



HRL Series

HRL12-910W (12V250Ah)

Alpha House powered by Sacred Sun HRL batteries feature a new design and structure, utilising automatic welding, through-partition welding, and heat sealing technology. The fully automated production process ensures excellent consistency. These batteries offer high power discharge, long floating backup time, and fast charging performance, making them ideal for use in data centres, UPS systems, and IDC rooms.



Benefits

- Very long life according to EUROBAT Classification
- High power density, 30% higher than ordinary batteries
- Special lead paste formula and additives improve the battery service life
- Maximum charge efficiency
- Low self-discharge rate
- Wide range of power, easy sizing of batteries
- Easy installation and handling

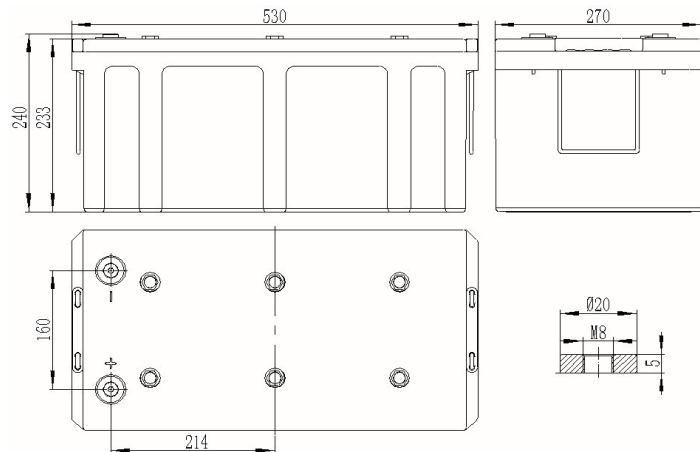
Applications

- Data centre
- UPS
- IDC room
- Emergency power
- HVDC system

Standards

- IEC 60896-21/22
- JIS C8704-1/2
- EUROBAT guide

Drawing



Specifications

Battery Model	HRL12-910W			
Design Life (years, 25°C)	15			
Capacity (Ah, 25°C)	10min (1.60V)	15min (1.67V)	1HR (157A, 1.70V)	10HR(25A, 1.80V)
	1176W	910W	157	250
Dimensions (mm)	Length	Width	Height	Total Height
	530	270	233	240
Approx. Weight (kg)	82			
Reference Internal Resistance (mΩ)	1.6 (fully charged @ 25°C)			
Maximum Discharge Current (A/3 Sec.)	2750			
Self-Discharge (25°C)	≤ 2% per month			
Charge Voltage (V/cell, 25°C)	Cycle use		Float use	
	2.35(-3.5mV/°C/cell), max charge current: 62.5A		2.25 (-3.5mV/°C/cell)	
Short Circuit Current (A)	6500			

Discharge Data

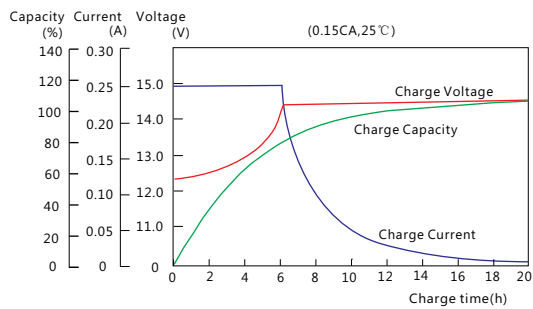
Constant Power Discharge Data (25°C, W/cell)

End Voltage (V/cell)	min							h								
	5	10	15	20	25	30	45	1	1.5	2	3	4	5	6	8	10
1.60	1460	1176	935	780	669	553	427	318	266	212	152	119	95.6	81.2	62.0	51.3
1.65	1370	1156	920	772	660	547	422	314	263	210	151	118	94.8	80.8	61.8	51.2
1.67	1300	1130	910	766	655	542	418	310	260	208	150	117	94.4	80.5	61.7	51.1
1.70	1250	1110	890	757	647	537	412	306	257	206	148	116	93.7	80.2	61.6	51.0
1.75	1200	1040	850	737	628	522	396	294	246	200	145	113	92.0	79.3	61.3	50.7
1.80	1160	970	810	713	605	504	383	280	236	194	140	110	90.0	78.2	60.0	50.0

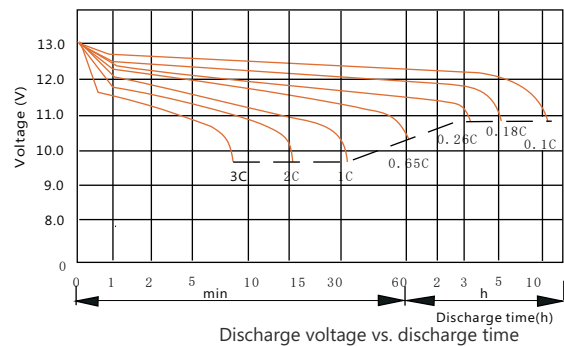
Constant Power Discharge Data (25°C, W/cell)

End Voltage (V/cell)	min							h								
	5	10	15	20	25	30	45	1	1.5	2	3	4	5	6	8	10
1.60	860	678	525	430	363	295	225	166	138	110	78.5	61.0	49.0	41.5	31.6	26.0
1.65	800	660	514	423	357	290	220	163	136	108	77.5	60.3	48.5	41.2	31.4	25.9
1.67	740	647	505	418	352	287	218	160	134	107	76.7	59.7	48.0	41.0	31.3	25.8
1.70	710	628	493	410	346	282	215	157	132	105	75.7	58.8	47.6	40.6	31.0	25.7
1.75	670	587	466	394	332	272	206	150	126	102	73.3	57.0	46.4	39.8	30.7	25.4
1.80	630	538	435	375	315	256	195	140	120	97.5	70.5	55.0	45.0	39.0	30.3	25.0

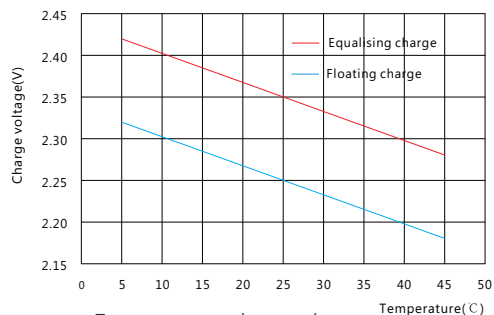
Performance Curve



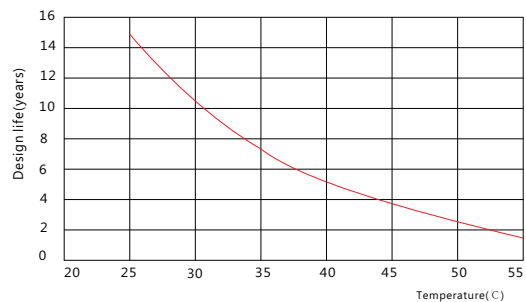
Charge performance



Discharge voltage vs. discharge time



Temperature vs. charge voltage



Design life vs. temperature



Disclaimer: The manufacturer reserves the right to amend and/or vary the specifications and parameters of the product and apply updates accordingly at any time. It is the sole responsibility of the buyer and user of the product to ensure all applicable product specifications referred to are valid, applicable and up to date at all times. All product specifications are available upon written request to Alpha House Ltd. All batteries must be installed, used and maintained at all times in accordance with standard BS EN IEC 62485-2:2018, and specifically installed, used and maintained at all times in accordance with manufacturer's guidelines and product specification documentation. (All top terminal, front terminal and top vented batteries must be positioned horizontally, plumb and level at all times unless specified otherwise by the manufacturer. Further details are available upon written request to Alpha House Ltd.)