



HR series

**HR 1218W 12V 18W**



**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 5 Years in Standby Service at 25°C

Eurobat (20°C) : 3-5 years, Standard Commercial

**【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)

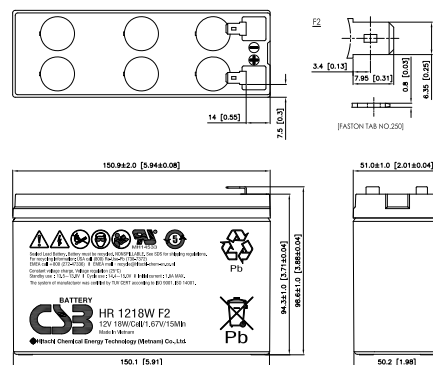
**【Self Discharge】**

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 61056-1/2:2012

|                           |   |              |                |
|---------------------------|---|--------------|----------------|
| Nominal Voltage           | 12V (6 cells per unit)  |              |                |
| Nominal Capacity          | 18W @15min-rate to 1.67V per cell @25°C (77°F)                  |              |                |
| Weight                    | Approx. 1.53 Kg (3.37 lbs)                                      |              |                |
| Maximum Discharge Current | 130A (5sec)   |              |                |
| Internal Resistance       | Approx. 28.5 mΩ   |              |                |
| Short Circuit Current     | --  |              |                |
| Maximum Charge Current    | 1.8A  |              |                |
| Terminal types            | F2-Faston Tab250  |              |                |
| Terminal breaking Torque  | --  |              |                |
| Container Material        | ABS (UL 94-HB) & Flame Retardant (94-V0) available upon request |              |                |
| Dimensions                | Length (L)  | 150.9±2.0 mm | 5.94±0.08 inch |
|                           | Width (W)   | 51.0±1.0 mm  | 2.01±0.04 inch |
|                           | Container Height (h)  | 94.3±1.0 mm  | 3.71±0.04 inch |
|                           | Overall Height (H)  | 98.6±1.0 mm  | 3.88±0.04 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    | 33.2 | 26.5 | 22.8 | 20.2 | 16.3 | 13.6  | 9.86  | 7.77  | 5.61  | 4.02  | 3.17  | 2.28  |
| 1.67V    | 30.9 | 24.8 | 21.8 | 19.6 | 15.9 | 13.3  | 9.74  | 7.74  | 5.54  | 3.96  | 3.12  | 2.24  |
| 1.70V    | 30.0 | 24.1 | 21.3 | 19.2 | 15.5 | 13.0  | 9.59  | 7.67  | 5.47  | 3.92  | 3.10  | 2.22  |
| 1.75V    | 29.2 | 22.8 | 20.1 | 18.1 | 15.0 | 12.7  | 9.46  | 7.53  | 5.42  | 3.89  | 3.07  | 2.20  |
| 1.80V    | 27.9 | 20.6 | 18.3 | 16.6 | 14.1 | 12.0  | 9.11  | 7.32  | 5.32  | 3.83  | 3.04  | 2.17  |
| 1.85V    | 24.1 | 18.3 | 16.3 | 14.9 | 12.6 | 10.9  | 8.43  | 6.82  | 5.04  | 3.66  | 2.92  | 2.09  |

**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    | 339  | 271  | 237  | 213   | 178  | 150   | 108   | 88.0  | 64.5  | 46.6  | 37.0  | 26.7  |
| 1.67V    | 332  | 260  | 229  | 206   | 174  | 147   | 107   | 87.0  | 64.2  | 46.4  | 36.8  | 26.5  |
| 1.70V    | 329  | 252  | 223  | 202   | 172  | 146   | 106   | 85.8  | 63.5  | 45.9  | 36.4  | 26.2  |
| 1.75V    | 325  | 241  | 214  | 194   | 165  | 141   | 105   | 85.0  | 62.9  | 45.4  | 36.0  | 26.0  |
| 1.80V    | 308  | 227  | 202  | 183   | 155  | 133   | 102   | 82.5  | 61.8  | 44.8  | 35.6  | 25.7  |
| 1.85V    | 273  | 207  | 186  | 170.0 | 143  | 124   | 94.6  | 77.9  | 59.2  | 43.1  | 34.4  | 24.8  |

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

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

