



**B00426/BATU1-GEL-30A**
**Applications**

- Railway and marine systems
- Electric tools
- Vehicule in place of walking
- Lawn mowers
- Golf trolleys and golf carts
- Electric toys
- Portable power
- Wheelchairs
- Medical equipment

| <b>Specification</b>              |  |
|-----------------------------------|--|
| Nominal voltage                   | 12V  |
| Nominal capacity (20h)            | 30Ah   |
| Dimensions                        | Length : 195 ± 1 mm (7.68 inches)<br>Width : 130 ± 1 mm (5.12 inches)<br>Container height : 164 ± 1 mm (6.46 inches)<br>Total height (with terminal) : 178 ± 1 mm (7.01 inches)  |
| Weight                            | Approx. 10.7kg (23.59lb)   |
| Terminal                          | T5   |
| Container material                | ABS  |
| Rated capacity                    | 30.0 Ah/1.50 A (20h, 1.80V/cell, 25°C/77°F)<br>27.6 Ah/2.76 A (10h, 1.80V/cell, 25°C/77°F)<br>24.25 Ah/4.85 A (5h, 1.75V/cell, 25°C/77°F)<br>21.36 Ah/7.12 A (3h, 1.75V/cell, 25°C/77°F)<br>17.8 Ah/17.8 A (1h, 1.60V/cell, 25°C/77°F) |
| Max. discharge current            | 300 A (5s)   |
| Internal resistance               | Approx. 14.6mΩ   |
| Operating temperature range       | Discharge : -20~55°C (-4~131°F)<br>Charge : 0~40°C (32~104°F)<br>Storage : -20~50°C (-4~122°F)   |
| Nominal operating temp. range     | 25 ± 3°C (77 ± 5°F)  |
| Cycle use                         | Initial charging current less than 6 A.<br>Voltage 14.4V~15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C   |
| Standby use                       | No limit on initial charging current voltage<br>13.5V~13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C  |
| Capacity according to temperature | 40°C (104°F) : 103%<br>25°C (77°F) : 100%<br>0°C (32°F) : 86%  |
| Self discharge                    | CG Power GEL series batteries may be stored for up to 9 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.   |

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

| F.V/Time   | 10 min | 15 min | 20 min | 30 min | 45 min | 1 h  | 2 h  | 3 h  | 4 h  | 5 h  | 6 h  | 8 h  | 10 h | 20 h |
|------------|--------|--------|--------|--------|--------|------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 36.5   | 31.0   | 27.0   | 21.0   | 16.0   | 13.3 | 8.36 | 6.30 | 5.16 | 4.42 | 3.84 | 3.10 | 2.63 | 1.46 |
| 1.80V/cell | 44.9   | 36.8   | 31.7   | 23.9   | 17.9   | 14.8 | 9.09 | 6.80 | 5.53 | 4.69 | 4.07 | 3.26 | 2.76 | 1.50 |
| 1.75V/cell | 50.5   | 41.0   | 34.7   | 25.8   | 19.1   | 15.7 | 9.53 | 7.12 | 5.75 | 4.85 | 4.20 | 3.34 | 2.80 | 1.52 |
| 1.70V/cell | 56.3   | 44.6   | 37.0   | 27.1   | 20.0   | 16.4 | 10.0 | 7.36 | 5.91 | 4.98 | 4.31 | 3.42 | 2.85 | 1.54 |
| 1.65V/cell | 60.3   | 47.0   | 38.9   | 28.4   | 20.7   | 17.0 | 10.3 | 7.58 | 6.05 | 5.10 | 4.40 | 3.47 | 2.90 | 1.56 |
| 1.60V/cell | 65.8   | 50.4   | 41.6   | 30.0   | 21.9   | 17.8 | 10.6 | 7.82 | 6.23 | 5.24 | 4.50 | 3.52 | 2.94 | 1.58 |

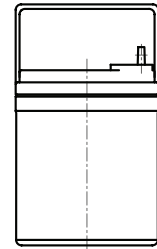
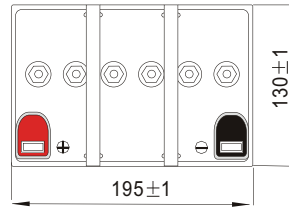
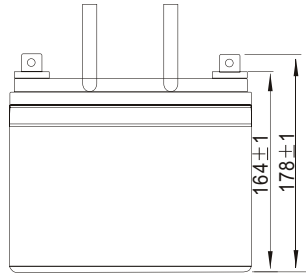
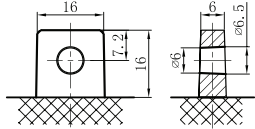
**Constant Power Discharge (Watts/cell) at 25°C (77°F)**

| F.V/Time   | 10 min | 15 min | 20 min | 30 min | 45 min | 1 h  | 2 h  | 3 h  | 4 h  | 5 h  | 6 h  | 8 h  | 10 h | 20 h |
|------------|--------|--------|--------|--------|--------|------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 68.6   | 58.6   | 51.6   | 40.3   | 30.9   | 25.9 | 16.3 | 12.3 | 10.1 | 8.70 | 7.58 | 6.14 | 5.22 | 2.92 |
| 1.80V/cell | 83.1   | 68.6   | 59.6   | 45.5   | 34.4   | 28.7 | 17.6 | 13.2 | 10.8 | 9.21 | 8.02 | 6.46 | 5.48 | 2.99 |
| 1.75V/cell | 92.0   | 75.5   | 64.6   | 48.8   | 36.5   | 30.2 | 18.4 | 13.8 | 11.2 | 9.49 | 8.26 | 6.61 | 5.56 | 3.03 |
| 1.70V/cell | 101.1  | 81.3   | 68.4   | 51.0   | 38.0   | 31.4 | 19.3 | 14.3 | 11.5 | 9.73 | 8.47 | 6.75 | 5.65 | 3.07 |
| 1.65V/cell | 107.1  | 84.8   | 71.3   | 52.9   | 39.2   | 32.3 | 19.7 | 14.6 | 11.7 | 9.95 | 8.61 | 6.84 | 5.73 | 3.10 |
| 1.60V/cell | 114.8  | 89.7   | 75.5   | 55.5   | 41.1   | 33.7 | 20.3 | 15.0 | 12.0 | 10.2 | 8.79 | 6.92 | 5.81 | 3.13 |

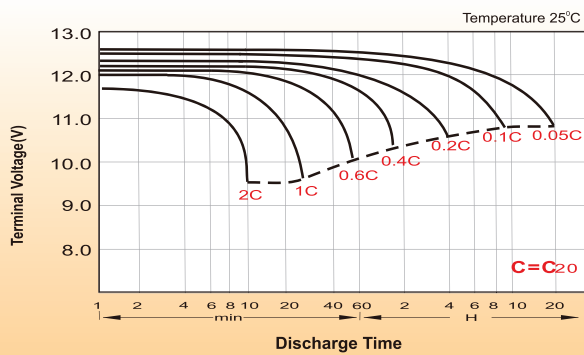
## GEL Battery (12V30AH) | B00426/BATU1-GEL-30A

### Dimensions

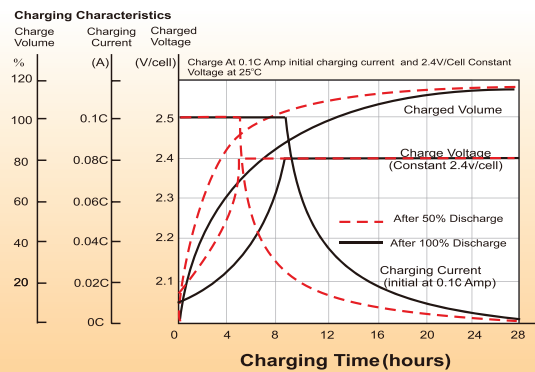
**T5 Terminal**  
Unit: mm



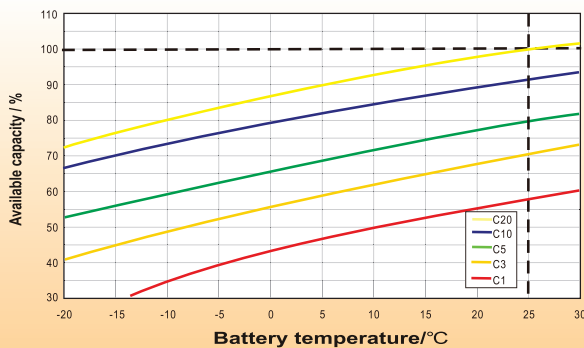
### Discharge Characteristics



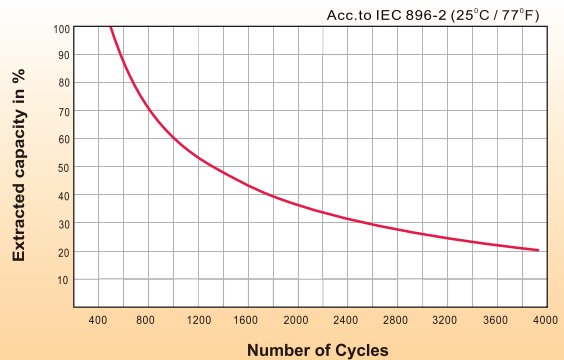
### Charging Characteristics (cycle use)



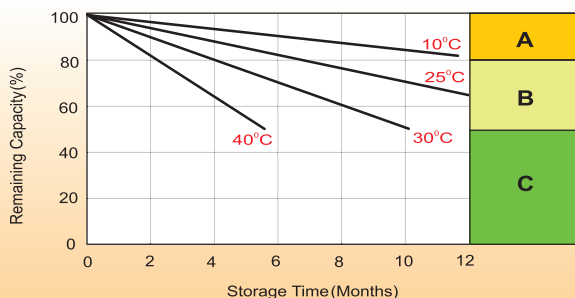
### Temperature Effects in Relation to Battery Capacity



### Cycle Life in Relation to Depth of Discharge



### Self Discharge Characteristics



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