

The operating environment temperature above 40°C should be avoided ,After long term storage, The battery actual capacity would be less than the rated capacity. Full capacity will be obtained through several charge/discharge cycles.  
To get the longest life, IMP battery should be fully charged before storage.

### Specifications

|                               |                             | L x W x H           |
|-------------------------------|-----------------------------|---------------------|
| Nominal Voltage               |                             | 12V                 |
| Rated Capacity (20 hour rate) |                             | 250Ah               |
| Dimensions                    | Length                      | 20.51 inches(521mm) |
|                               | Width                       | 10.59 inches(269mm) |
|                               | Height                      | 8.66 inches(220mm)  |
|                               | Total Height with terminals | 9.52 inches(242mm)  |
|                               | Weight                      | Approx. (70.0kg)    |

### Characteristics

|                                                |                                    |                                                                            |
|------------------------------------------------|------------------------------------|----------------------------------------------------------------------------|
| Capacity<br>77°F(25°C)                         | 20 hour rate (25A)                 | 250 Ah                                                                     |
|                                                | 5 hour rate (40A)                  | 200 Ah                                                                     |
|                                                | 1 hour rate (21A)                  | 150 Ah                                                                     |
| Internal Resistance                            | Full charged Battery at 25°C(77°F) | 2.6 mΩ                                                                     |
|                                                | 40°C (104°F)                       | 102%                                                                       |
|                                                | 25°C (77°F)                        | 100%                                                                       |
|                                                | 0°C (32°F)                         | 85%                                                                        |
| Capacity affected by Temperature (20hour rate) | -15°C (5°F)                        | 65%                                                                        |
|                                                | Capacity after 3 month storage     | 91%                                                                        |
|                                                | Capacity after 6 month storage     | 81%                                                                        |
|                                                | Capacity after 12 month storage    | 60%                                                                        |
| Self-Discharge<br>77°F(25°C)                   |                                    |                                                                            |
| Terminal                                       | M8                                 |                                                                            |
| Charge (Constant Voltage)                      | Cycle                              | Initial Charging Current less than 75A<br>Voltage 14.4~14.7 V / 77°F(25°C) |
|                                                | Float                              | Voltage 13.5~13.8V / 77°F(25°C)                                            |
| Design Life                                    | 10 years                           |                                                                            |
| Colour                                         | Black / White                      |                                                                            |

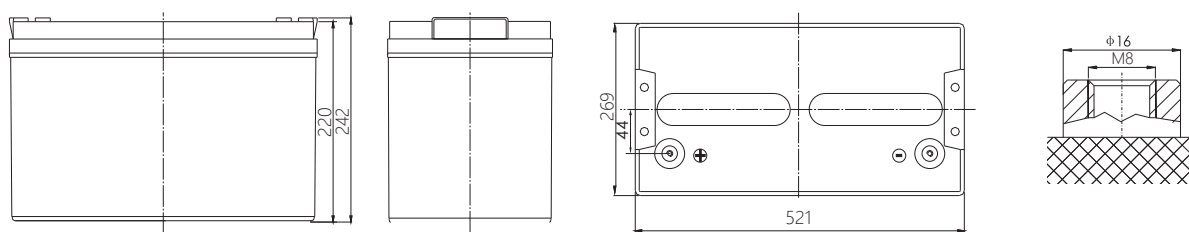
### Test Report

|                       |                                                                                                                                                                                       |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Standards        | IEC 60950-1, IEC 60896-2, EN 50342-1 : 2006+A1 : 2011                                                                                                                                 |
| Measurement Procedure | EN 55022: 2010+AC:2011<br>EN 61000-6-3:2007+A1:2011+AC:2012<br>EN 55024:2010<br>EN 61000-6-1:2007<br>/IEC 61000-4-2:2008, IEC 61000-4-3:2006+A1:2007<br>+A2:2010, IEC 61000-4-8:2009) |
| Used :                |                                                                                                                                                                                       |

# T6-12-250



Dimension : L x W x H



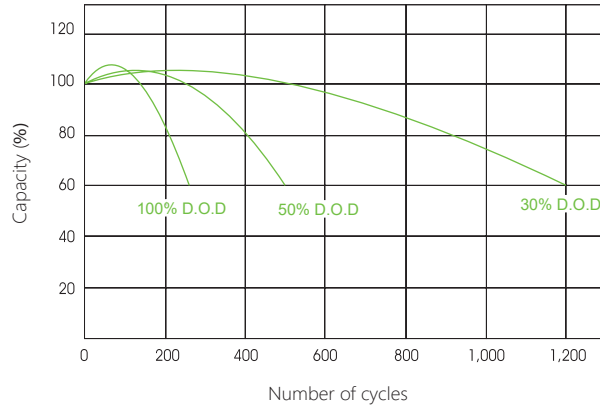
### Constant Current Discharge (AMPERES @25 C)

| EV/ TIME | 5min   | 10min | 15min | 30min | 1h    | 2h    | 3h    | 4h   | 5h   | 8h   | 10h  | 20h  |
|----------|--------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 1.60v    | 133.65 | 87.98 | 70.83 | 47.50 | 25.00 | 14.58 | 10.71 | 8.33 | 6.88 | 4.88 | 4.38 | 2.36 |
| 1.70v    | 129.33 | 79.49 | 66.83 | 45.46 | 23.53 | 13.93 | 10.43 | 8.14 | 6.76 | 4.75 | 4.30 | 2.29 |
| 1.75v    | 125.16 | 70.99 | 58.49 | 42.55 | 22.77 | 13.59 | 10.18 | 8.01 | 6.67 | 4.71 | 4.21 | 2.29 |
| 1.80v    | 120.67 | 66.99 | 54.33 | 39.20 | 22.02 | 13.27 | 9.92  | 7.88 | 6.51 | 4.59 | 4.01 | 2.25 |
| 1.85v    | 116.51 | 62.66 | 50.16 | 35.03 | 21.27 | 12.93 | 9.60  | 7.68 | 6.35 | 4.46 | 3.96 | 2.13 |

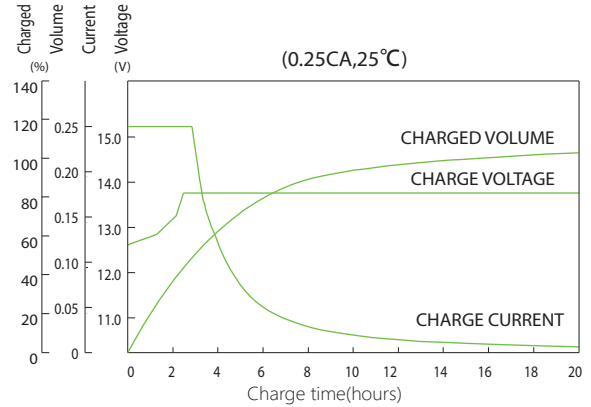
### Constant Power Discharge (WATTS PER CELL@25°C)

| Cut off voltage V/cell | 5min    | 10min  | 15min  | 30min  | 1h     | 2h     | 3h     | 4h    | 5h    | 8h    | 10h   | 20h   |
|------------------------|---------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| 1.60v                  | 1378.67 | 939.83 | 760.67 | 511.17 | 270.33 | 160.33 | 119.33 | 93.83 | 78.17 | 56.00 | 50.50 | 27.50 |
| 1.70v                  | 1381.83 | 886.67 | 747.67 | 510.33 | 266.00 | 160.50 | 120.67 | 94.50 | 78.83 | 55.67 | 50.50 | 26.90 |
| 1.75v                  | 1366.83 | 808.00 | 666.83 | 489.50 | 263.67 | 157.67 | 118.50 | 93.67 | 78.17 | 55.50 | 49.83 | 27.12 |
| 1.80v                  | 1353.33 | 772.00 | 625.67 | 454.17 | 256.33 | 155.33 | 117.00 | 93.00 | 76.83 | 54.33 | 49.50 | 26.82 |
| 1.85v                  | 1322.00 | 726.33 | 583.50 | 409.83 | 250.17 | 152.83 | 114.00 | 91.33 | 75.67 | 53.50 | 47.83 | 25.78 |

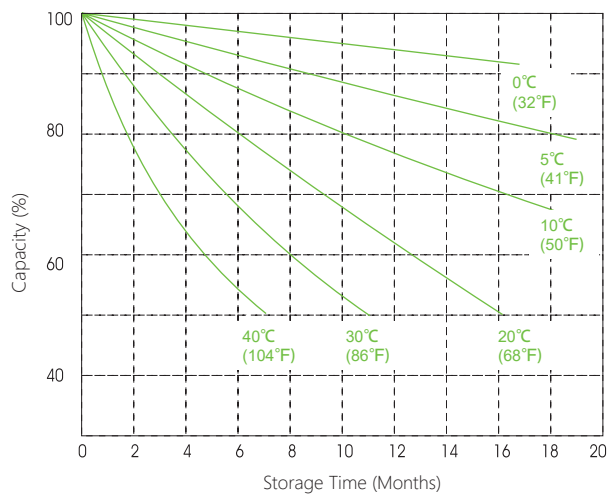
## Cycle service life in relation to depth of discharge



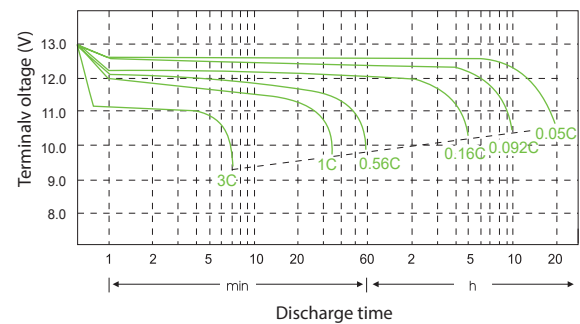
## Constant voltage charge characteristic



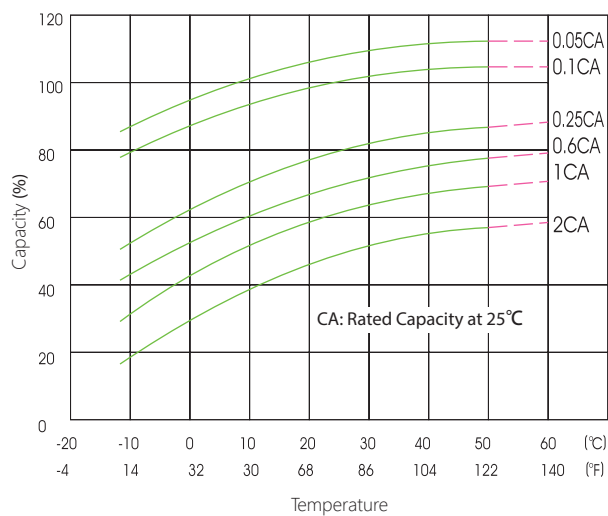
## Self-Discharge Characteristics



## Discharge Curves 77 F (25°C)



## Temperature effects on capacity



## Temperature effects float life

