

HRL Series

HRL12-410W 12V100Ah

Sacred Sun HRL batteries adopt new appearance and constructure design, automatically welding+through the partition welding+heat sealing technology, full automatic production process with good consistency. It has excellent high power discharge, long floating backup time and fast charging performance. It can be widely used in data center, UPS, IDC room.

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

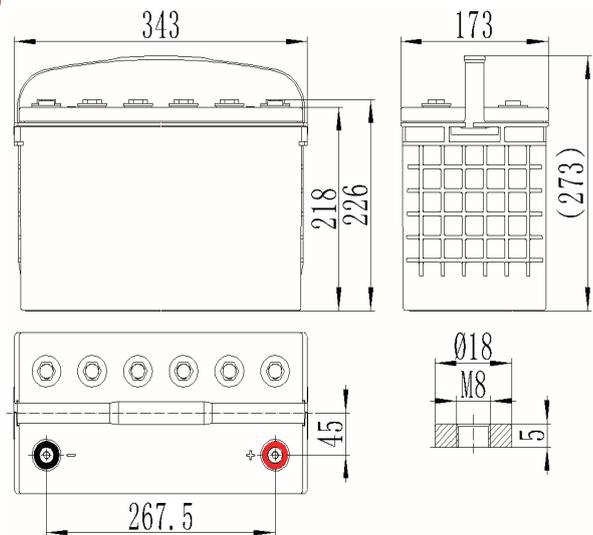
Applications

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

Standards

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

Drawing



Specifications

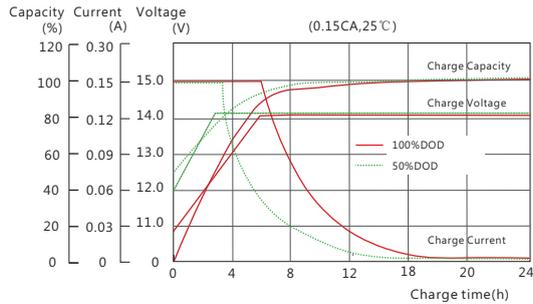
Battery Model	HRL12-410W			
Design Life (years, 25°C)	15			
Capacity (Ah, 25°C)	10min (1.60V)	15min (1.67V)	1HR (63A, 1.70V)	10HR(10.0A, 1.80V)
	470W/cell	410W/cell	63	100
Dimensions (mm)	Length	Width	Height	Total Height
	343	173	218	226
Approx. Weight (kg)	33.7			
Reference Internal Resistance (mΩ)	2.4±15%(full charged @ 25°C,testing device:HIOKIBT3562)			
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:25A		2.25 (-3.5mV/°C/cell)	
Short Circuit Current (A)	4000(For reference only)			

Discharge Data

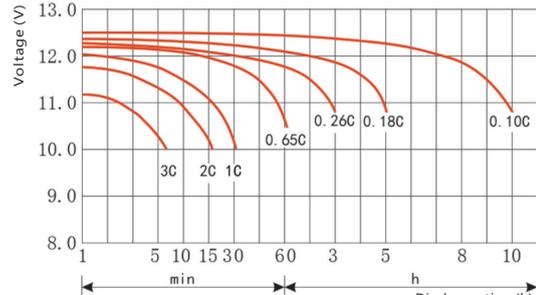
Constant Power Discharge Data (25°C, W/cell)																
End Voltage (V/cell)	min							h								
	5	10	15	20	25	30	45	1	1.5	2	3	4	5	6	8	10
1.60	620	470	420	340	288	238	177	128	102	81.6	59.2	46.3	38.6	33.3	25.8	21.7
1.65	600	465	416	338	285	232	174	127	101	80.8	58.7	45.8	38.3	33.0	25.7	21.5
1.67	590	460	410	334	280	230	170	125	100	80.4	58.3	45.6	38.0	32.8	25.6	21.4
1.70	580	454	395	328	276	226	168	123	98.4	79.6	57.8	45.0	37.7	32.5	25.3	21.2
1.75	560	440	370	313	264	220	160	118	95.2	77.8	56.6	44.2	37.0	31.8	24.8	20.7
1.80	510	390	350	295	250	207	150	113	91.5	75.7	55.0	43.0	36.0	31.0	24.2	20.2

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	310	270	236	190	157	127	93.0	66.6	52.8	42.2	30.5	23.8	19.8	17.0	13.2	11.0
1.65	305	265	230	186	154	124	91.0	65.4	52.0	41.7	30.2	23.5	19.6	16.8	13.0	10.8
1.67	300	260	226	182	150	123	89.5	64.4	51.3	41.3	29.8	23.3	19.4	16.7	12.8	10.7
1.70	290	244	220	178	148	120	87.4	63.0	50.4	40.7	29.5	23.0	19.2	16.5	12.8	10.6
1.75	270	230	207	167	138	114	82.6	60.0	48.4	39.5	28.6	22.3	18.6	16.0	12.4	10.4
1.80	240	212	180	155	130	106	77.0	56.5	46.0	38.0	27.6	21.5	18.0	15.5	12.0	10.0

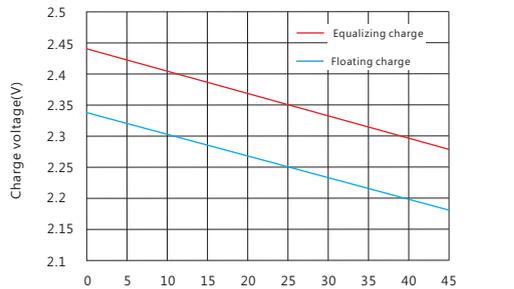
Performance Curve



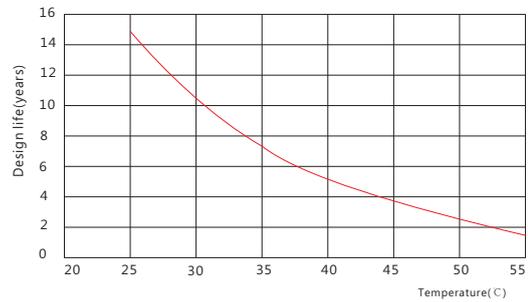
Charge performance



Discharge voltage vs. discharge time



Temperature vs. charge voltage



Design life vs. temperature

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