



HR series

**HR 1251W 12V 51W**



**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)

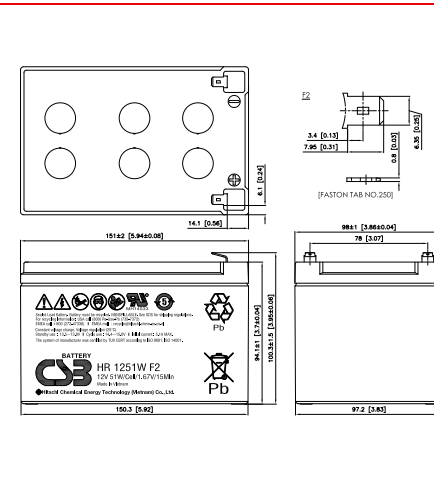
**【Self Discharge】**

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	51W @15min-rate to 1.67V per cell @25°C (77°F)	
Weight	Approx. 3.85 Kg (8.49 lbs)	
Maximum Discharge Current	180A (5sec)	
Internal Resistance	Approx. 13.6 mΩ	
Short Circuit Current	462A	
Maximum Charge Current	5.1A	
Terminal types	F2-Faston Tab250	
Terminal breaking Torque	--	
Container Material	ABS (UL 94-HB) & Flame Retardant (94-V0) available upon request	
Dimensions	Length (L)	151.0±2.0 mm 5.94±0.08 inch
	Width (W)	98.0±1.0 mm 3.86±0.04 inch
	Container Height (h)	94.1±1.0 mm 3.70±0.04 inch
	Overall Height (H)	100.3±1.5 mm 3.95±0.06 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	85.8	64.0	56.4	50.8	43.0	36.8	27.1	21.4	15.4	10.9	8.33	6.65
1.67V	82.4	61.6	54.4	49.2	41.8	35.8	26.7	20.9	15.3	10.8	8.29	6.61
1.70V	80.5	60.5	53.3	48.0	41.2	35.2	26.4	20.7	15.2	10.7	8.28	6.58
1.75V	77.2	57.9	51.3	46.4	39.9	34.3	25.7	20.3	15.1	10.6	8.24	6.52
1.80V	72.9	54.8	48.9	44.6	38.3	32.9	24.8	19.9	14.9	10.5	8.20	6.44
1.85V	68.6	51.6	46.5	42.7	36.5	31.6	23.9	19.6	14.7	10.4	8.16	6.36

**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	1030	768	675	607	511	441	325	257	185	130	100	79.8
1.67V	990	742	651	585	500	430	320	251	184	129	99.6	79.4
1.70V	969	726	637	573	494	422	317	249	183	128	99.3	79.0
1.75V	927	695	612	552	479	408	310	244	181	127	98.9	78.3
1.80V	875	657	585	532	460	393	300	239	179	126	98.4	77.3
1.85V	824	619	558	513	441	379	290	235	177	125	97.9	76.4

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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**Sales Offices**

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



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