



**GP series**

**GP 12650 12V 65AH**



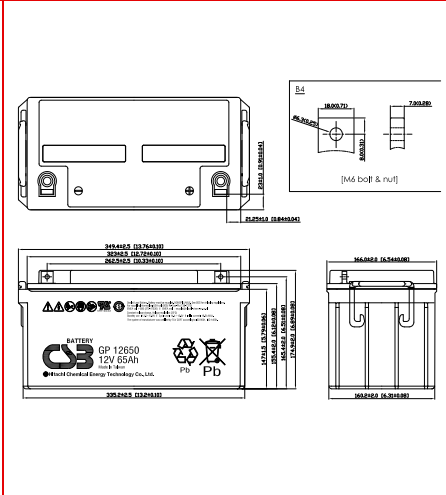
**Valve Regulated Lead Acid Battery**

Maintenance-Free Sealed Lead Acid Battery.  
Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99%.

**Design for Standby Power Applications**

|  |   |
|--|---|
| <p><b>【Design Life】</b><br/>Up to 5 Years in Standby Service at 25°C<br/>Eurobat (20°C) : 3-5 years, Standard Commercial</p> <p><b>【Operating Temperature Range】</b><br/>Nominal Operating Temperature : 25°C (77°F)<br/>Discharge : -15°C ~ 50°C (5°F~122°F)<br/>Charge: -15°C ~ 40°C (5°F~104°F)<br/>Storage: -15°C ~ 40°C (5°F~104°F)</p> | <p><b>【Float Charging Voltage】</b><br/>13.5 ~ 13.8 VDC/Unit at 25°C (77°F)</p> <p><b>【Equalization Charging Voltage】</b><br/>14.4 ~ 15.0 VDC/Unit at 25°C (77°F)</p> <p><b>【Self Discharge】</b><br/>Less than 10% after 90 days, can be stored up to 6 months at 25°C (77°F); Fully recharging is required before usage, and charged sooner if stored at higher temperature than 25°C (77°F).</p> |
|--|---|

| Specification             |  | Design according with IEC 60896-21/22: 2004 |                 |
|---------------------------|--|---|-----------------|
| Nominal Voltage           | 12V (6 cells per unit)   |   |                 |
| Nominal Capacity          | 65 Ah @20hr-rate to 1.75V per cell @25°C (77°F)                |   |                 |
| Weight                    | Approx. 20.00 Kg (44.08 lbs)                                   |   |                 |
| Maximum Discharge Current | 500A (5sec)  |   |                 |
| Internal Resistance       | Approx. 5.8mΩ  |   |                 |
| Short Circuit Current     | 1663A  |   |                 |
| Maximum Charge Current    | 19.50A   |   |                 |
| Terminal types            | B4 terminal to accept M6 bolt                                  |   |                 |
| Terminal hardware Torque  | 138.6 Kgf-cm / 120.3 Lbf-in / 13.58 N-m                        |   |                 |
| Container Material        | PP (UL 94-HB) & Flame Retardant (94-V0) available upon request |   |                 |
| Dimensions                | Length (L)   | 349.4±2.5 mm                                | 13.76±0.10 inch |
|                           | Width (W)  | 166.0±2.0 mm                                | 6.54±0.08 inch  |
|                           | Container Height (h)   | 174.9±2.0 mm                                | 6.89±0.08 inch  |
|                           | Overall Height (H)   | 174.9±2.0 mm                                | 6.89±0.08 inch  |



| Constant Current Discharge Characteristics Unit: A (25°C, 77°F) |       |       |       |       |       |       |      |      |      |      |      |      |
|---|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|
| F.V/Time  | 5 MIN | 10MIN | 15MIN | 30MIN | 60MIN | 90MIN | 2HR  | 3HR  | 5HR  | 8HR  | 10HR | 20HR |
| 1.60V   | 271   | 173   | 132   | 79.9  | 47.2  | 34.2  | 27.3 | 19.4 | 12.4 | 8.08 | 6.58 | 3.57 |
| 1.67V   | 242   | 162   | 124   | 78.3  | 46.9  | 34.1  | 27.2 | 19.3 | 12.3 | 7.97 | 6.47 | 3.42 |
| 1.70V   | 229   | 157   | 121   | 77.3  | 46.7  | 34.0  | 27.1 | 19.2 | 12.2 | 7.93 | 6.43 | 3.36 |
| 1.75V   | 208   | 147   | 117   | 75.4  | 46.4  | 33.8  | 27.0 | 19.1 | 12.1 | 7.86 | 6.32 | 3.25 |
| 1.80V   | 186   | 137   | 111   | 73.4  | 45.9  | 33.6  | 26.9 | 19.0 | 12.0 | 7.76 | 6.21 | 3.14 |
| 1.85V   | 164   | 127   | 105   | 71.3  | 45.4  | 33.3  | 26.8 | 18.9 | 11.9 | 7.66 | 6.10 | 3.03 |

| Constant Power Discharge Characteristics Unit: W (25°C, 77°F) |      |       |       |       |       |       |     |     |     |      |      |      |
|---|------|-------|-------|-------|-------|-------|-----|-----|-----|------|------|------|
| F.V/Time  | 5MIN | 10MIN | 15MIN | 30MIN | 60MIN | 90MIN | 2HR | 3HR | 5HR | 8HR  | 10HR | 20HR |
| 1.60V   | 3250 | 2080  | 1580  | 959   | 566   | 411   | 327 | 232 | 148 | 97.0 | 79.0 | 40.9 |
| 1.67V   | 2900 | 1940  | 1503  | 935   | 562   | 409   | 326 | 231 | 147 | 96.0 | 77.7 | 39.2 |
| 1.70V   | 2750 | 1871  | 1460  | 924   | 560   | 407   | 325 | 230 | 146 | 95.5 | 77.1 | 38.4 |
| 1.75V   | 2490 | 1760  | 1400  | 903   | 555   | 405   | 324 | 229 | 145 | 94.3 | 75.8 | 37.1 |
| 1.80V   | 2230 | 1640  | 1330  | 881   | 550   | 403   | 323 | 228 | 144 | 93.1 | 74.5 | 35.7 |
| 1.85V   | 1970 | 1520  | 1260  | 856   | 545   | 400   | 322 | 227 | 143 | 91.9 | 73.2 | 34.4 |

Please refer to the official site for the latest rating confirmation. URL: [www.csb-battery.com](http://www.csb-battery.com) Issued: 170201

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