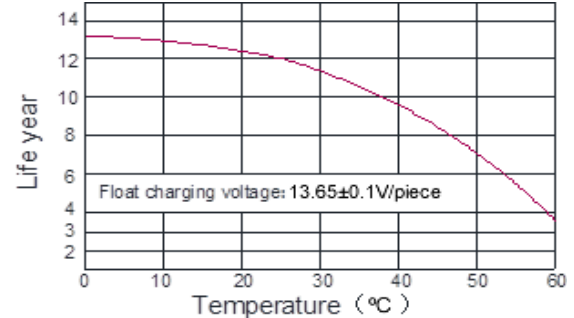
Terminal



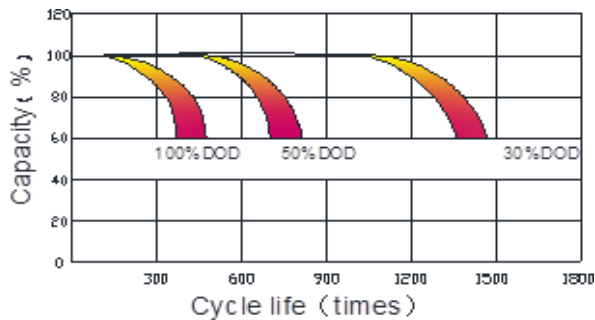
Charging Characteristics (@25°C/77°F)



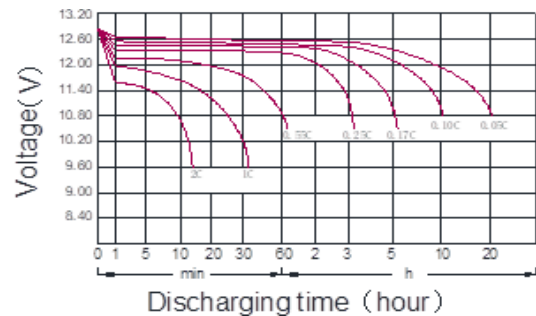
Temperature Effects on Design Service Life



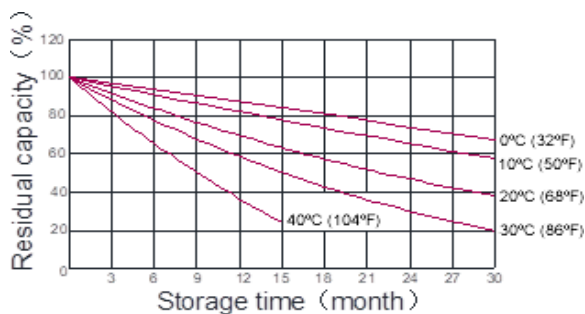
Cycle Life vs. Depth of Discharge (@25°C/77°F)



Discharge Characteristics (@25°C/77°F)



Temperature Effects on Battery Self-Discharge



Temperature Effects on Capacity

