

UP Series CG256-12

C A R B O N G E L



Main Features

- The carbon can greatly slow down the sulfate of negative plate due to the PSOC cycle application.
- Excellent partial stage of charge (PSOC) cycle performance.
- Excellent recharge acceptance performance, super fast charge / large discharge performance.
- Excellent temperature tolerance, capacity increased 16% at -20°C.

Complied Standards

- IEC 60896-21/22
- JIS C8704
- UL1989
- GB/T19639

12 V
voltage

256 Ah
capacity

GEL
technology

12 years
design life

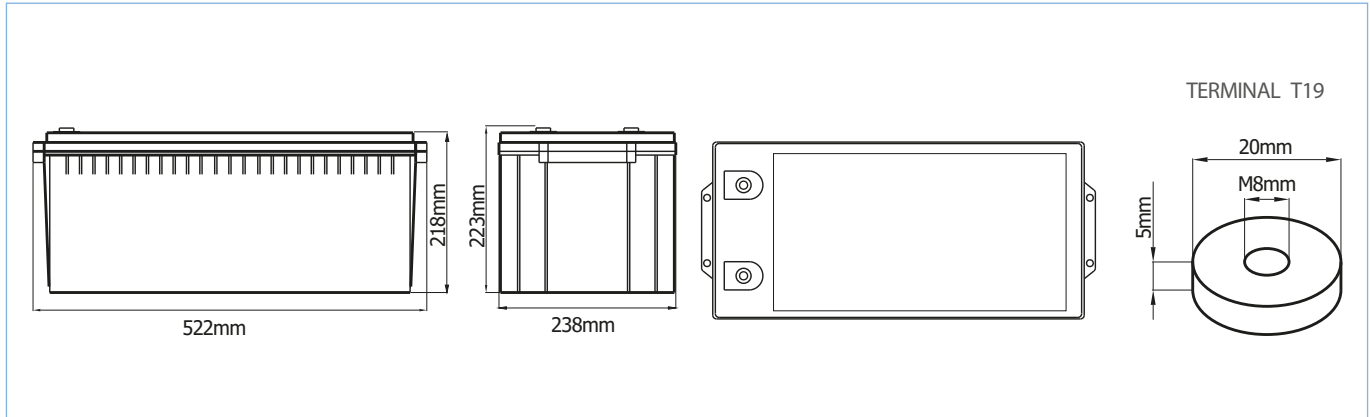


Technical Specifications

| | |
|---|---|
| Nominal Voltage (V) | 12 (6 cells per unit) |
| Designed Floating Life (20°C) | 12 Years |
| Nominal Capacity (25°C) | 256 Ah @ 20 Hr - rate (to 1.75 Vpc) 320 Ah @ 100 Hr - rate (to 1.75 Vpc) |
| Dimension, L x W x H (mm) | 522 x 238 x 223 |
| Approx. Weight | 64 Kg (141.2 lbs) |
| Terminal Type | Female Copper Insert M8 (torque: 10 ~ 12 N.m) |
| Internal Resistance | Approx. 0.003 Ω (fully charged @ 20°C) |
| Maximum Charge Current | 50 A |
| Maximum Discharge Current (5S) | 2000 A |
| Short Circuit Current | 4000 A |
| Self Discharge | Approx. 3% per month @ 20°C |
| Ambient Temperature | Discharge: -20 ~ 60°C Charge: -20 ~ 60°C Storage: -20 ~ 45°C |
| Float Charge Voltage (20~25°C) | 13.7 - 13.9 V (-3 mV / cell / °C) |
| Equalize and Cycle Use Charge Voltage (20~25°C) | 14.3 - 14.6 V (-5 mV / cell / °C) |
| Container Material | ABS (UL94-V0 optional) |



Battery Dimensions

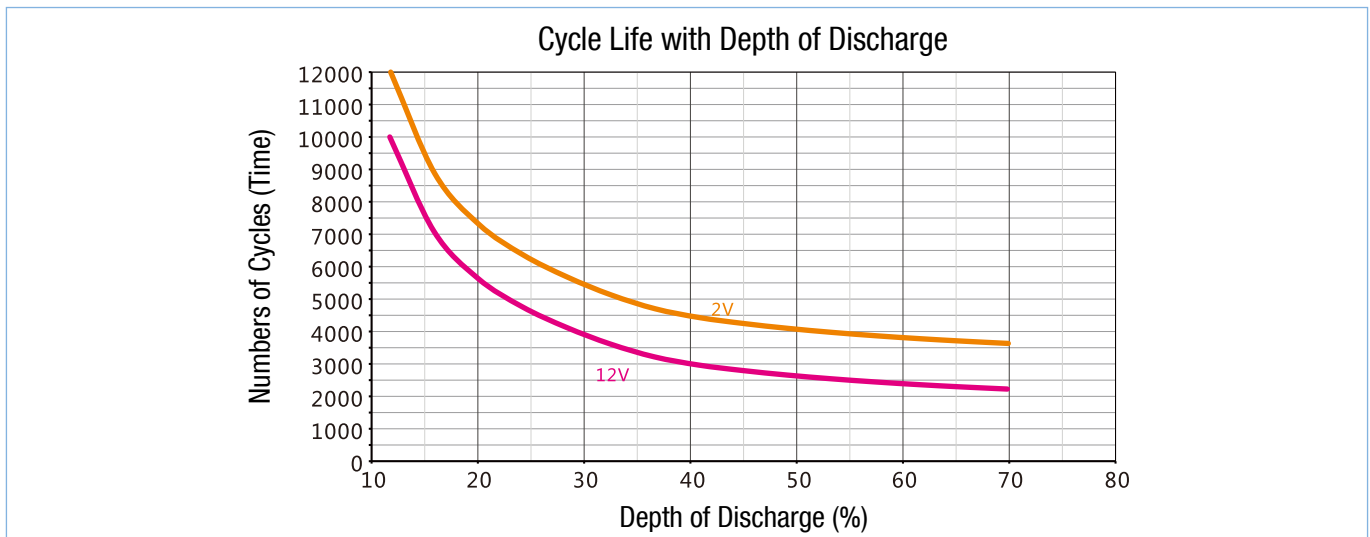


Battery Discharge Table

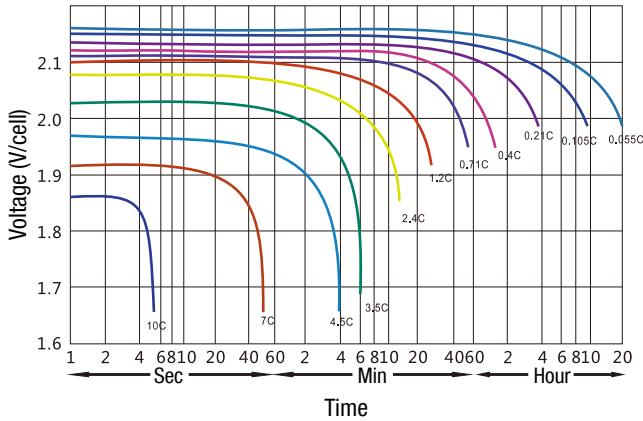
| Constand Current Discharge (25°C) | | | | | | | | | | | | |
|-----------------------------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|
| F.V/Time | 1 HR | | 3 HR | | 5 HR | | 10 HR | | 20 HR | | 100 HR | |
| | Current (Amps) | Capacity (Ah) | Current (Amps) | Capacity (Ah) | Current (Amps) | Capacity (Ah) | Current (Amps) | Capacity (Ah) | Current (Amps) | Capacity (Ah) | Current (Amps) | Capacity (Ah) |
| 1.75 V | 170 | 170 | 66 | 200 | 42.6 | 213 | 23.3 | 233 | 12.8 | 256 | 3.20 | 320 |

Note: The above data are average values, and can be obtained within 5 charge / discharge cycles. These are not minimum values. Cell and battery designs / specifications are subject to modification without notice. Contact UPOWER, LTD for the latest information.

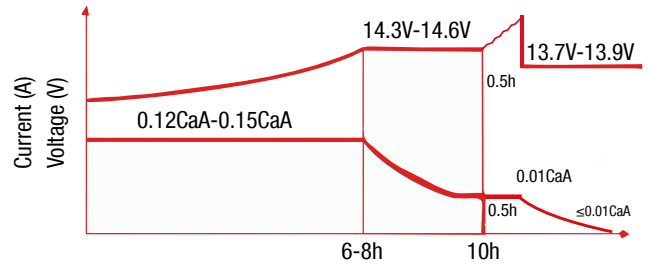
Performance Curve



Discharging Characteristics (25°C / 77°F)

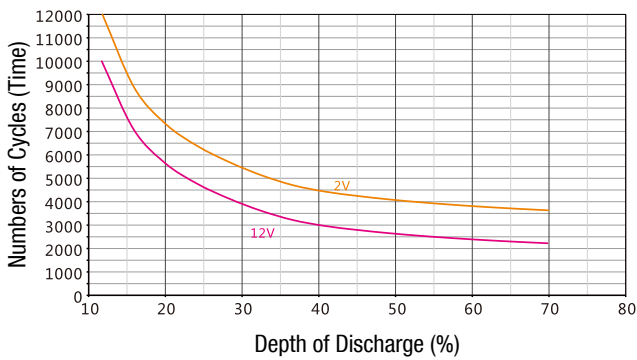


Charge Characteristic Curve

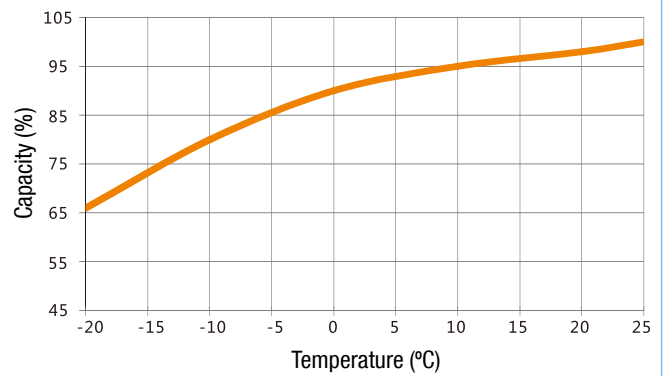


Step 1: Constant current charging with 0.12-0.15CaA until voltage reach to 14.3-14.6V
 Step 2: Constant voltage charging with 14.3-14.6V until current is less than 0.01CaA
 Step 3: Constant current charging with 0.01CaA for 0.5h
 Step 4: Float charging at voltage 13.7-13.9V

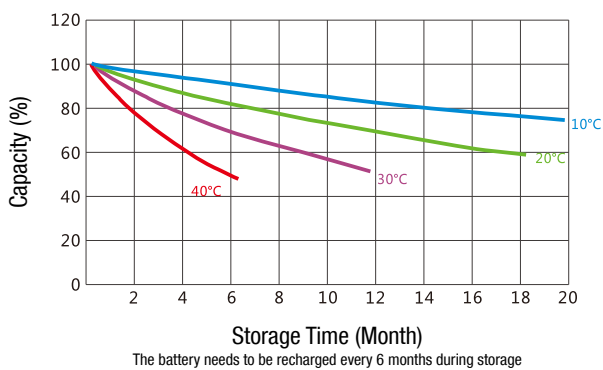
Cycle Life with Depth of Discharge



Capacity Effected by Temperature



Self Discharge Characteristics



Charging Time with Depth of Discharge

