

### ⚡ Specifications

#### Nominal Voltage(V)

12V

#### Nominal Capacity

|              |                    |         |
|--------------|--------------------|---------|
| 20 hour rate | (3.25A to 10.50V)  | 65Ah    |
| 10 hour rate | (6.175A to 10.50V) | 61.75Ah |
| 5 hour rate  | (11.05A to 10.20V) | 55.25Ah |
| 1 C          | (65A to 9.60V)     | 36.83Ah |
| 3 C          | (195A to 9.60V)    | 26Ah    |

#### Weight

Approx. 23.3kg(51.26Lbs.)

#### Internal Resistance (at 1KHz)

Approx. 5 mΩ

#### Maximum Discharge Current for

5 seconds: 780A

#### Charging Methods at 25°C (77°F)

|                            |                |
|----------------------------|----------------|
| Cycle use:                 |                |
| Charging Voltage           | 14.4 to 15.0V  |
| Coefficient                | -5.0mV/°C/cell |
| Maximum Charging Current : | 19.5A          |
| Standby use:               |                |
| Float Charging Voltage     | 13.5 to 13.8V  |
| Coefficient                | -3.0mV/°C/cell |

#### Operating Temperature Range

|           |             |    |              |
|-----------|-------------|----|--------------|
| Charge    | -15°C (5°F) | to | 40°C (104°F) |
| Discharge | -15°C (5°F) | to | 50°C (122°F) |
| Storage   | -15°C (5°F) | to | 40°C (104°F) |

#### Charge Retention (shelf life) at 20°C (68°F)

|         |     |
|---------|-----|
| 1 month | 98% |
| 3 month | 94% |
| 6 month | 85% |

#### Case Material

ABS UL94 HB  
Option: Flammability resistance of (UL94 V-0)

#### Design Life

3-5 Years.

#### Terminal

F8



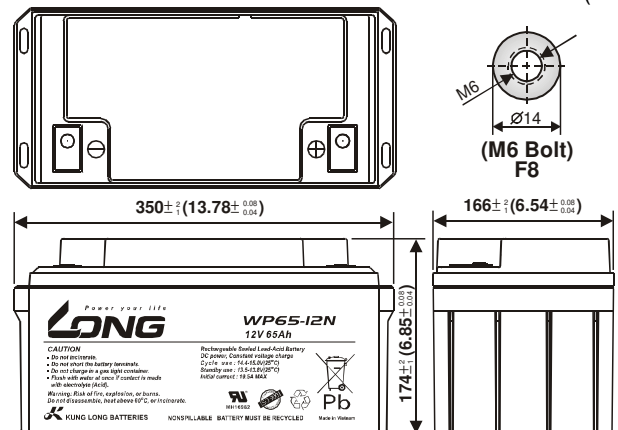
### ⚡ Dimensions

|                     |                           |
|---------------------|---------------------------|
| Length (L)          | 350±2-1 (13.78±0.08-0.04) |
| Width (W)           | 166±2-1 (6.54±0.08-0.04)  |
| Height (H)          | 174±2-1 (6.85±0.08-0.04)  |
| Overall Height (HT) | 174±2-1 (6.85±0.08-0.04)  |

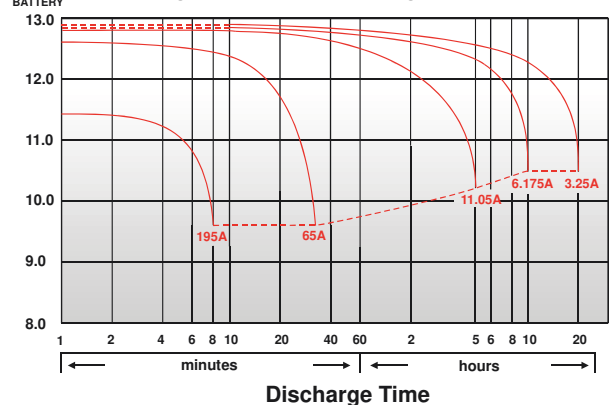
#### Description of torque value of hard ware for the terminals:

|                                |                        |
|--------------------------------|------------------------|
| Recommended torque value       | M6: 7 N-m (71kgf-cm)   |
| Maximum allowable torque value | M6: 10 N-m (102kgf-cm) |

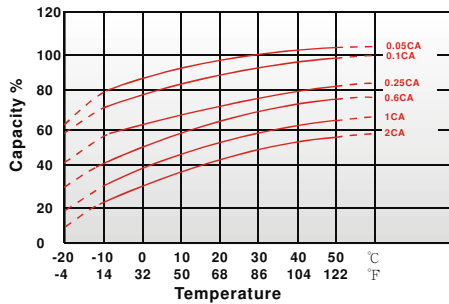
mm(inch)



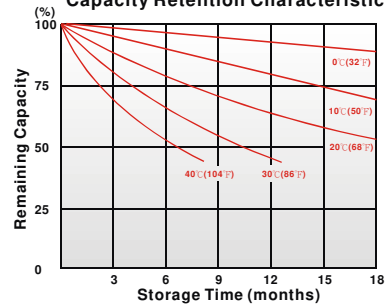
#### (V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



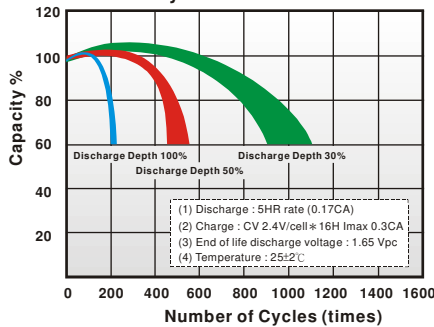
Effect of Temperature on Capacity 25°C(77°F)



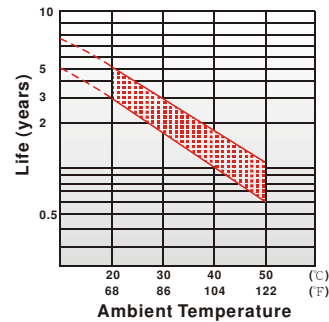
Capacity Retention Characteristic



Cycle Service Life



Trickle (or float) Service Life



### - PERFORMANCE DATA

#### Discharge Rates in Watts to Various End Voltages at 25°C(77°F)

| End Voltage |     | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|-------------|-----|-------|-------|-------|-------|-------|-------|-------|
| Time        |     |       |       |       |       |       |       |       |
| 5           | min | 322   | 461   | 543   | 589   | 601   | 614   | 627   |
| 10          | min | 206   | 296   | 348   | 378   | 385   | 394   | 403   |
| 15          | min | 152   | 209   | 241   | 259   | 264   | 269   | 274   |
| 30          | min | 96.5  | 109   | 116   | 122   | 124   | 127   | 130   |
| 60          | min | 78.7  | 81.5  | 82.7  | 83.5  | 84.0  | 84.7  | 85.5  |
| 120         | min | 46.7  | 49.0  | 50.0  | 50.5  | 50.7  | 50.8  | 51.0  |
| 180         | min | 33.2  | 35.0  | 36.2  | 36.8  | 37.2  | 37.5  | 38.0  |
| 240         | min | 27.0  | 28.0  | 28.8  | 29.5  | 29.7  | 30.0  | 30.3  |
| 300         | min | 23.2  | 23.6  | 23.9  | 24.3  | 24.4  | 24.6  | 24.8  |
| 600         | min | 13.3  | 13.9  | 14.2  | 14.4  | 14.5  | 14.6  | 14.8  |
| 1200        | min | 6.97  | 7.30  | 7.43  | 7.55  | 7.60  | 7.65  | 7.73  |

#### - Discharge Rates in Amperes to Various End Voltages at 25°C(77°F)

| End Voltage |     | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|-------------|-----|-------|-------|-------|-------|-------|-------|-------|
| Time        |     |       |       |       |       |       |       |       |
| 5           | min | 172   | 243   | 281   | 300   | 306   | 314   | 336   |
| 10          | min | 108   | 159   | 177   | 191   | 196   | 202   | 210   |
| 15          | min | 81.5  | 112   | 119   | 128   | 131   | 135   | 140   |
| 30          | min | 50.6  | 56.0  | 60.0  | 65.7  | 67.1  | 69.2  | 71.4  |
| 60          | min | 33.8  | 38.7  | 41.1  | 42.5  | 43    | 43.6  | 44.3  |
| 120         | min | 19.7  | 22.5  | 24.4  | 25.6  | 26    | 26.5  | 27.2  |
| 180         | min | 15.0  | 16.1  | 17.3  | 18.2  | 18.5  | 18.9  | 19.4  |
| 240         | min | 12.9  | 13.6  | 14.0  | 14.3  | 14.4  | 14.6  | 14.8  |
| 300         | min | 11.3  | 11.6  | 11.8  | 12.0  | 12.1  | 12.2  | 12.3  |
| 600         | min | 6.56  | 6.86  | 7.00  | 7.11  | 7.15  | 7.20  | 7.27  |
| 1200        | min | 3.49  | 3.60  | 3.67  | 3.73  | 3.76  | 3.79  | 3.82  |

All data on the spec. sheet is an average value:

The tolerance range : X<6min(+15%~-15%), 6min ≤ X < 10min(+12%~-12%), 10min ≤ X < 60min(+8%~-8%), X ≥ 60min(+5%~-5%)

251220-1L