

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.



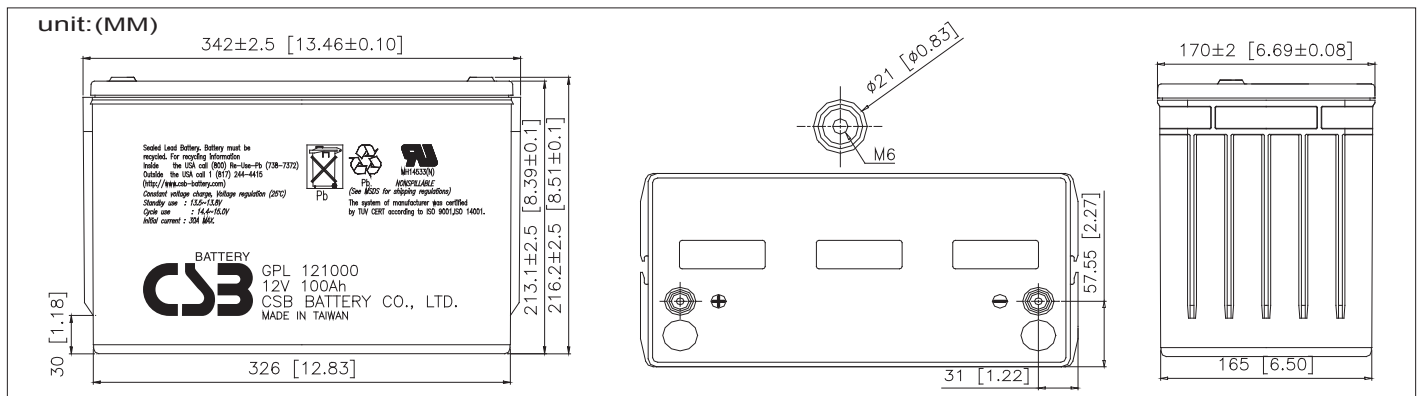
Specification

| | | |
|--|-----------------|---|
| Cells Per Unit | □ □ □ □ | 6 |
| Voltage Per Unit | □ □ □ □ | 12 |
| Capacity | □ □ □ □ | 100Ah @ 20hr-rate to 1.75V per cell @25 °C (77°F) |
| Weight | □ □ □ □ | Approx. 35.2kg(77.0 lbs) |
| Maximum Discharge Current | □ □ | 800A(5sec) |
| Internal Resistance | □ □ □ □ | Approx. 3.5mΩ |
| 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) |
| Float Charging Voltage | □ □ □ □ | 13.5 to 13.8 VDC/unit Average at 25°C (77°F) |
| Recommended Maximum Charging | □ □ □ □ | 30A |
| Current Limit | □ □ □ □ | |
| 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. |



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)

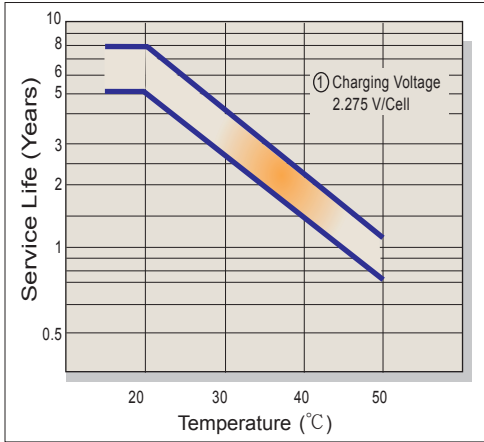
| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 2HR | 3HR | 4HR | 5HR | 8HR | 10HR | 20HR |
|----------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|------|------|
| 1.60V | 411.00 | 273.00 | 198.00 | 118.00 | 67.60 | 38.30 | 27.30 | 21.20 | 18.10 | 11.90 | 9.98 | 5.15 |
| 1.67V | 386.00 | 256.50 | 194.00 | 115.00 | 66.90 | 37.90 | 27.00 | 21.00 | 18.00 | 11.80 | 9.93 | 5.12 |
| 1.70V | 361.00 | 240.00 | 190.00 | 112.00 | 66.10 | 37.40 | 26.60 | 20.80 | 17.80 | 11.70 | 9.88 | 5.09 |
| 1.75V | 319.50 | 222.00 | 184.00 | 107.50 | 64.20 | 36.80 | 26.10 | 20.50 | 17.50 | 11.50 | 9.69 | 5.05 |
| 1.80V | 278.00 | 204.00 | 178.00 | 103.00 | 62.30 | 36.20 | 25.60 | 20.10 | 17.20 | 11.30 | 9.50 | 5.00 |
| 1.83V | 253.10 | 193.20 | 174.40 | 100.30 | 61.20 | 35.80 | 25.30 | 20.00 | 17.00 | 11.18 | 9.39 | 4.97 |

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

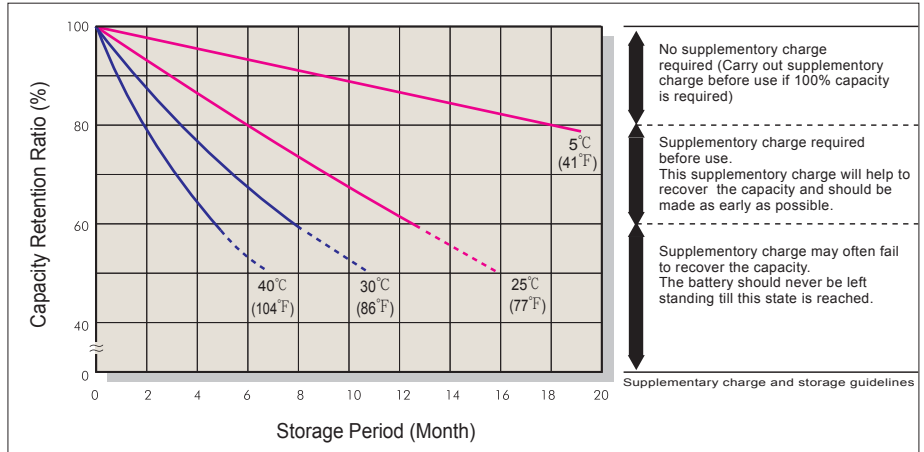
| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 2HR | 3HR | 4HR | 5HR | 8HR | 10HR | 20HR |
|----------|----------|----------|----------|----------|--------|--------|--------|--------|--------|--------|--------|-------|
| 1.60V | 4,330.00 | 3,000.00 | 2,210.00 | 1,350.00 | 788.00 | 449.00 | 321.00 | 250.00 | 216.00 | 142.00 | 120.00 | 67.50 |
| 1.67V | 4,115.00 | 2,830.00 | 2,145.00 | 1,330.00 | 780.50 | 444.00 | 317.50 | 249.00 | 215.00 | 141.50 | 119.50 | 67.20 |
| 1.70V | 3,900.00 | 2,660.00 | 2,080.00 | 1,310.00 | 773.00 | 439.00 | 314.00 | 248.00 | 214.00 | 141.00 | 119.00 | 66.90 |
| 1.75V | 3,500.00 | 2,450.00 | 2,005.00 | 1,250.00 | 753.50 | 431.00 | 309.50 | 243.50 | 210.00 | 138.50 | 117.00 | 65.70 |
| 1.80V | 3,100.00 | 2,240.00 | 1,930.00 | 1,190.00 | 734.00 | 423.00 | 305.00 | 239.00 | 206.00 | 136.00 | 115.00 | 64.50 |
| 1.83V | 2,860.00 | 2,114.00 | 1,885.00 | 1,154.00 | 722.30 | 418.20 | 302.30 | 236.30 | 203.60 | 134.50 | 113.80 | 63.80 |

● All mentioned values are average values.

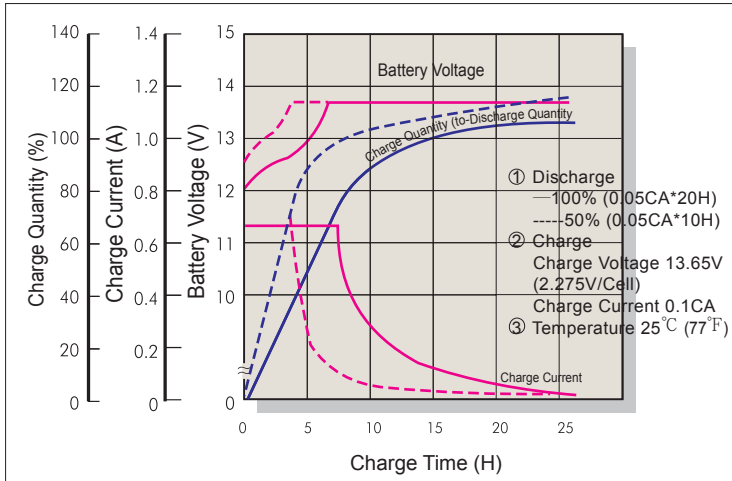
Trickle (or Float) Service Life



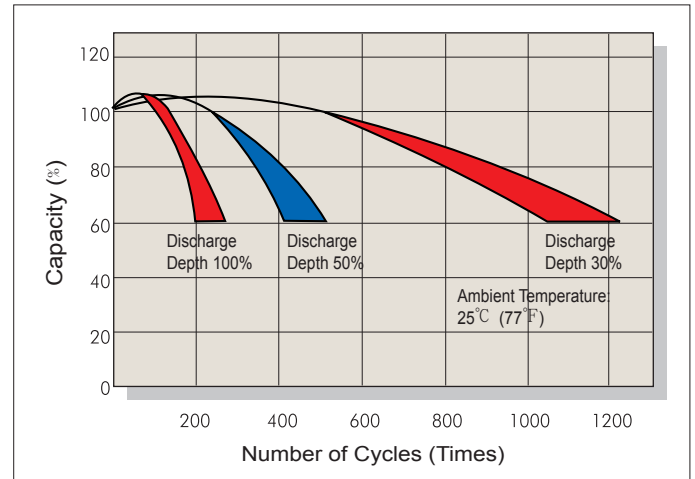
Capacity Retention Characteristic



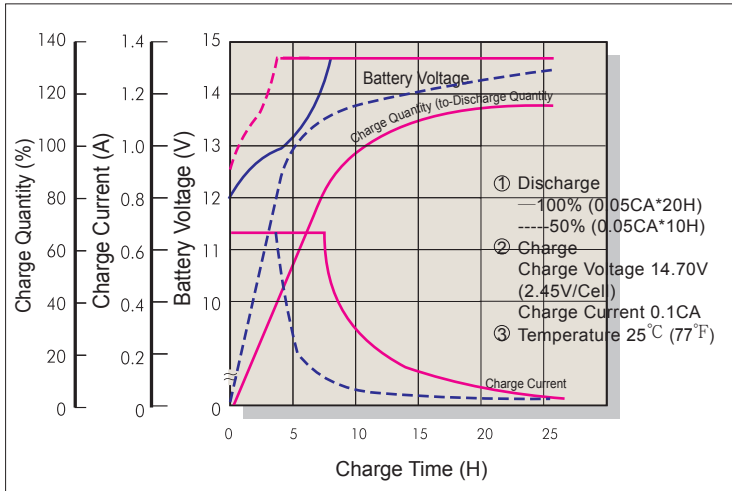
Battery Voltage and Charge Time for Standby Use



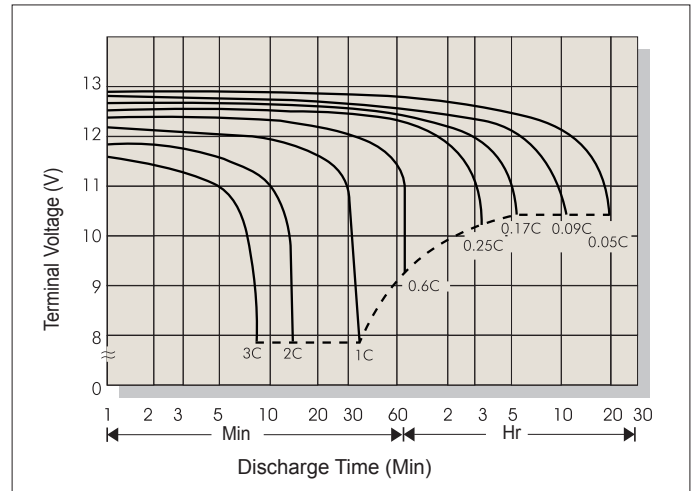
Cycle Service Life



Battery Voltage and Charge Time for Cycle Use



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



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 | |

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 |

Sales Office URL: WWW.CSB-BATTERY.COM

CSB BATTERY CO., LTD.
TAIWAN OFFICE
Tel: +886-2-8751-5000
Fax: +886-2-8751-6161
E-mail: service@csb-battery.com.tw

CSB BATTERY OF NETHERLANDS B.V.
NETHERLANDS OFFICE
Tel: +31(0) 180 418 140
Fax: +31(0) 180 418 327
E-mail: eurosales@csb-battery.com

CSB BATTERY (SINGAPORE) PTE., LTD.
SINGAPORE OFFICE
Tel: +65-6742-4944
Fax: +65-6742-4744
E-mail: sales@csb-battery.com.sg

CSB BATTERY TECHNOLOGIES, INC.
USA OFFICE
Tel: +1-817-244-7777/1-8003 CSBUSA(272872)
Fax: +1-817-244-4445
E-mail: csb@csb-battery.com

CSB BATTERY LOGISTICS (SHANGHAI) CO., LTD.
SHANGHAI OFFICE
Tel: +86-21-5046-1622, 5046-0833
Fax: +86-21-5064-3314

CSB BATTERY LOGISTICS (SHANGHAI) CO., LTD.
BEIJING OFFICE
Tel: +86-10-6597-8060, 6597-8070
Fax: +86-10-6597-8050
E-mail: chinasis@csb-battery.com