



GPL 121000

12V 100.0Ah

GPL 121000 is a general purpose battery with 10 years expected life under normal float charge. As with all CSB batteries, all are rechargeable, highly efficient, leak proof and maintenance free.



Specification

| | |
|---|---|
| Cells Per Unit | 6 |
| Voltage Per Unit | 12 |
| Capacity | 100Ah @ 20hr-rate to 1.75V per cell @25 °C (77°F) |
| Weight | Approx. 35kg(77.2 lbs) |
| Maximum Discharge Current | 800A(5sec) |
| Internal Resistance | Approx. 4.5mΩ |
| Operating Temperature Range | Discharge: -20°C~50°C (-4°F~122°F) Charge: -20°C~50°C (-4°F~122°F) Storage: -20°C~40°C (-4°F~104°F) |
| Nominal Operating Temperature Range | 25°C±3°C (77°F±5°F) |
| Flood Charging Voltage | 13.5 to 13.8 VDC/unit Average at 25°C (77°F) |
| Recommended Maximum Charging Current Limit | 30A |
| Equalization and Cycle Service | 14.4 to 15.0 VDC/unit Average at 25°C (77°F) |
| Self Discharge | CSB Batteries can be stored for more than 6 months at 25°C (77°F). Please charge batteries before using. For higher temperatures the time interval will be shorter. |
| Terminal | Thread Insert & Bolt |
| Container Material | -Polypropylene (UL94-HB)*Flammability resistance of UL94-V0 can be available upon request. |

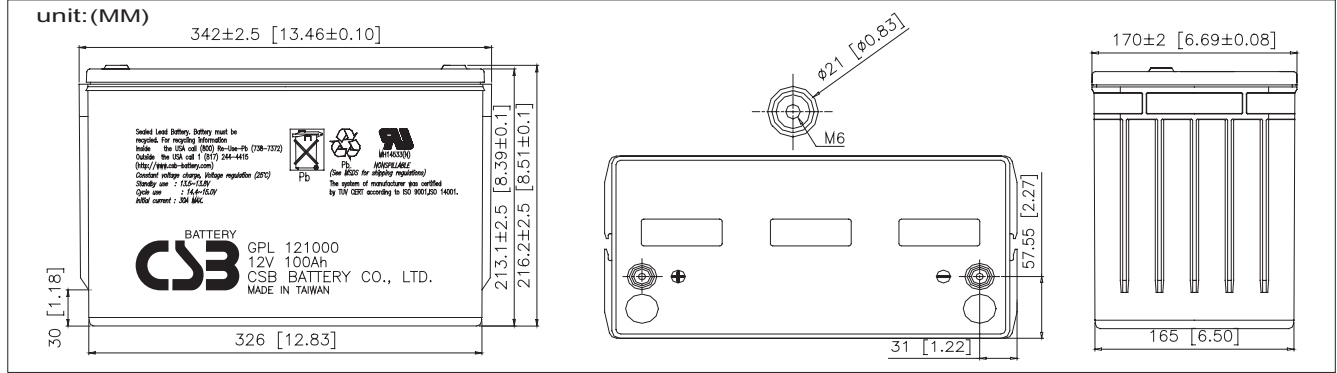
UL
MH14533(N)

TÜV CERT
ISO 9001
No.041005117

RWTV
ISO 14001
NO. UM 1-12-0045

CSB-manufactured batteries are UL-recognized components under UL924 and UL1989. CSB is also certified by ISO 9001 and ISO 14001.

Dimensions



Constant Current Discharge Characteristics Unit:A (25°C ,77°F)

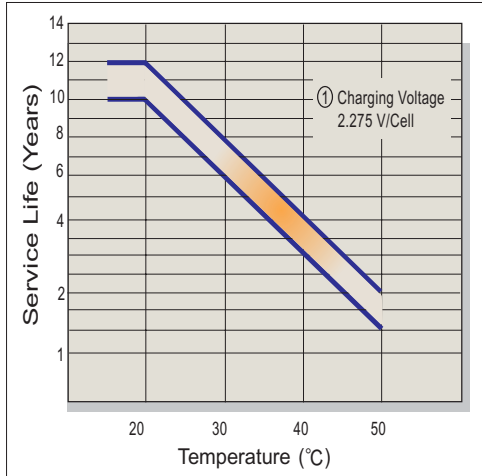
| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 2HR | 3HR | 4HR | 5HR | 8HR | 10HR | 20HR |
|----------|-------|-------|-------|-------|------|------|------|------|------|-------|------|------|
| 1.60V | 411.0 | 273.0 | 198.0 | 118.0 | 67.6 | 38.3 | 27.3 | 21.2 | 18.1 | 11.90 | 9.98 | 5.15 |
| 1.67V | 386.0 | 256.5 | 194.0 | 115.0 | 66.9 | 37.9 | 27.0 | 21.0 | 18.0 | 11.80 | 9.93 | 5.12 |
| 1.70V | 361.0 | 240.0 | 190.0 | 112.0 | 66.1 | 37.4 | 26.6 | 20.8 | 17.8 | 11.70 | 9.88 | 5.09 |
| 1.75V | 319.5 | 222.0 | 184.0 | 107.5 | 64.2 | 36.8 | 26.1 | 20.5 | 17.5 | 11.50 | 9.69 | 5.05 |
| 1.80V | 278.0 | 204.0 | 178.0 | 103.0 | 62.3 | 36.2 | 25.6 | 20.1 | 17.2 | 11.30 | 9.50 | 5.00 |
| 1.83V | 253.1 | 193.2 | 174.4 | 100.3 | 61.2 | 35.8 | 25.3 | 20.0 | 17.0 | 11.18 | 9.39 | 4.97 |

Constant Power Discharge Characteristics Unit:W (25°C ,77°F)

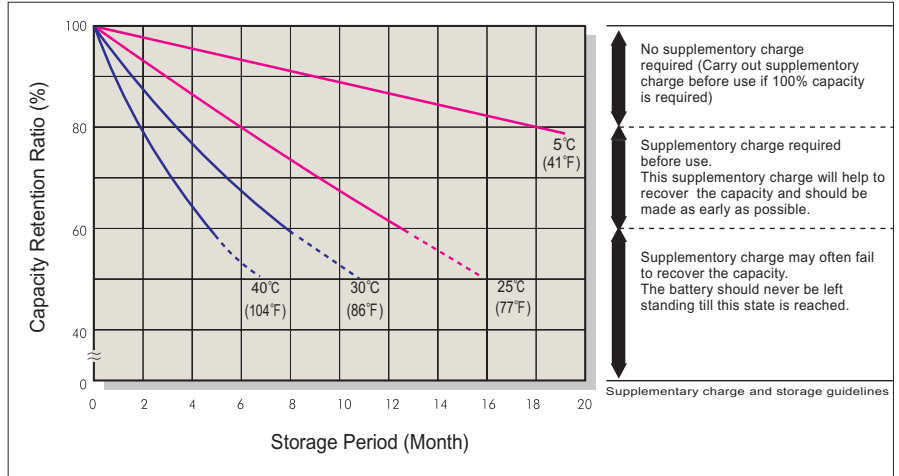
| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 2HR | 3HR | 4HR | 5HR | 8HR | 10HR | 20HR |
|----------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 1.60V | 4330 | 3000 | 2210 | 1350 | 788.0 | 449.0 | 321.0 | 250.0 | 216.0 | 142.0 | 120.0 | 67.5 |
| 1.67V | 4115 | 2830 | 2145 | 1330 | 780.5 | 444.0 | 317.5 | 249.0 | 215.0 | 141.5 | 119.5 | 67.2 |
| 1.70V | 3900 | 2660 | 2080 | 1310 | 773.0 | 439.0 | 314.0 | 248.0 | 214.0 | 141.0 | 119.0 | 66.9 |
| 1.75V | 3500 | 2450 | 2005 | 1250 | 753.5 | 431.0 | 309.5 | 243.5 | 210.0 | 138.5 | 117.0 | 65.7 |
| 1.80V | 3100 | 2240 | 1930 | 1190 | 734.0 | 423.0 | 305.0 | 239.0 | 206.0 | 136.0 | 115.0 | 64.5 |
| 1.83V | 2860 | 2114 | 1885 | 1154 | 722.3 | 418.2 | 302.3 | 236.3 | 203.6 | 134.5 | 113.8 | 63.8 |

● All mentioned values are average values.

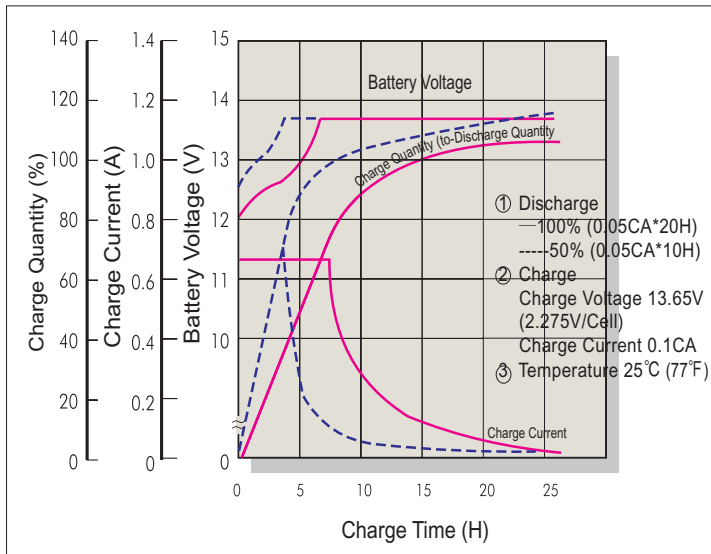
Trickle (or Float) Service Life



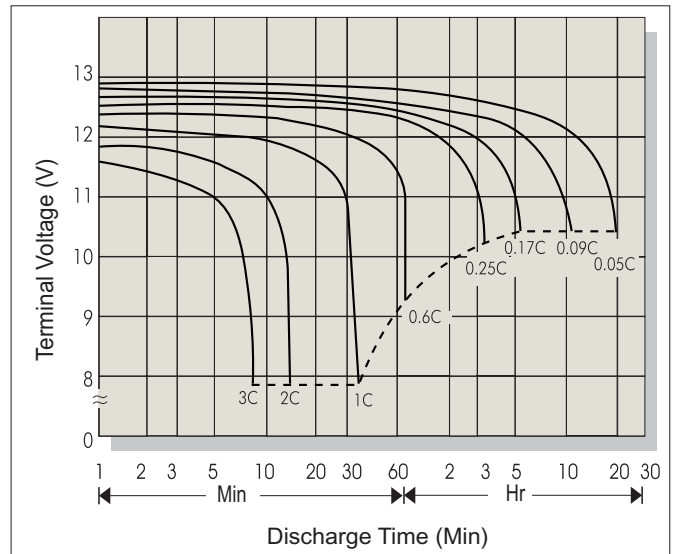
Capacity Retention Characteristic



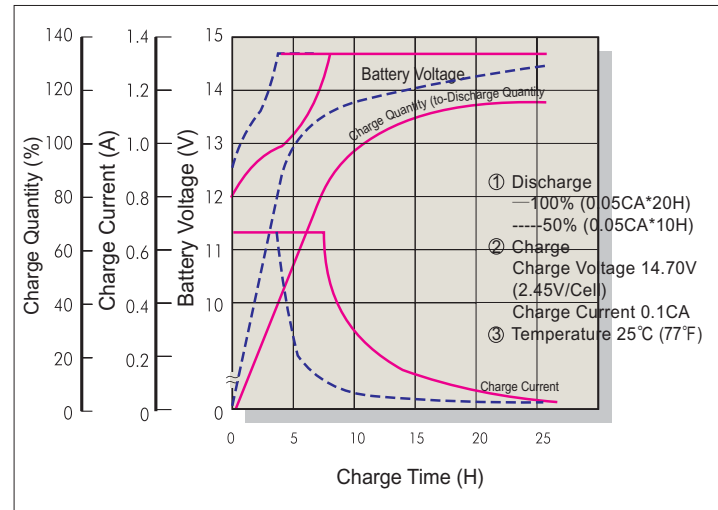
Battery Voltage and Charge Time for Standby Use



Terminal Voltage (V) and Discharge Time (25°C 77°F)



Battery Voltage and Charge Time for Cycle Use



Discharge Current VS. Discharge Voltage

| | | | | |
|--------------------------------|----------|---------------|---------------|----------|
| Final Discharge Voltage V/Cell | 1.75 | 1.70 | 1.55 | 1.30 |
| Discharge Current (A) | 0.2C>(A) | 0.2C<(A)<0.5C | 0.5C<(A)<1.0C | (A)>1.0C |

Charging Procedures

| Application | Charge Voltage (V/Cell) | | | Max. Charge Current |
|-------------|-------------------------|-----------|-----------------|---------------------|
| | Temperature | Set Point | Allowable Range | |
| Cycle Use | 25°C (77°F) | 2.45 | 2.40~2.50 | 0.3C |
| Standby | 25°C (77°F) | 2.275 | 2.25~2.30 | |