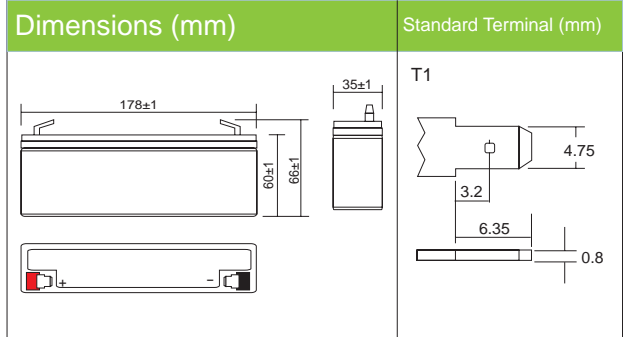
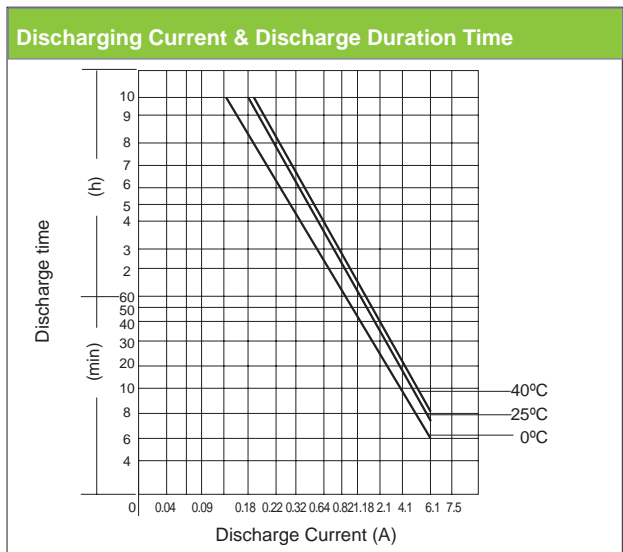


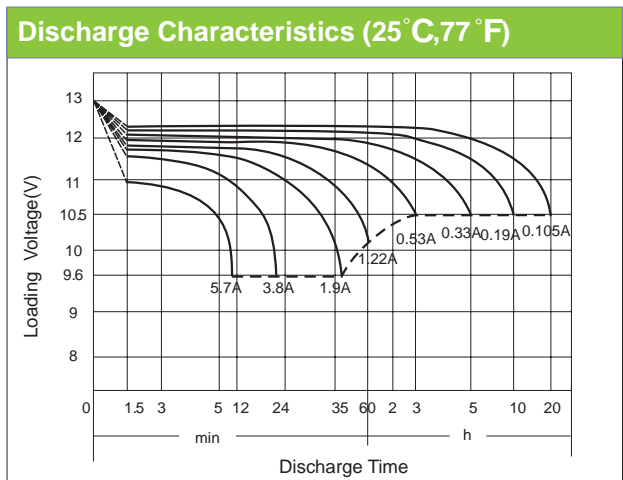
# BD12-1.9 (12V1.9Ah)



| PHYSICAL SPECIFICATION |                              |                        |
|------------------------|------------------------------|------------------------|
| Nominal Voltage        |                              | 12V                    |
| Nominal Capacity (20h) |                              | 1.9Ah                  |
| Dimension              | Length                       | 178±1mm (7.00 inches)  |
|                        | Width                        | 35±1mm (1.38 inches)   |
|                        | Container Height             | 60±1mm (2.36 inches)   |
|                        | Total Height (with Terminal) | 66±1mm (2.60 inches)   |
| Weight                 |                              | Approx 1.0kg (2.20lbs) |
| Standard Terminal      |                              | T1 (standard)          |



| ELECTRICAL SPECIFICATION         |   |        |                         |  |  |
|----------------------------------|---|--------|-------------------------|--|--|
| Rated Capacity                   | 20 hour rate (105 mA)                   | 2.1Ah  | Constant-Voltage Charge | Cycle  | Initial Charging Current less than 0.57A. Voltage 14.4V- 15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C |
|                                  | 10 hour rate (190mA)                    | 1.9Ah  |                         |  |  |
|                                  | 5 hour rate (334mA)                     | 1.67Ah |                         |  |  |
|                                  | 1 hour rate (1.22A)                     | 1.22Ah |                         |  |  |
| Capacity affected by Temperature | 40°C (104°F)                            | 103%   | Standby                 | No limit on Initial Charging Current Voltage 13.5V-13.8V at 25°C(77°F) Temp. Coefficient - 20mV/°C |  |
|                                  | 25°C (77°F)                             | 100%   |                         |  |  |
|                                  | 0°C (32°F)                              | 86%    |                         |  |  |
| Internal Resistance              | Fully charged battery (25°C, 77°F) 40mΩ |        |                         |  |  |



| Constant Current (Amp) and Constant Power (Watt/Cell) Discharge Table |      |      |      |      |      |      |      |      |     |     |     |      | Discharge Time (Minute) to final voltage /cell |      |
|---|------|------|------|------|------|------|------|------|-----|-----|-----|------|--|------|
| Final voltage   | Time | 0.5  | 1    | 2    | 3    | 6    | 10   | 20   | 30  | 60  | 120 | 180  | 300  | 600  |
| 1.75V   | A    | 12.3 | 11.3 | 10.3 | 8.2  | 7.2  | 5.6  | 2.8  | 2.1 | 1.1 | 0.7 | 0.53 | 0.33   | 0.19 |
| 25°C  | W    | 19.5 | 16.7 | 15.2 | 12.1 | 10.8 | 9.1  | 5.0  | 2.9 | 2.2 | 1.3 | 1.0  | 0.67   | 0.38 |
| 1.70V   | A    | 16.6 | 14.9 | 13.5 | 10.8 | 8.5  | 6.1  | 2.9  | 2.3 | 1.2 | 0.7 | 0.55 | 0.35   | 0.21 |
| 25°C  | W    | 26.7 | 22.9 | 20.7 | 16.7 | 12.9 | 9.7  | 5.2  | 3.8 | 2.4 | 1.4 | 1.0  | 0.70   | 0.38 |
| 1.60V   | A    | 21.5 | 19.0 | 16.7 | 13.2 | 10.1 | 6.5  | 2.95 | 2.4 | 1.3 | 0.8 | 0.6  | 0.38   | 0.22 |
| 25°C  | W    | 31.1 | 26.8 | 23.9 | 18.8 | 14.4 | 10.9 | 5.7  | 3.9 | 2.6 | 1.5 | 1.0  | 0.73   | 0.41 |
| 1.75V   | A    | 10.8 | 9.7  | 9.1  | 7.2  | 5.7  | 4.7  | 2.7  | 2.0 | 1.1 | 0.6 | 0.5  | 0.32   | 0.18 |
| 5°C   | W    | 17.1 | 15.4 | 14.4 | 11.3 | 9.5  | 8.0  | 4.8  | 2.8 | 1.8 | 1.1 | 0.9  | 0.59   | 0.32 |
| 1.70V   | A    | 14.9 | 13.7 | 12.3 | 9.7  | 7.6  | 5.7  | 2.8  | 2.0 | 1.1 | 0.6 | 0.5  | 0.34   | 0.18 |
| 5°C   | W    | 22.9 | 20.2 | 18.5 | 14.9 | 12.1 | 8.8  | 5.3  | 3.4 | 2.1 | 1.2 | 0.9  | 0.62   | 0.35 |
| 1.60V   | A    | 18.5 | 16.4 | 14.2 | 11.1 | 8.4  | 6.2  | 2.9  | 2.1 | 1.2 | 0.7 | 0.5  | 0.35   | 0.19 |
| 5°C   | W    | 28.5 | 24.9 | 22.2 | 17.9 | 14.1 | 9.3  | 5.6  | 3.6 | 2.1 | 1.3 | 1.0  | 0.64   | 0.37 |