

# HRL Series

## HRL12-380W 12V95Ah

Sacred Sun HRL batteries adopt new appearance and constructure design, automatically welding+throug the partition welding+heat sealing technolgy, 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 formual 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

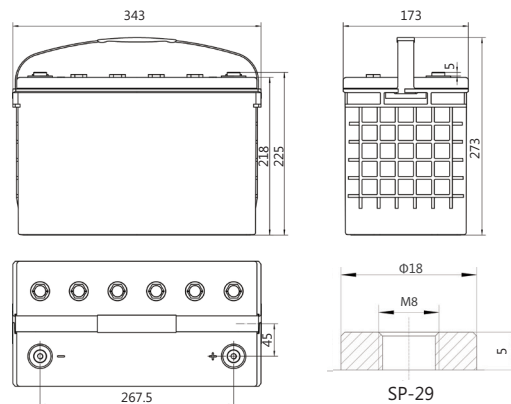
### Applications

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

### Standards

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

### Drawing



### Specifications

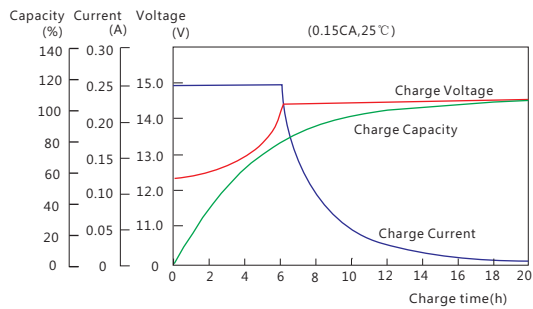
Battery Model	HRL12-380W			
Design Life (years, 25°C)	15			
Capacity (Ah, 25°C)	10min (1.60V)	15min (1.67V)	1HR (66.9A, 1.70V)	10HR(9.5A, 1.80V)
	492	380	66.9	95
Dimensions (mm)	Length	Width	Height	Total Height
	343	173	218	225
Approx. Weight (kg)	31.7			
Reference Internal Resistance (mΩ)	2.5 ( fully charged @ 25°C)			
Maximum Discharge Current (A/3 Sec.)	1150			
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: 28.5A		2.27 (-3mV/°C/cell)	
Short Circuit Current (A)	3100			

## Discharge Data

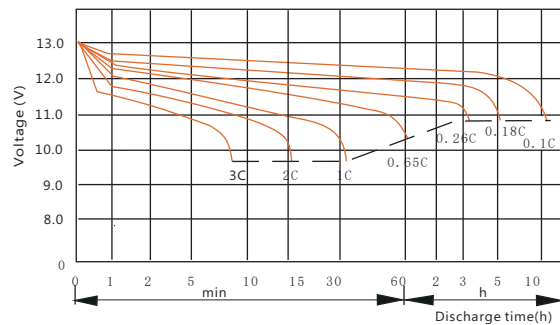
Constant Power Discharge Data (25°C, W/cell)																
End Voltage (V/cell)	min							h								
	5	10	15	20	25	30	45	1	1.5	2	3	4	5	6	8	10
1.60	670	492	393	336	292	245	184	136	105	77.9	57.1	43.3	36.9	31.7	25.1	20.7
1.65	658	483	386	330	286	239	181	134	104	77.2	56.7	42.9	36.6	31.5	24.9	20.5
1.67	648	476	380	325	281	235	178	132	103	76.7	56.3	42.5	36.3	31.3	24.7	20.4
1.70	635	467	372	318	275	228	175	130	101	75.9	55.7	42.1	36.0	31.0	24.5	20.2
1.75	605	446	353	301	259	214	168	125	98.2	74.1	54.5	41.1	35.2	30.3	24.0	19.7
1.80	568	420	330	282	241	196	159	120	94.5	71.9	53.0	39.9	34.3	29.5	23.3	19.2

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	394	281	221	185	158	131	96.8	70.4	54.3	40.3	29.5	22.3	18.9	16.2	12.8	10.5
1.65	385	275	215	181	154	127	94.8	69.2	53.5	39.8	29.1	22.0	18.7	16.0	12.6	10.4
1.67	378	270	211	177	151	124	93.2	68.2	52.8	39.4	28.8	21.7	18.5	15.9	12.5	10.3
1.70	369	263	205	172	147	120	91.2	66.9	51.9	38.8	28.4	21.4	18.3	15.7	12.4	10.2
1.75	347	248	192	161	137	111	86.4	63.9	49.9	37.6	27.6	20.8	17.7	15.3	12.0	9.9
1.80	322	230	176	148	125	101	80.8	60.3	47.5	36.1	26.6	20.0	17.1	14.7	11.6	9.5

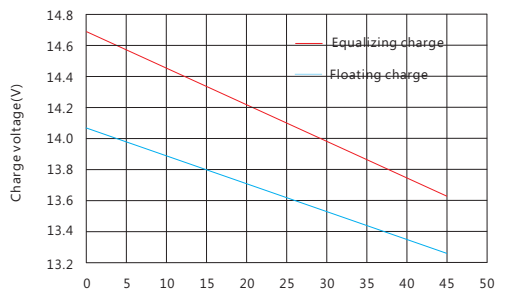
## Performance Curve



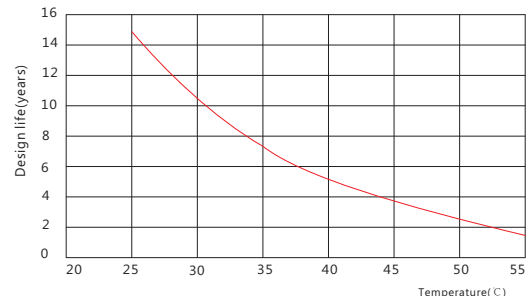
Charge performance



Discharge voltage vs. discharge time



Temperature vs. charge voltage



Design life vs. temperature

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