

UP-DC8.0-12



| Specification | | |
|-------------------------------------|--|-------------------------------|
| Nominal Voltage | 12V | |
| Nominal Capacity (10HR) | 8.0AH | |
| Dimension | Length | 151±1mm (5.95 inches) |
| | Width | 65±1mm (2.56 inches) |
| | Container Height | 94.5±1mm (3.72 inches) |
| | Total Height (with Terminal) | 100±1mm (3.94 inches) |
| | Approx Weight | Approx 2.75 Kg (6.06 lbs) |
| Terminal | T1 / T2 | |
| Container Material | ABS | |
| Rated Capacity | 8.58 AH/0.43A | (20hr, 1.80V/cell, 25°C/77°F) |
| | 8.00 AH/0.80A | (10hr, 1.80V/cell, 25°C/77°F) |
| | 7.02 AH/1.40A | (5hr, 1.75V/cell, 25°C/77°F) |
| | 6.36 AH/2.12A | (3hr, 1.75V/cell, 25°C/77°F) |
| | 5.17 AH/5.17A | (1hr, 1.60V/cell, 25°C/77°F) |
| Max. Discharge Current | 120A (5s) | |
| Internal Resistance | Approx 18.0mΩ | |
| Operating Temperature Range | Discharge: -15~50°C (5~122°F) | |
| | Change : 0~40°C (32~104°F) | |
| | Storage : -15~40°C (5~104°F) | |
| Nominal Operating Temperature Range | 25±3°C (77±5°F) | |
| Cycle Use | Initial Charging Current less than 2.4A.Voltage. 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C | |
| Standby Use | No limit on Initial Charging Current Voltage. 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C | |
| Capacity affected by Temperature | 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. | |

| Constant Current Discharge (Amperes) at 25°C (77°F) | | | | | | | | | | | | | | |
|---|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|-------|
| F.V/Time | 10min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
| 1.85V/cell | 11.7 | 9.9 | 8.61 | 6.20 | 4.92 | 3.99 | 2.48 | 1.93 | 1.57 | 1.27 | 1.11 | 0.91 | 0.76 | 0.425 |
| 1.80V/cell | 15.0 | 11.9 | 10.2 | 7.31 | 5.72 | 4.47 | 2.71 | 2.08 | 1.67 | 1.37 | 1.19 | 0.96 | 0.80 | 0.429 |
| 1.75V/cell | 16.4 | 13.0 | 11.0 | 7.59 | 5.94 | 4.68 | 2.81 | 2.12 | 1.71 | 1.40 | 1.22 | 0.98 | 0.81 | 0.433 |
| 1.70V/cell | 17.9 | 13.9 | 11.5 | 7.90 | 6.18 | 4.83 | 2.92 | 2.18 | 1.76 | 1.44 | 1.25 | 0.99 | 0.82 | 0.441 |
| 1.65V/cell | 19.3 | 14.8 | 12.2 | 8.34 | 6.33 | 4.99 | 3.00 | 2.27 | 1.82 | 1.48 | 1.28 | 1.01 | 0.83 | 0.446 |
| 1.60V/cell | 21.0 | 15.8 | 13.0 | 8.80 | 6.60 | 5.17 | 3.10 | 2.34 | 1.87 | 1.53 | 1.30 | 1.02 | 0.84 | 0.449 |

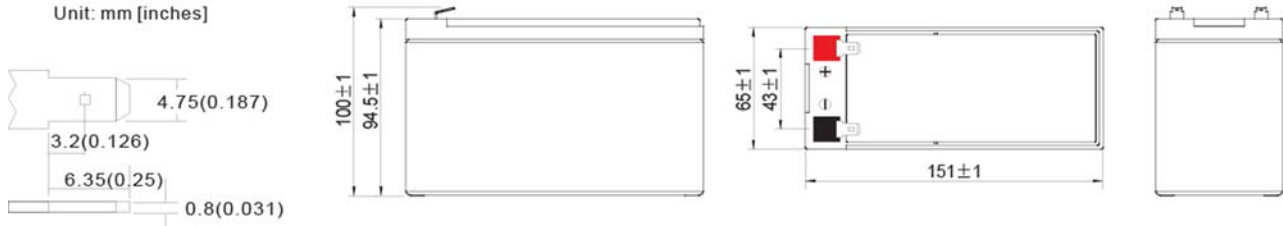
| Constant Power Discharge (Watts) at 25°C (77°F) | | | | | | | | | | | | | | |
|---|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|-------|
| F.V/Time | 10min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
| 1.85V/cell | 21.9 | 18.6 | 16.4 | 11.9 | 9.52 | 7.75 | 4.83 | 3.78 | 3.07 | 2.50 | 2.19 | 1.79 | 1.50 | 0.850 |
| 1.80V/cell | 27.6 | 22.1 | 19.1 | 13.9 | 11.0 | 8.63 | 5.25 | 4.05 | 3.26 | 2.68 | 2.34 | 1.90 | 1.58 | 0.857 |
| 1.75V/cell | 29.9 | 23.9 | 20.4 | 14.3 | 11.3 | 9.00 | 5.42 | 4.11 | 3.33 | 2.74 | 2.41 | 1.93 | 1.60 | 0.864 |
| 1.70V/cell | 32.1 | 25.4 | 21.3 | 14.9 | 11.8 | 9.26 | 5.63 | 4.22 | 3.41 | 2.80 | 2.45 | 1.96 | 1.61 | 0.879 |
| 1.65V/cell | 34.4 | 26.8 | 22.5 | 15.6 | 12.0 | 9.54 | 5.77 | 4.38 | 3.52 | 2.88 | 2.50 | 1.99 | 1.64 | 0.889 |
| 1.60V/cell | 36.7 | 28.3 | 23.7 | 16.3 | 12.4 | 9.80 | 5.92 | 4.49 | 3.61 | 2.96 | 2.55 | 2.00 | 1.66 | 0.893 |



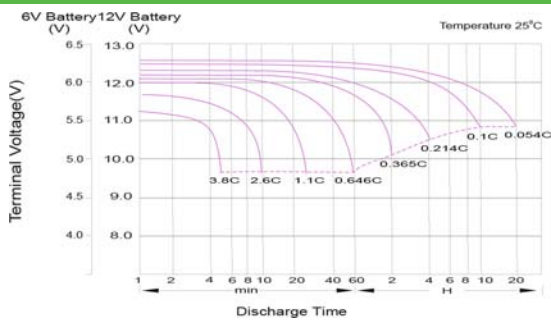
UP-DC8.0-12

Dimensions

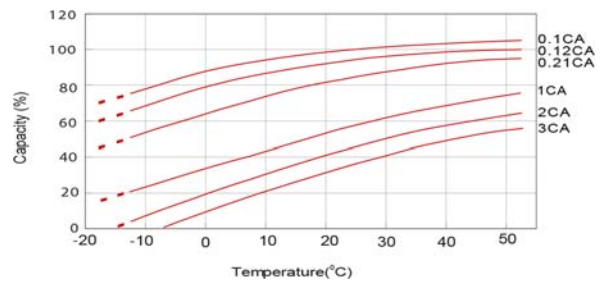
T1 Terminal
Unit: mm [inches]



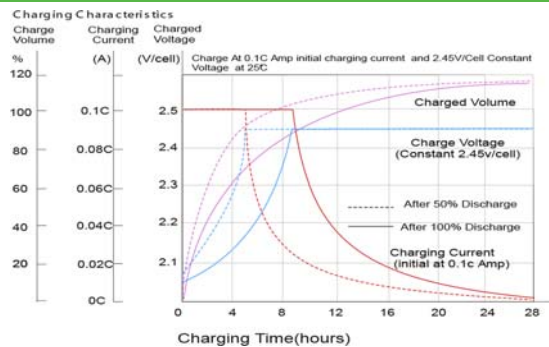
Discharge Characteristics



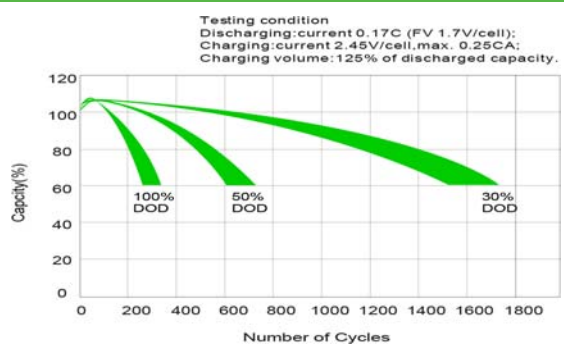
Temperature Effects in Relation to Battery Capacity



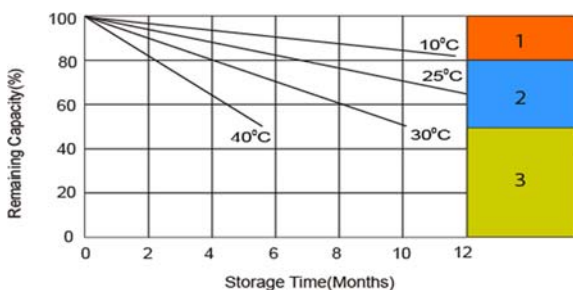
Charging Characteristics (cycle use)



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



- 1** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)
- 2** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant volatge 2.25V/cell.
 2. Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.
 3. Charged for 8~10hours at limited current 0.05CA .
- 3** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

