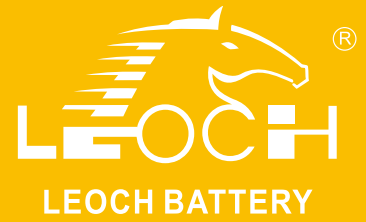




# LP Series-General Purpose

## LP6-1.0(6V1.0Ah)

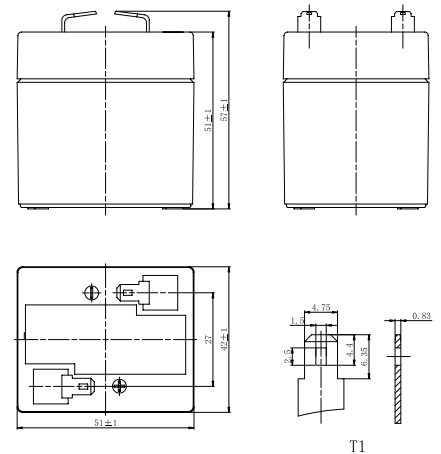


### Specifications

|                               |   |                                |
|-------------------------------|---|--------------------------------|
| Rated Voltage                 | 6V  |                                |
| Nominal Capacity              | 1.0Ah   | (C <sub>20</sub> , 1.75V/cell) |
| Dimension                     | Length  | 51±1mm (2.01 inches)           |
|                               | Width   | 42±1mm (1.65 inches)           |
|                               | Container Height  | 51±1mm (2.01 inches)           |
|                               | Total Height  | 57±1mm (2.24 inches)           |
| Approx Weight                 | 0.25 Kg (0.55 lbs)  |                                |
| Terminal                      | T1  |                                |
| Container Material            | ABS   |                                |
| Rated Capacity (25°C)         | 1.00 Ah   | (20hr, 0.050A, 1.75V/cell)     |
|                               | 0.95 Ah   | (10hr, 0.095A, 1.75V/cell)     |
|                               | 0.88 Ah   | (5hr, 0.176A, 1.75V/cell)      |
|                               | 0.774 Ah  | (3hr, 0.258A, 1.75V/cell)      |
|                               | 0.642 Ah  | (1hr, 0.642A, 1.60V/cell)      |
| Max. Discharge Current        | 15A (5s)  |                                |
| Internal Resistance (25°C)    | Approx 60mΩ   |                                |
| Operating Temp. Range         | Discharge   | -15 ~ 50°C (5 ~ 122°F)         |
|                               | Charge  | -20 ~ 40°C (-4 ~ 104°F)        |
|                               | Storage   | -15 ~ 40°C (5 ~ 104°F)         |
| Nominal Operating Temp. Range | 25±3°C (77±5°F)   |                                |
| Cycle Use                     | Initial Charging Current less than 0.3A. Voltage 7.2V~7.5V at 25°C(77°F)Temp. Coefficient -15mV/°C  |                                |
| Standby Use                   | Initial Charging Current less than 0.3A. Voltage 6.75V~6.9V at 25°C(77°F)Temp. Coefficient -10mV/°C   |                                |
| Effect of temp. to Capacity   | 40°C (104°F)  | 103%                           |
|                               | 25°C (77°F)   | 100%                           |
|                               | 0°C (32°F)  | 86%                            |
| Self Discharge                | LP series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter. |                                |



### Layout



### Constant Current Discharge (Amperes) at 25 °C (77°F)

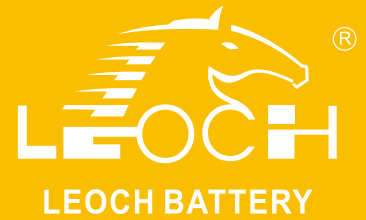
| F.V/Time   | 5min | 10min | 15min | 20min | 30min | 45min | 1h    | 1.5h  | 2h    | 3h    | 4h    | 5h    | 6h    | 8h    | 10h   | 20h   |
|------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.85V/cell | 2.79 | 1.74  | 1.43  | 1.14  | 0.850 | 0.636 | 0.581 | 0.428 | 0.341 | 0.250 | 0.202 | 0.172 | 0.147 | 0.116 | 0.092 | 0.049 |
| 1.80V/cell | 3.00 | 1.85  | 1.50  | 1.19  | 0.877 | 0.653 | 0.595 | 0.437 | 0.347 | 0.254 | 0.205 | 0.174 | 0.149 | 0.118 | 0.094 | 0.049 |
| 1.75V/cell | 3.16 | 1.92  | 1.55  | 1.22  | 0.900 | 0.667 | 0.607 | 0.445 | 0.354 | 0.258 | 0.207 | 0.176 | 0.151 | 0.119 | 0.095 | 0.050 |
| 1.70V/cell | 3.31 | 2.00  | 1.60  | 1.26  | 0.922 | 0.682 | 0.618 | 0.453 | 0.359 | 0.262 | 0.210 | 0.179 | 0.153 | 0.120 | 0.096 | 0.050 |
| 1.67V/cell | 3.43 | 2.06  | 1.64  | 1.29  | 0.939 | 0.693 | 0.628 | 0.459 | 0.363 | 0.264 | 0.212 | 0.180 | 0.154 | 0.121 | 0.096 | 0.051 |
| 1.60V/cell | 3.63 | 2.14  | 1.69  | 1.32  | 0.964 | 0.710 | 0.642 | 0.468 | 0.370 | 0.269 | 0.216 | 0.183 | 0.156 | 0.123 | 0.097 | 0.051 |

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

| F.V/Time   | 5min | 10min | 15min | 20min | 30min | 45min | 1h   | 1.5h  | 2h    | 3h    | 4h    | 5h    | 6h    | 8h    | 10h   | 20h   |
|------------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.85V/cell | 5.28 | 3.32  | 2.73  | 2.21  | 1.64  | 1.23  | 1.13 | 0.836 | 0.668 | 0.491 | 0.398 | 0.339 | 0.291 | 0.230 | 0.184 | 0.098 |
| 1.80V/cell | 5.62 | 3.50  | 2.85  | 2.28  | 1.69  | 1.26  | 1.15 | 0.851 | 0.679 | 0.498 | 0.403 | 0.343 | 0.295 | 0.233 | 0.186 | 0.099 |
| 1.75V/cell | 5.86 | 3.61  | 2.92  | 2.33  | 1.72  | 1.28  | 1.17 | 0.864 | 0.689 | 0.504 | 0.407 | 0.347 | 0.298 | 0.235 | 0.188 | 0.100 |
| 1.70V/cell | 6.08 | 3.73  | 3.00  | 2.39  | 1.76  | 1.31  | 1.19 | 0.877 | 0.697 | 0.511 | 0.412 | 0.352 | 0.301 | 0.237 | 0.189 | 0.101 |
| 1.67V/cell | 6.24 | 3.81  | 3.07  | 2.43  | 1.79  | 1.33  | 1.21 | 0.886 | 0.704 | 0.515 | 0.416 | 0.354 | 0.304 | 0.239 | 0.191 | 0.102 |
| 1.60V/cell | 6.49 | 3.92  | 3.15  | 2.49  | 1.83  | 1.35  | 1.23 | 0.901 | 0.715 | 0.523 | 0.422 | 0.359 | 0.307 | 0.242 | 0.193 | 0.103 |



# LP Series-General Purpose LP6-1.0(6V1.0Ah)



## Applications

- All purpose
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply
- Auto control system

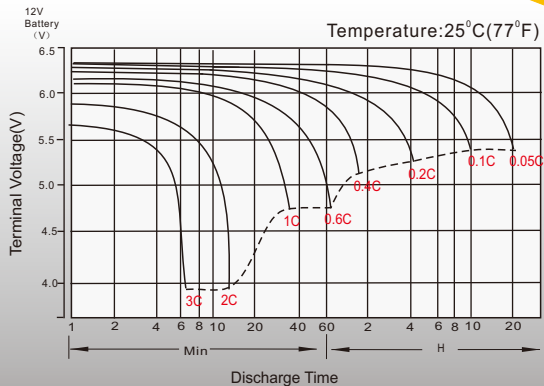
## General Features

- 5 years design life(25°C)
- Special exhaust structure and sealing technology, safe and reliable, flexible installation, convenient maintenance
- PbCaSn alloy for plate grids: less gassing, less self-discharging
- High quality AGM separator: extend cycle life and prevent micro short circuit
- High purity raw material: ensure low self discharge rate

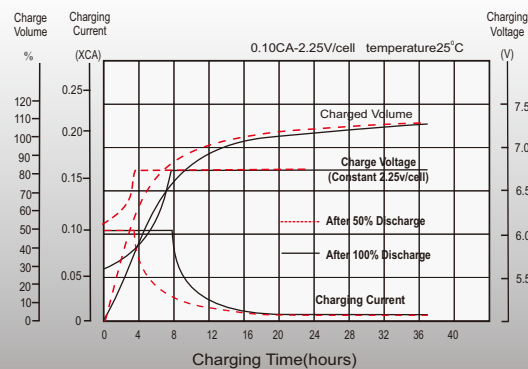
## Standards

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Certified
- Manufactured in Leoch®IATF 16949, ISO45001, ISO 9001 and ISO 14001 certified production facilities

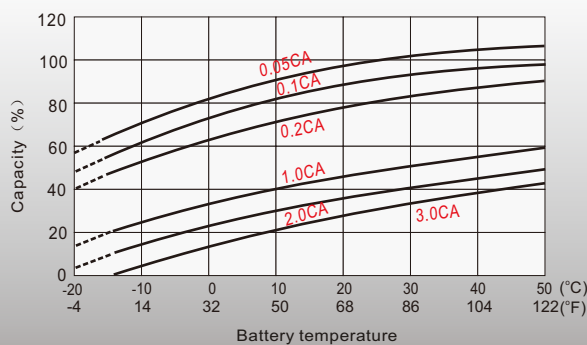
## Discharge Characteristics



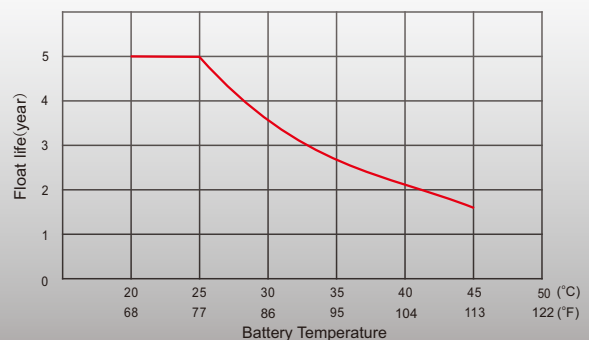
## Float Charging Characteristics



## Temperature Effects in Relation to Battery Capacity



## Float Service Life



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