

## 12V5Ah

**Valve Regulated Lead Acid Battery**

Website: [www.ibizapowerdxb.com](http://www.ibizapowerdxb.com)

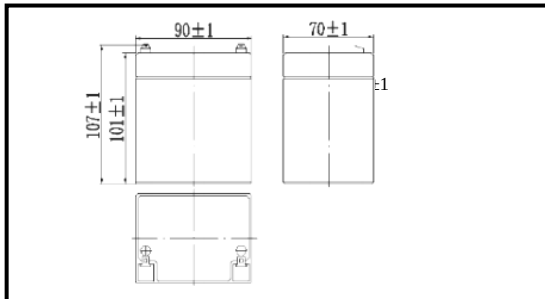
Tel: 042590647



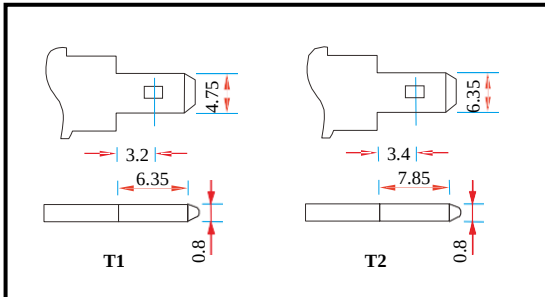
### Specifications

|                       |              |                        |
|-----------------------|--------------|------------------------|
| Nominal voltage       |              | 12V (6 cells per unit) |
| Rated capacity (20HR) |              | 5Ah/10.5V              |
| Dimensions            | Length       | 90±1mm (3.54inch)      |
|                       | Width        | 70±1mm (2.76inch)      |
|                       | Height       | 101±1mm (3.98inch)     |
|                       | Total height | 107±1mm (4.21inch)     |
| Approx. weight        |              | 1.65kg (3.64lbs)±4%    |

### Outer dimensions (mm)



### Terminal type (mm)



### Construction

| Component    | Positive plate | Negative plate | Container | Cover | Separator | Electrolyte   | Safety valve | Terminal |
|--------------|----------------|----------------|-----------|-------|-----------|---------------|--------------|----------|
| Raw material | Lead dioxide   | Lead           | ABS       | ABS   | AGM       | Sulfuric acid | Rubber       | Copper   |

### Constant current discharge characteristics unit: Ampere/Block (at 25°C, 77°F)

| F.V/Time | 5min | 10min | 15min | 30min | 60min | 2h   | 3h   | 4h   | 5h   | 10h  | 20h  |
|----------|------|-------|-------|-------|-------|------|------|------|------|------|------|
| 9.60V    | 19.1 | 12.1  | 9.45  | 5.33  | 3.28  | 1.79 | 1.24 | 1.03 | 0.87 | 0.47 | 0.25 |
| 9.90V    | 18.5 | 11.7  | 9.22  | 5.22  | 3.23  | 1.78 | 1.23 | 1.02 | 0.87 | 0.47 | 0.25 |
| 10.2V    | 17.8 | 11.3  | 8.88  | 5.06  | 3.14  | 1.77 | 1.22 | 1.01 | 0.86 | 0.47 | 0.25 |
| 10.5V    | 17.0 | 10.8  | 8.58  | 4.94  | 3.08  | 1.74 | 1.22 | 1.01 | 0.86 | 0.47 | 0.25 |
| 10.8V    | 16.0 | 10.2  | 8.13  | 4.76  | 2.99  | 1.69 | 1.18 | 0.97 | 0.83 | 0.46 | 0.25 |

### Constant power discharge characteristics unit: Watt/Block (at 25°C, 77°F)

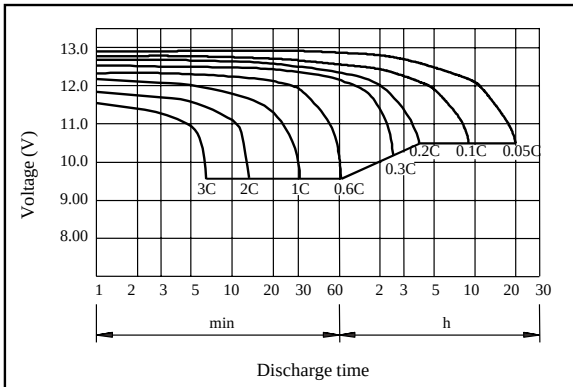
| F.V/Time | 5min | 10min | 15min | 30min | 60min | 2h   | 3h   | 4h   | 5h   | 10h  | 20h  |
|----------|------|-------|-------|-------|-------|------|------|------|------|------|------|
| 9.60V    | 213  | 136   | 108   | 61.0  | 37.9  | 21.0 | 14.7 | 12.2 | 10.4 | 5.68 | 3.05 |
| 9.90V    | 207  | 132   | 105   | 59.8  | 37.4  | 20.8 | 14.6 | 12.1 | 10.4 | 5.66 | 3.03 |
| 10.2V    | 198  | 127   | 101   | 58.0  | 36.4  | 20.7 | 14.5 | 12.1 | 10.3 | 5.63 | 3.02 |
| 10.5V    | 190  | 121   | 97.8  | 56.6  | 35.7  | 20.3 | 14.4 | 12.0 | 10.2 | 5.60 | 3.00 |
| 10.8V    | 179  | 115   | 92.6  | 54.5  | 34.6  | 19.8 | 14.0 | 11.6 | 9.9  | 5.49 | 2.94 |

Note 1: Above characteristics data can be obtained within three charge and discharge cycles.

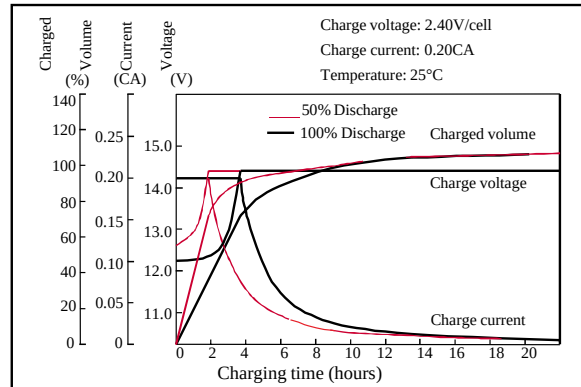
### Characteristics

|                                           |                                                 |                                                          |
|-------------------------------------------|-------------------------------------------------|----------------------------------------------------------|
| Capacity (25°C)                           | 20HR (10.5V)                                    | 5Ah                                                      |
|                                           | 10HR (10.5V)                                    | 4.7Ah                                                    |
|                                           | 1HR (9.60V)                                     | 3Ah                                                      |
| Terminal type                             |                                                 | T1/T2                                                    |
| Internal resistance (Fully charged, 25°C) |                                                 | Approx. 27mΩ                                             |
| Capacity affected by temperature (10HR)   | 40°C                                            | 102%                                                     |
|                                           | 25°C                                            | 100%                                                     |
|                                           | 0°C                                             | 85%                                                      |
|                                           | -15°C                                           | 65%                                                      |
| Self-discharge (25°C)                     | 3 months                                        | Remaining capacity: 91%                                  |
|                                           | 6 months                                        | Remaining capacity: 82%                                  |
|                                           | 12 months                                       | Remaining capacity: 65%                                  |
| Nominal operating temperature             |                                                 | 25°C±3°C (77°F±5°F)                                      |
| Operating temperature range               | Discharge                                       | -15°C~50°C (5°F~122°F)                                   |
|                                           | Charge                                          | -10°C~50°C (14°F~122°F)                                  |
|                                           | Storage                                         | -20°C~50°C (-4°F~122°F)                                  |
| Float charging voltage (25°C)             |                                                 | 13.60 to 13.80V Temperature compensation: -18mV/°C/Block |
| Cyclic charging voltage (25°C)            |                                                 | 14.50 to 15.00V Temperature compensation: -30mV/°C/Block |
| Maximum charging current                  |                                                 | 1.5A                                                     |
| Maximum discharge current                 |                                                 | 75A (5 sec.)                                             |
| Design life                               | 5 years for floating (25°C)                     |                                                          |
|                                           | Eurobat (20°C): 3-5 years, standard commercial. |                                                          |

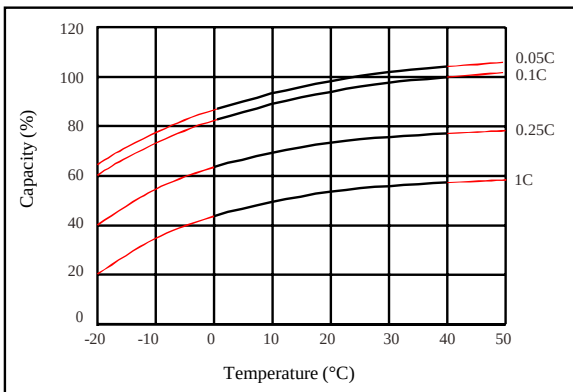
## Discharge characteristics (25°C)



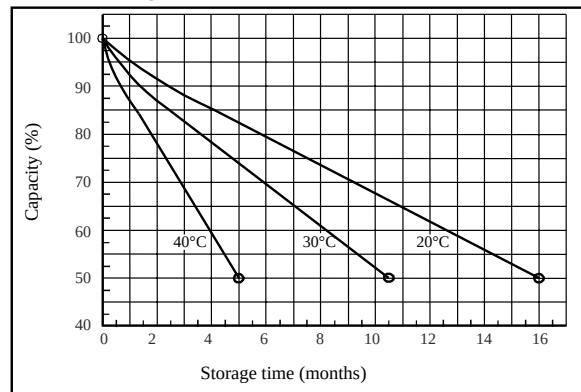
## Charging characteristics (25°C)



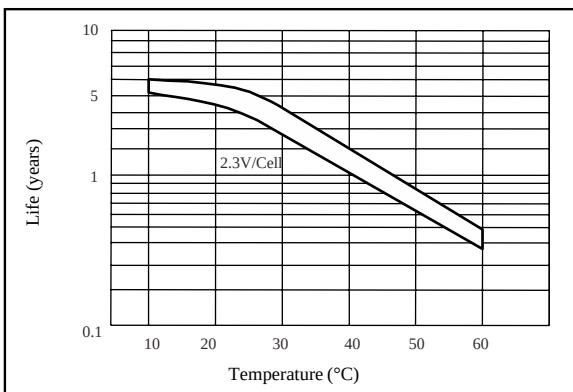
## Temperature effects on capacity



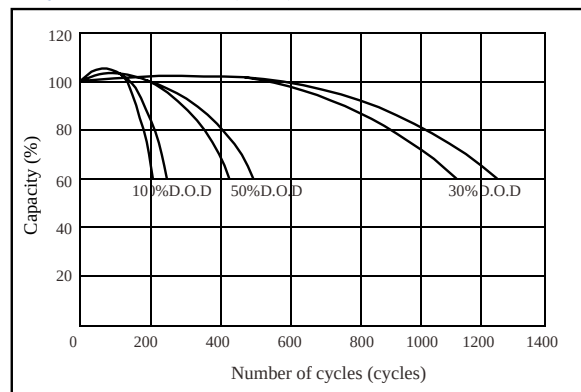
## Self-discharge characteristics



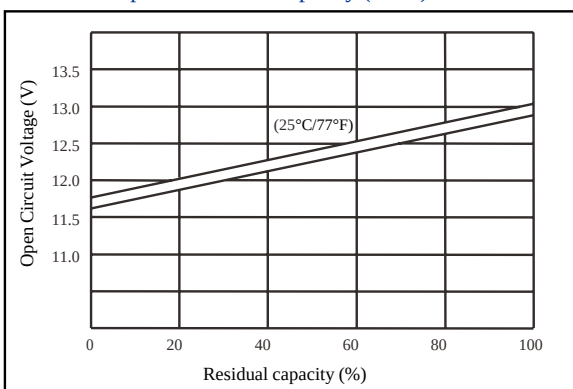
## Floating life on temperature



## Cycle life on D.O.D (25°C)



## Relationship for OCV and capacity (25°C)



## Relationship for charging voltage and temperature

