



**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**

**【Design Life】**

Up to 10 Years in Standby Service at 25°C

Eurobat (20°C) : 10-12 years, Long Life

**【Operating Temperature Range】**

Nominal Operating Temperature : 25°C (77°F)

Discharge : -15°C ~ 50°C (5°F~122°F)

Charge: -15°C ~ 40°C (5°F~104°F)

Storage: -15°C ~ 40°C (5°F~104°F)

**【Float Charging Voltage】**

13.5 ~ 13.8 VDC/Unit at 25°C (77°F)

**【Equalization Charging Voltage】**

14.4 ~ 15.0 VDC/Unit at 25°C (77°F)

**【Self Discharge】**

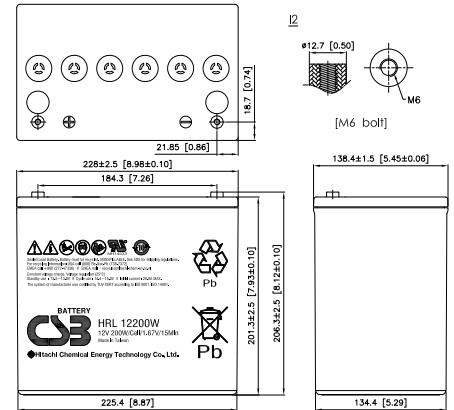
Less than 10% after 90 days, can be stored up to 6 months at 25°C (77°F);

Fully recharging is required before usage, and charged sooner if stored at higher temperature than 25°C (77°F).

**Specification**

Design according with IEC 60896-21/22:2004

|                           |                                                                |                             |
|---------------------------|----------------------------------------------------------------|-----------------------------|
| Nominal Voltage           | 12V (6 cells per unit)                                         |                             |
| Nominal Capacity          | 215W @15min-rate to 1.67V per cell @25°C (77°F)                |                             |
| Weight                    | Approx. 17.30 Kg (38.13 lbs)                                   |                             |
| Maximum Discharge Current | 400A (5sec)                                                    |                             |
| Internal Resistance       | Approx. 5.50 mΩ                                                |                             |
| Short Circuit Current     | 1509A                                                          |                             |
| Maximum Charge Current    | 20.0A                                                          |                             |
| Terminal types            | I2 thread lead alloy terminal to accept M6 bolt                |                             |
| Terminal breaking 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)                                                     | 228.0±2.5 mm 8.98±0.10 inch |
|                           | Width (W)                                                      | 138.4±1.5 mm 5.45±0.06 inch |
|                           | Container Height (h)                                           | 201.3±2.5 mm 7.93±0.10 inch |
|                           | Overall Height (H)                                             | 206.3±2.5 mm 8.12±0.10 inch |



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

| F.V/Time | 2MIN | 4MIN | 5MIN | 6MIN | 8MIN | 10MIN | 15MIN | 20MIN | 30MIN | 45MIN | 60MIN | 90MIN |
|----------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V    | 304  | 256  | 243  | 221  | 190  | 164   | 123   | 98.9  | 71.9  | 52.6  | 41.8  | 29.9  |
| 1.67V    | 279  | 232  | 218  | 205  | 177  | 157   | 118   | 97.0  | 71.2  | 52.0  | 41.2  | 29.5  |
| 1.70V    | 260  | 218  | 209  | 196  | 170  | 151   | 116   | 95.7  | 70.3  | 51.8  | 41.1  | 29.4  |
| 1.75V    | 233  | 197  | 192  | 176  | 156  | 141   | 111   | 92.0  | 68.2  | 50.7  | 40.3  | 29.1  |
| 1.80V    | 198  | 172  | 165  | 156  | 140  | 126   | 102   | 85.2  | 64.6  | 48.7  | 38.9  | 28.2  |
| 1.85V    | 162  | 146  | 145  | 136  | 120  | 110   | 91.3  | 76.1  | 59.0  | 45.3  | 36.2  | 26.6  |

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

| F.V/Time | 2MIN | 4MIN | 5MIN | 6MIN | 8MIN | 10MIN | 15MIN | 20MIN | 30MIN | 45MIN | 60MIN | 90MIN |
|----------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V    | 3094 | 2572 | 2448 | 2279 | 1962 | 1745  | 1333  | 1098  | 816   | 602   | 476   | 343   |
| 1.67V    | 2861 | 2395 | 2306 | 2127 | 1874 | 1666  | 1308  | 1083  | 809   | 600   | 475   | 342   |
| 1.70V    | 2732 | 2308 | 2207 | 2045 | 1815 | 1625  | 1282  | 1066  | 796   | 596   | 474   | 339   |
| 1.75V    | 2458 | 2120 | 2022 | 1904 | 1717 | 1523  | 1232  | 1027  | 772   | 585   | 464   | 335   |
| 1.80V    | 2231 | 1889 | 1840 | 1765 | 1562 | 1409  | 1158  | 959   | 738   | 564   | 452   | 326   |
| 1.85V    | 1764 | 1691 | 1659 | 1544 | 1376 | 1255  | 1035  | 873   | 687   | 529   | 423   | 310   |

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

Issued: 180205

**Sales Offices**

**日立化成能源科技股份有限公司**  
Hitachi Chemical Energy Technology Co., Ltd.

**BUSINESS HEADQUARTERS**

Tel: +886-2-2880-5600

Fax: +886-2-2888-3300

**USA OFFICE**

Tel: +1-817-244-7777 / 1-(800)3-CSB-USA (272872)

Fax: +1-817-244-4445

**SHENZHEN OFFICE (CHINA)**

Tel: +86-755-8831-6488, 8831-6775

Fax: +86-755-8831-6075

**EUROPE (EMEA) OFFICE**

Tel: +31(0)180-418-140

Fax: +31(0)180-418-327

**SHANGHAI OFFICE (CHINA)**

Tel: +86-21-5046-1622, 5046-0833

Fax: +86-21-5046-1046

**TAIPEI OFFICE**

Tel: +886-2-2880-5600

Fax: +866-2-2888-3300

**BEIJING OFFICE (CHINA)**

Tel: +86-10-5820-5336, 5820-5338

Fax: +86-10-5820-3053

Recognized under UL 1989,  
and certified by ISO 9001, 14001.

