



HRL Series

HRL12-700W (12V195Ah)

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.



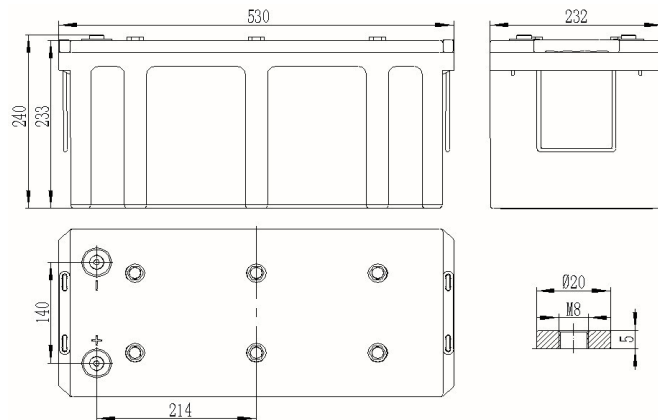
Benefits

- 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

Drawing



Standards

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

Specifications

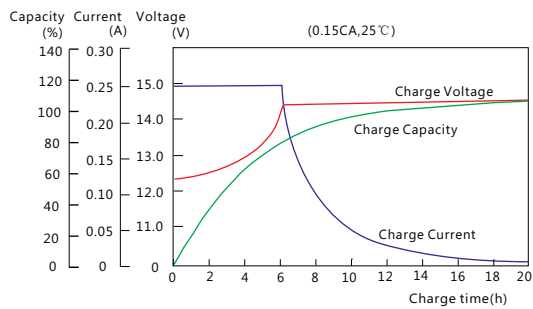
Battery Model	HRL12-700W			
Design Life (years, 25°C)	15			
Capacity (Ah, 25°C)	10min (1.60V)	15min (1.67V)	1HR (120A, 1.70V)	10HR(19.5A, 1.80V)
	860W	700W	120	195
Dimensions (mm)	Length	Width	Height	Total Height
	530	232	233	240
Approx. Weight (kg)	64.8			
Reference Internal Resistance (mΩ)	2.0 (fully charged @ 25°C)			
Maximum Discharge Current (A/3 Sec.)	2100			
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: 50A		2.25 (-3.5mV/°C/cell)	
Short Circuit Current (A)	5400			

Discharge Data

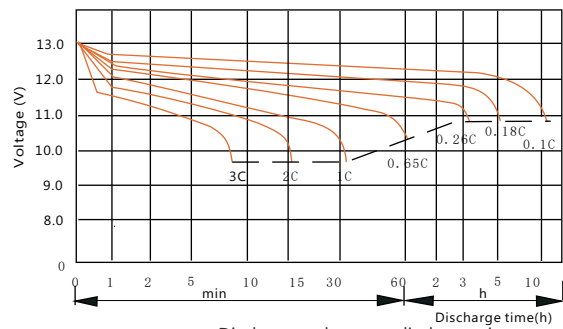
Constant Power Discharge Data (25°C, W/cell)																
End Voltage (V/cell)	min							h								
	5	10	15	20	25	30	45	1	1.5	2	3	4	5	6	8	10
1.60	1100	860	727	597	510	422	318	230	192	160	117	89.4	72.0	62.2	48.8	40.4
1.65	1000	847	712	587	503	417	317	238	191	159	116	88.8	71.8	62.0	48.6	40.3
1.67	980	820	700	578	498	413	315	236	189	158	115	88.5	71.6	61.8	48.5	40.2
1.70	950	797	680	566	490	408	312	234	188	157	114	87.8	71.4	61.6	48.3	40.0
1.75	920	742	640	540	474	396	306	226	183	154	112	86.6	70.8	61.2	48.0	39.7
1.80	870	675	600	508	453	362	290	204	168	140	106	85.0	70.3	60.6	46.5	38.4

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	620	524	395	322	274	225	168	125	100	83.0	60.5	46.0	36.8	31.8	24.8	20.5
1.65	580	508	386	316	268	220	166	123	98.5	82.0	59.8	45.6	36.7	31.6	24.7	20.4
1.67	560	495	378	310	266	218	165	122	97.5	81.3	59.2	45.2	36.5	31.4	24.5	20.3
1.70	550	478	368	303	260	215	163	120	96.2	80.3	58.4	44.8	36.3	31.2	24.4	20.2
1.75	510	438	346	286	248	206	158	117	93.2	77.8	56.6	43.7	35.7	30.8	24.0	19.8
1.80	470	394	320	267	236	197	152	113	89.7	75.0	54.5	42.5	35.0	30.2	23.6	19.5

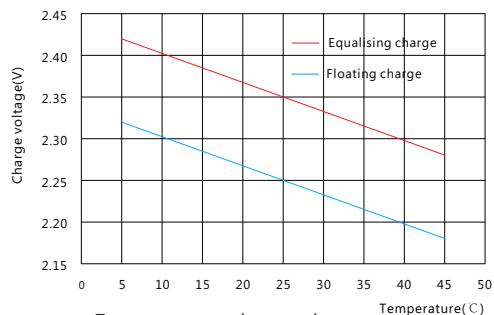
Performance Curve



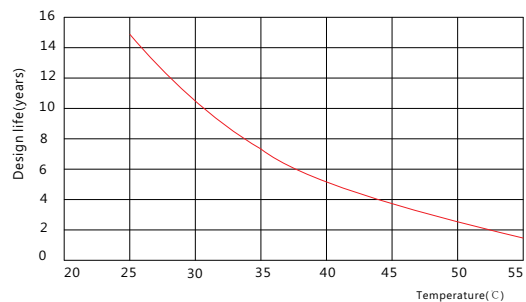
Charge performance



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.)