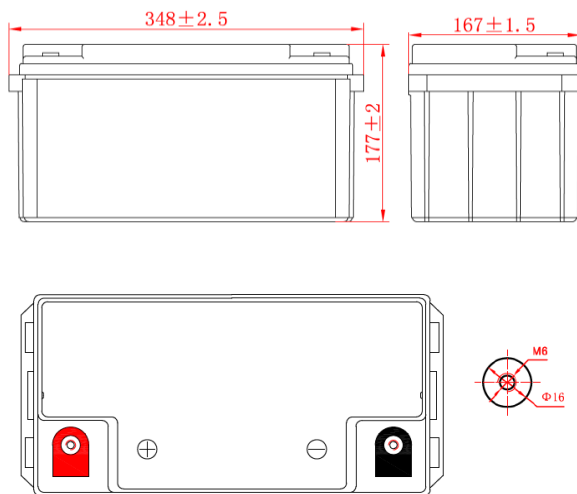


## APPLICATIONS

- Uninterruptible Power Supplies (UPS)
- Electric Power Systems (EPS)
- Emergency backup power supplies
- Electronic apparatus and equipment
- Communication power supplies
- DC power supplies
- Auto control system



## SPECIFICATIONS

|                                           |                              |               |
|-------------------------------------------|------------------------------|---------------|
| Nominal Voltage                           | 12 V                         |               |
| Number of cells                           | 6                            |               |
| Design Floating Life (20°C)               | 12 years                     |               |
| Dimensions                                | Length                       | 348 mm        |
|                                           | Width                        | 167 mm        |
|                                           | Height                       | 177 mm        |
|                                           | Total Height                 | 177 mm        |
| Weight                                    | 22.6 kg                      |               |
| Nominal Capacity (25°C)                   | 20 hours rate (1.80)         | 70.0 Ah       |
|                                           | 10 hours rate (1.80)         | 66.3 Ah       |
|                                           | 5 hours rate (1.75)          | 61.5 Ah       |
|                                           | 1 hour rate (1.65)           | 43.2 Ah       |
| Internal Resistance (fully charged, 25°C) | 6.0 mOhm                     |               |
| Self Discharge                            | approx. 3% per month at 25°C |               |
| Nominal Operating Temperature             | 25°C                         |               |
| Operating Temperature range               | Discharge                    | -15°C to 50°C |
|                                           | Charge                       | -15°C to 40°C |
|                                           | Storage                      | -15°C to 40°C |
| Float Charging Voltage                    | 2.25 to 2.30 V/cell at 25°C  |               |
| Temperature compensation                  | -18mV/°C                     |               |
| Maximum charging current                  | 16 A                         |               |
| Maximum discharge current (25°C)          | 650 A (5 sec.)               |               |
| Short Circuit Current (25°C)              | 845 A                        |               |

## PERFORMANCE DATA

### Discharge Constant Current at 25°C (Amperes)

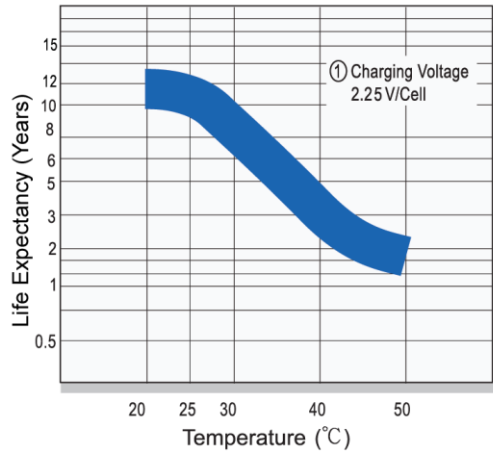
| End Voltage (V/cell) | 10min | 15min | 30min | 45min | 1h   | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
|----------------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|
| 1.60V                | 158   | 115   | 68.9  | 53.5  | 43.3 | 25.7 | 18.0 | 15.3 | 12.6 | 10.5 | 8.20 | 7.03 | 3.66 |
| 1.65V                | 151   | 113   | 67.9  | 52.6  | 43.2 | 25.4 | 17.9 | 15.1 | 12.5 | 10.3 | 8.14 | 6.92 | 3.63 |
| 1.70V                | 138   | 108   | 65.7  | 50.8  | 43.1 | 25.2 | 17.8 | 14.7 | 12.4 | 10.2 | 8.08 | 6.87 | 3.61 |
| 1.75V                | 128   | 102   | 64.3  | 48.9  | 42.6 | 24.8 | 17.7 | 14.2 | 12.3 | 10.1 | 8.03 | 6.75 | 3.57 |
| 1.80V                | 119   | 97.1  | 62.3  | 47.2  | 42.1 | 24.3 | 17.6 | 13.9 | 12.3 | 9.69 | 7.79 | 6.63 | 3.50 |

### Discharge Constant Power at 25°C (Watts/Cell)

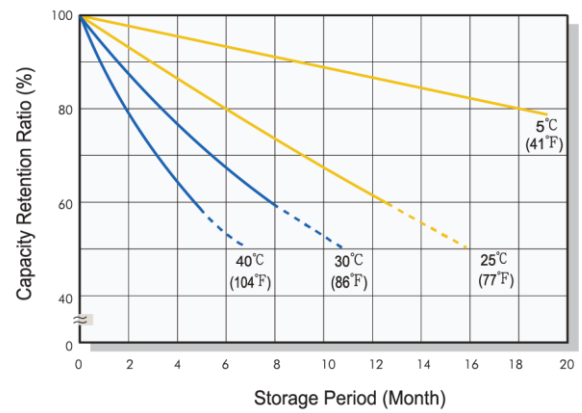
| End Voltage (V/cell) | 10min | 15min | 30min | 45min | 1h   | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
|----------------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|
| 1.60V                | 259   | 206   | 129   | 96.3  | 82.8 | 47.2 | 33.7 | 29.0 | 23.3 | 20.5 | 16.1 | 13.8 | 7.25 |
| 1.65V                | 255   | 200   | 126   | 93.8  | 80.1 | 46.8 | 33.3 | 28.7 | 23.2 | 19.9 | 16.1 | 13.6 | 7.24 |
| 1.70V                | 249   | 196   | 123   | 91.4  | 78.0 | 46.5 | 33.1 | 27.9 | 23.1 | 19.8 | 15.9 | 13.5 | 7.24 |
| 1.75V                | 234   | 188   | 120   | 88.1  | 77.2 | 45.8 | 32.8 | 26.9 | 23.0 | 19.7 | 15.8 | 13.4 | 7.18 |
| 1.80V                | 218   | 178   | 116   | 85.0  | 76.0 | 44.6 | 32.4 | 26.4 | 22.6 | 19.2 | 15.4 | 13.3 | 7.12 |

Note: The above characteristics data can be obtained within three charge/discharge cycles.

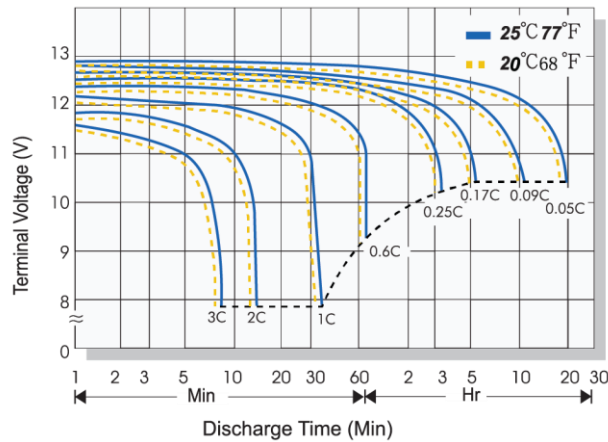
### Temperature Effects on Float Life



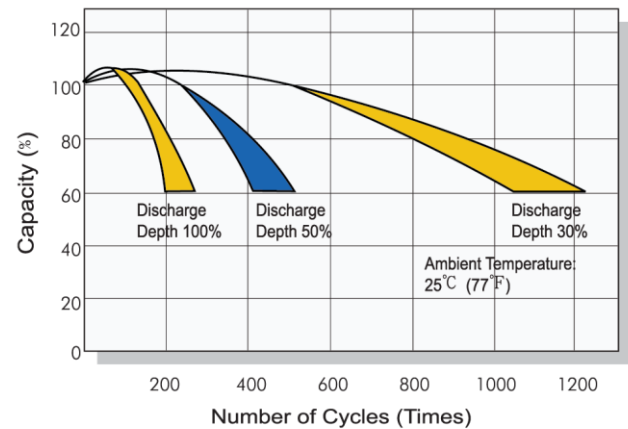
### Self Discharge Characteristics



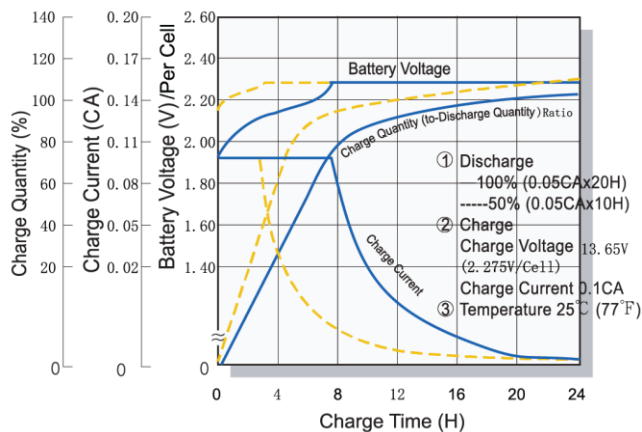
### Discharge Characteristics (25°C)



### Cycle Service Life in Relation to Depth of Discharge



### Float Charging Characteristics (25°C)



### Boost Charging Characteristics (25°C)

