



# General Purpose WPP12120(12V12Ah)

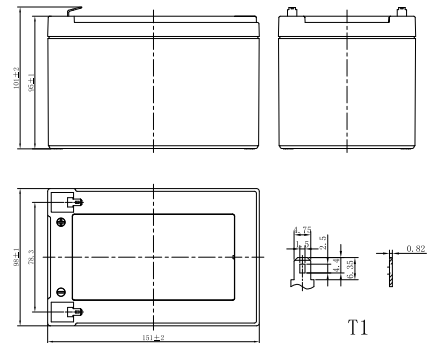


## Specifications

|                               |   |                                |
|-------------------------------|---|--------------------------------|
| Rated Voltage                 | 12V   |                                |
| Nominal Capacity              | 12.0Ah  | (C <sub>20</sub> , 1.75V/cell) |
| Dimension                     | Length  | 151±2mm (5.95 inches)          |
|                               | Width   | 98±1mm (3.86 inches)           |
|                               | Container Height  | 95±1mm (3.74 inches)           |
|                               | Total Height  | 101±2mm (3.98 inches)          |
| Approx Weight                 | 3.24 Kg (7.14 lbs)  |                                |
| Terminal                      | T1/T2   |                                |
| Container Material            | ABS   |                                |
| Rated Capacity (25°C)         | 12.0 Ah   | (20hr, 0.600A, 1.75V/cell)     |
|                               | 11.2 Ah   | (10hr, 1.12A, 1.75V/cell)      |
|                               | 10.2 Ah   | (5hr, 2.04A, 1.75V/cell)       |
|                               | 9.00 Ah   | (3hr, 3.00A, 1.75V/cell)       |
|                               | 7.20 Ah   | (1hr, 7.20A, 1.60V/cell)       |
| Max. Discharge Current        | 180A (5s)   |                                |
| Internal Resistance (25°C)    | Approx 19mΩ   |                                |
| 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 3.6A. Voltage 14.1V~14.7V at 25°C(77°F)Temp. Coefficient -30mV/°C  |                                |
|                               | Initial Charging Current less than 3.6A. Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C  |                                |
| Effect of temp. to Capacity   | 40°C (104°F)  | 103%                           |
|                               | 25°C (77°F)   | 100%                           |
|                               | 0°C (32°F)  | 86%                            |
| Self Discharge                | 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 | 30.6 | 22.7  | 18.1  | 14.8  | 11.0  | 8.07  | 6.59 | 4.81 | 3.82 | 2.91 | 2.34 | 1.99 | 1.70 | 1.34 | 1.09 | 0.587 |
| 1.80V/cell | 33.2 | 23.9  | 18.8  | 15.2  | 11.3  | 8.23  | 6.72 | 4.90 | 3.88 | 2.95 | 2.37 | 2.01 | 1.72 | 1.35 | 1.10 | 0.594 |
| 1.75V/cell | 35.9 | 25.1  | 19.5  | 15.7  | 11.5  | 8.39  | 6.84 | 4.98 | 3.94 | 3.00 | 2.40 | 2.04 | 1.74 | 1.37 | 1.12 | 0.600 |
| 1.70V/cell | 38.6 | 26.2  | 20.2  | 16.2  | 11.8  | 8.55  | 6.96 | 5.06 | 4.01 | 3.04 | 2.43 | 2.07 | 1.77 | 1.39 | 1.13 | 0.606 |
| 1.67V/cell | 40.2 | 26.9  | 20.6  | 16.4  | 12.0  | 8.65  | 7.03 | 5.11 | 4.04 | 3.07 | 2.45 | 2.08 | 1.78 | 1.40 | 1.14 | 0.609 |
| 1.60V/cell | 43.7 | 28.6  | 21.6  | 17.1  | 12.3  | 8.88  | 7.20 | 5.22 | 4.12 | 3.13 | 2.50 | 2.12 | 1.81 | 1.42 | 1.16 | 0.618 |

## 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 | 58.2 | 43.5  | 34.8  | 28.4  | 21.2  | 15.7  | 12.8 | 9.40 | 7.49 | 5.72 | 4.60 | 3.92 | 3.36 | 2.65 | 2.17 | 1.17 |
| 1.80V/cell | 62.7 | 45.4  | 36.0  | 29.2  | 21.7  | 15.9  | 13.0 | 9.53 | 7.58 | 5.79 | 4.66 | 3.97 | 3.40 | 2.68 | 2.19 | 1.19 |
| 1.75V/cell | 67.3 | 47.4  | 37.1  | 29.9  | 22.1  | 16.2  | 13.2 | 9.66 | 7.68 | 5.87 | 4.72 | 4.02 | 3.44 | 2.71 | 2.22 | 1.20 |
| 1.70V/cell | 71.8 | 49.3  | 38.2  | 30.7  | 22.5  | 16.4  | 13.4 | 9.79 | 7.78 | 5.94 | 4.77 | 4.06 | 3.48 | 2.74 | 2.24 | 1.21 |
| 1.67V/cell | 74.6 | 50.5  | 38.9  | 31.1  | 22.8  | 16.6  | 13.5 | 9.87 | 7.84 | 5.98 | 4.80 | 4.09 | 3.50 | 2.76 | 2.26 | 1.22 |
| 1.60V/cell | 80.4 | 53.1  | 40.4  | 32.1  | 23.3  | 16.9  | 13.8 | 10.0 | 7.97 | 6.08 | 4.88 | 4.15 | 3.56 | 2.80 | 2.29 | 1.24 |



# General Purpose WPP12120(12V12Ah)



HIDDEN IN QUALITY

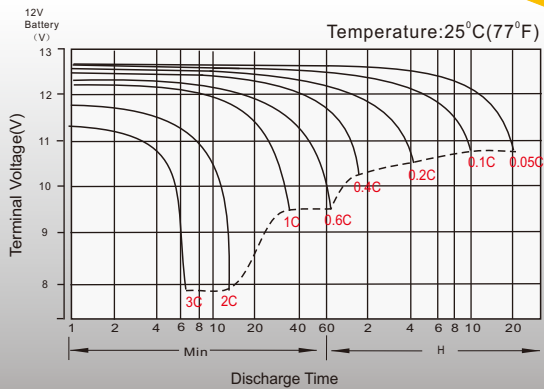
## Applications

- 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

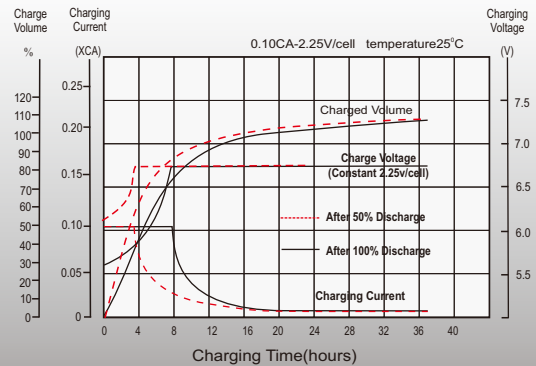
## General Features

- 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

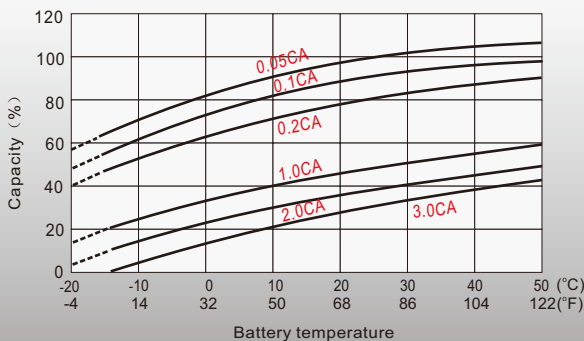
## Discharge Characteristics



## Float Charging Characteristics



## Temperature Effects in Relation to Battery Capacity



## Float Service Life

