



**HRL series**

**HRL 12330W 12V 350W**



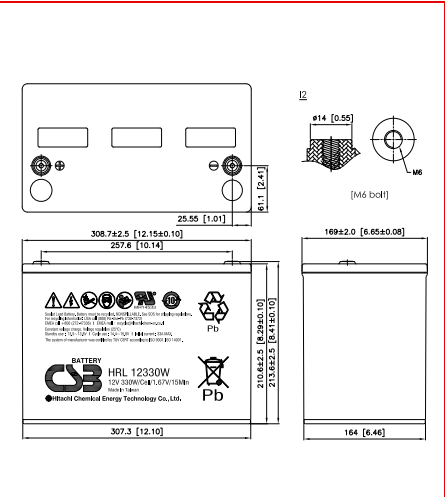
**Valve Regulated Lead Acid Battery**

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> Up to 10 Years in Standby Service at 25°C Eurobat (20°C) : 10-12 years, Long Life</p> <p><b>【Operating Temperature Range】</b> 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)</p>	<p><b>【Float Charging Voltage】</b> 13.5 ~ 13.8 VDC/Unit at 25°C (77°F)</p> <p><b>【Equalization Charging Voltage】</b> 14.4 ~ 15.0 VDC/Unit at 25°C (77°F)</p> <p><b>【Self Discharge】</b> 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>
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Specification		Design according with IEC 60896-21/22:2004	
Nominal Voltage	12V (6 cells per unit)		
Nominal Capacity	350W @15min-rate to 1.67V per cell @25°C (77°F)		
Weight	Approx. 29.60 Kg (65.24 lbs)		
Maximum Discharge Current	800A (5sec)		
Internal Resistance	Approx. 3.50 mΩ		
Short Circuit Current	2386A		
Maximum Charge Current	33.0A		
Terminal types	I2 thread lead alloy 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)	308.7±2.5 mm	12.15±0.10 inch
	Width (W)	169.0±2.0 mm	6.65±0.08 inch
	Container Height (h)	210.6±2.5 mm	8.29±0.10 inch
	Overall Height (H)	213.6±2.5 mm	8.41±0.10 inch
	Terminal Height	169±2.0 mm	6.65±0.08 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	530	444	409	373	317	271	202	162	119	86.0	68.4	49.6
1.67V	482	405	369	341	293	256	196	158	117	85.1	67.9	49.4
1.70V	454	382	350	326	280	248	191	155	116	84.4	67.5	49.3
1.75V	405	340	317	293	257	230	181	149	112	82.6	66.4	48.9
1.80V	337	294	273	257	230	206	168	139	106	79.1	64.1	47.7
1.85V	252	243	234	219	196	180	150	125	97.1	73.2	59.9	45.1

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	4597	4083	3930	3730	3221	2870	2187	1772	1318	972	784	578
1.67V	4397	3951	3761	3474	3065	2737	2131	1738	1304	965	779	576
1.70V	4285	3878	3597	3345	2983	2656	2093	1713	1292	958	775	575
1.75V	4043	3550	3300	3109	2830	2485	2009	1656	1260	941	764	571
1.80V	3660	3143	2993	2862	2515	2276	1883	1564	1204	907	742	559
1.85V	2976	2795	2589	2432	2204	2042	1676	1416	1116	850	700	534

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

**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: +866-2-2888-3300

**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

