



HRL Series

HRL12-660W (12V190Ah)

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.



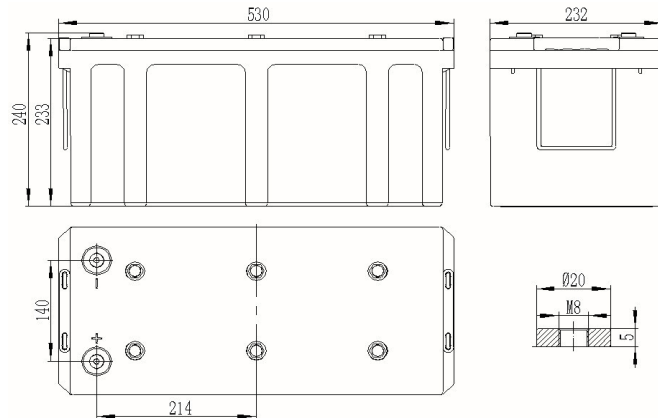
Benefits

- 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

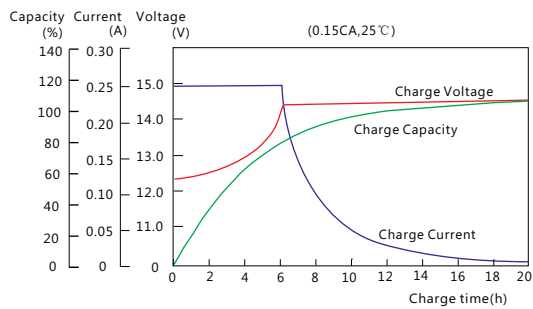
Battery Model	HRL12-660W			
Design Life (years, 25°C)	15			
Capacity (Ah, 25°C)	10min (1.60V)	15min (1.67V)	1HR (117A, 1.70V)	10HR(19A, 1.80V)
	822W	660W	117	190
Dimensions (mm)	Length	Width	Height	Total Height
	530	232	233	240
Approx. Weight (kg)	63.4			
Reference Internal Resistance (mΩ)	2.0 (fully charged @ 25°C)			
Maximum Discharge Current (A/3 Sec.)	2000			
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)	5200			

Discharge Data

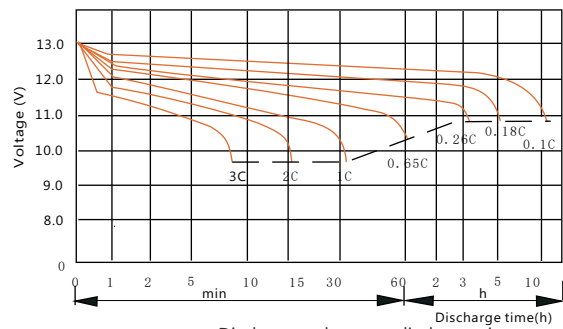
Constant Power Discharge Data (25°C, W/cell)																
End Voltage (V/cell)	min							h								
	5	10	15	20	25	30	45	1	1.5	2	3	4	5	6	8	10
1.60	1060	822	683	550	470	386	297	232	184	152	110	85.2	70.6	61.0	47.9	39.4
1.65	990	806	670	543	465	384	295	230	183	151	109	84.8	70.4	60.8	47.8	39.3
1.67	960	780	660	537	460	380	293	228	182	150	108	84.5	70.0	60.7	47.7	39.2
1.70	930	760	640	526	454	375	290	227	180	148	107	84.0	69.8	60.5	47.5	39.0
1.75	900	720	614	510	438	365	284	223	178	147	105	83.0	69.3	60.0	47.0	38.7
1.80	860	700	576	487	420	352	276	218	174	144	102	81.7	68.5	59.5	46.7	38.3

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	600	490	376	302	255	207	157	120	95.4	78.7	56.8	43.8	36.2	31.2	24.4	20.0
1.65	560	477	368	296	250	204	155	119	94.4	77.8	56.0	43.5	36.0	31.0	24.3	19.9
1.67	540	466	360	292	247	200	153	118	93.6	77.3	55.6	43.2	35.8	30.8	24.1	19.8
1.70	530	452	352	286	242	198	150	117	92.6	76.4	54.8	42.8	35.5	30.6	24.0	19.7
1.75	490	418	330	272	230	190	146	114	90.2	74.5	53.2	41.8	34.8	30.2	23.6	19.4
1.80	460	380	306	257	218	180	140	110	87.4	72.2	51.3	40.8	34.2	29.6	23.2	19.0

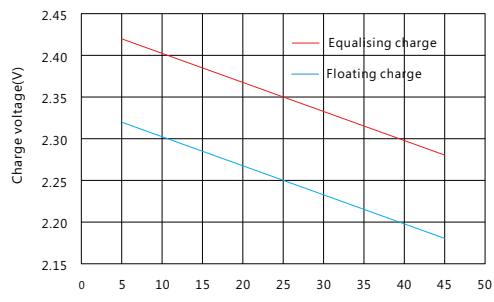
Performance Curve



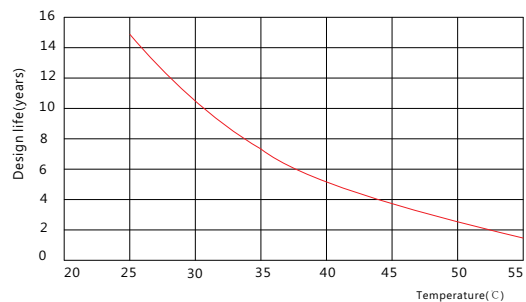
Charge performance



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.)