



HRL Series

HRL12-570W (12V142Ah)

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

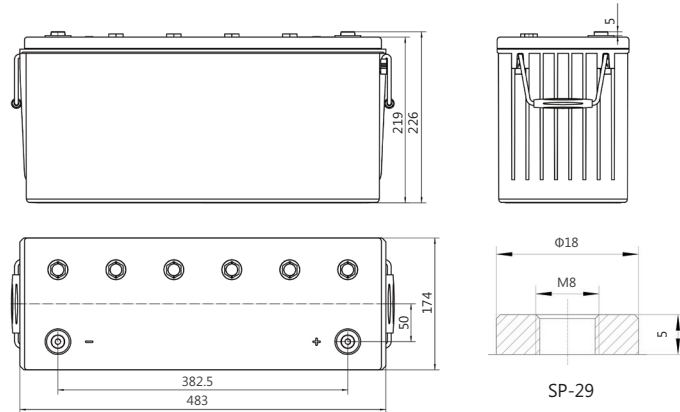
Applications

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

Standards

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

Drawing



Specifications

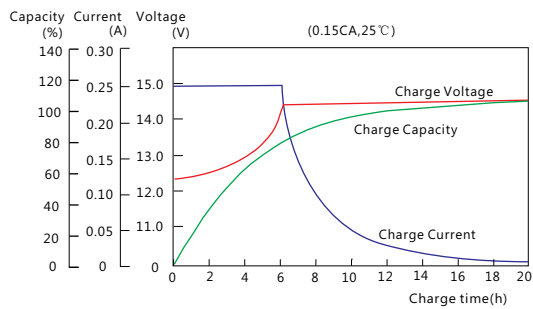
Battery Model	HRL12-570W			
Design Life (years, 25°C)	15			
Capacity (Ah, 25°C)	10min (1.60V)	15min (1.67V)	1HR (108A, 1.70V)	10HR(14.2A, 1.80V)
	752	570	108	142
Dimensions (mm)	Length	Width	Height	Total Height
	483	174	219	226
Approx. Weight (kg)	48.2			
Reference Internal Resistance (mΩ)	2.1 (fully charged @ 25°C)			
Maximum Discharge Current (A/3 Sec.)	1700			
Self-Discharge (25°C)	≤ 2% per month			
Charge Voltage (V/cell, 25°C)	Cycle use		Float use	
	2.35(-4mV/°C/cell), max charge current: 42.6A		2.27 (-3mV/°C/cell)	
Short Circuit Current (A)	4500			

Discharge Data

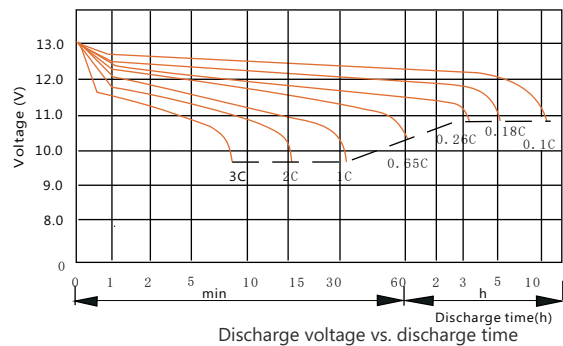
Constant Power Discharge Data (25°C, W/cell)																
End Voltage (V/cell)	min							h								
	5	10	15	20	25	30	45	1	1.5	2	3	4	5	6	8	10
1.60	990	752	580	488	429	360	278	215	156	113	83.4	62.4	53.4	46.0	37.0	30.0
1.65	979	745	575	482	424	355	275	213	155	112	83.0	62.1	53.1	45.8	36.8	29.8
1.67	971	740	570	478	420	351	273	212	154	112	82.7	61.8	52.9	45.6	36.6	29.7
1.70	959	732	563	472	414	345	271	210	153	111	82.3	61.5	52.6	45.4	36.4	29.5
1.75	933	714	547	458	400	332	264	206	150	110	81.3	60.6	52.0	44.8	36.0	29.1
1.80	900	691	528	440	384	315	256	201	147	108	80.0	59.6	51.2	44.2	35.4	28.7

Constant Current Discharge Data (25°C, A)																
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	582	430	326	269	233	192	146	111	80.6	58.4	43.0	32.1	27.4	23.5	18.8	15.2
1.65	573	424	320	264	229	189	144	110	79.8	57.9	42.7	31.8	27.1	23.3	18.7	15.1
1.67	566	419	316	261	226	186	143	109	79.1	57.5	42.4	31.6	27.0	23.2	18.5	15.0
1.70	557	412	310	256	221	182	141	108	78.3	56.9	42.0	31.3	26.7	23.0	18.4	14.9
1.75	535	397	296	245	211	173	136	105	76.2	55.7	41.1	30.6	26.2	22.5	18.0	14.6
1.80	510	379	281	232	200	162	130	101	73.8	54.2	40.1	29.8	25.6	22.0	17.6	14.2

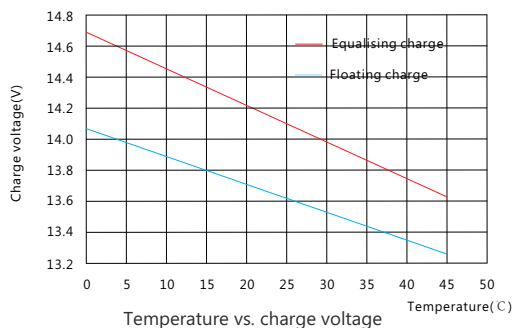
Performance Curve



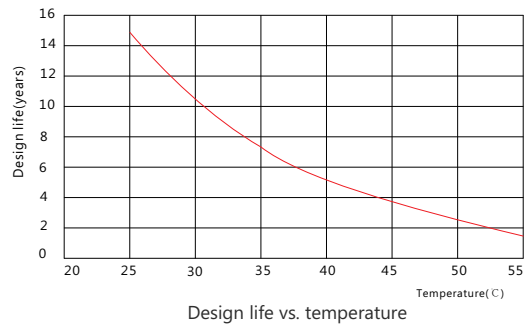
Charge performance



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.)