

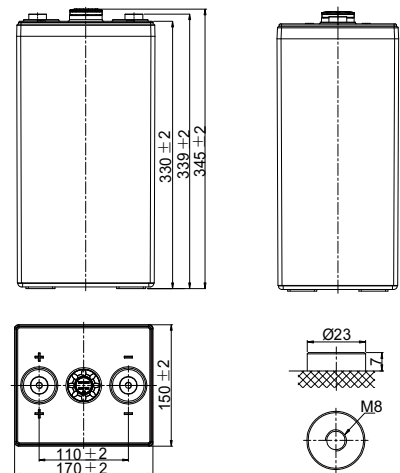
## LHR Series High Rate LHR857W(2V857W)

### Specifications

Rated Voltage	2V	
Nominal Rate ( $W_{15}, 1.67V/cell$ )	857W	
Nominal Capacity( $C_{10}, 1.80V/cell$ )	300Ah	
Dimension	Length	170±2mm (6.69 inches)
	Width	150±2mm (5.90 inches)
	Container Height	330±2mm (12.99 inches)
	Total Height	345±2mm (13.58 inches)
Approx. Weight	18.1 Kg (39.9 lbs)	
Terminal	M8	
Container Material	ABS(UL94 V-0)	
Rated Capacity (25°C)	300.0 Ah	(10hr, 30.0A, 1.80V/cell)
	288.0 Ah	(8hr, 36.0A, 1.80V/cell)
	262.5 Ah	(5hr, 52.5A, 1.75V/cell)
	234.0 Ah	(3hr, 78.0A, 1.75V/cell)
	180.0 Ah	
Max. Discharge Current	2400A	
Internal Resistance (25°C)	Approx. 0.75mΩ	
Operating Temp. Range	Discharge	-20 ~ 55°C (4 ~ 131°F)
	Charge	0 ~ 40°C (32 ~ 104°F)
	Storage	-15 ~ 50°C (5 ~ 122°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Max. Charging Current(25°C)	75.0A	
Charge voltage(25°C)	Float	2.25V
	Temp. Coefficient	-3mV/cell/°C
	Equalization	2.35~2.40V
Effect of temp. to Capacity	40°C (104°F)	106%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤3%/month @ 25°C	



### Layout



### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	614.4	453.5	300.5	261.9	214.2	169.3	148.2	113.9	92.3	70.2	56.5	47.7	33.6	28.1
1.80V/cell	687.1	507.2	349.5	301.7	242.1	189.3	164.0	124.7	100.4	76.0	60.9	51.3	36.0	30.0
1.75V/cell	732.9	541.1	369.7	316.6	253.1	197.0	170.1	128.9	103.5	78.0	62.4	52.5	36.7	30.5
1.70V/cell	771.0	569.1	390.7	333.2	264.2	204.5	176.3	133.2	106.8	80.3	64.0	53.7	37.3	30.9
1.67V/cell	783.3	578.3	403.1	342.6	270.9	209.1	180.0	135.6	108.6	81.5	64.9	54.4	37.7	31.2
1.60V/cell	794.5	586.5	432.0	364.8	286.2	219.9	188.8	141.7	113.1	84.5	67.0	56.0	38.6	31.9

### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	1105.5	816.1	675.6	590.3	484.3	384.1	302.5	233.3	189.4	144.6	111.0	93.8	66.4	55.6
1.80V/cell	1236.4	912.8	777.4	673.6	542.9	426.4	332.5	253.8	205.0	155.8	119.2	100.8	71.0	59.3
1.75V/cell	1318.9	973.7	813.8	700.0	562.6	440.3	342.3	260.7	210.2	159.2	121.7	102.7	72.1	60.1
1.70V/cell	1387.4	1024.2	838.0	729.3	582.1	453.4	352.5	267.9	215.7	163.1	124.4	104.8	73.3	60.9
1.67V/cell	1409.5	1040.6	857.0	745.2	593.6	461.3	358.1	271.7	218.6	165.1	125.8	105.8	73.9	61.4
1.60V/cell	1429.7	1055.5	896.3	781.1	619.1	480.0	372.0	281.5	226.0	170.2	129.3	108.6	75.4	62.6

## LHR Series High Rate LHR857W(2V857W)

### Applications

- UPS
- Hospitals & Testing Laboratories
- Emergency Power Supply
- Industrial Process Control Facilities
- Banks & Financial Markets
- Data & Network Operation Centers

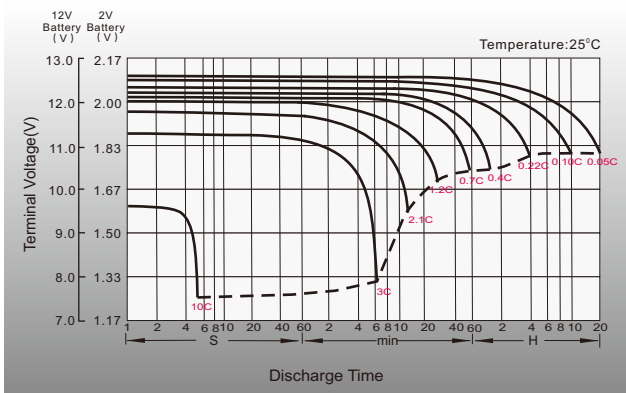
### General Features

- ABS material: UL94 V-0
- Oxygen recombination efficiency:  $\geq 98\%$
- High quality AGM separator: extend cycle life and prevent micro short circuit
- Unique vent valve design: reduce water losing and prevent air/spark going inside
- PbCaSn alloy for plate grids: less gassing, less self-discharging

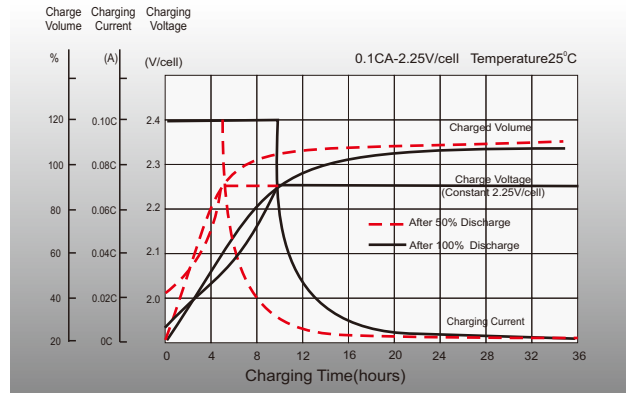
### Standards

- Compliance with IEC 60896 standards
- Classified as "Very Long Life" according to Eurobat
- CE, UL Certified
- Manufactured in Leoch@IATF16949, OHSAS 18001, ISO 9001 and ISO 14001 certified production facilities

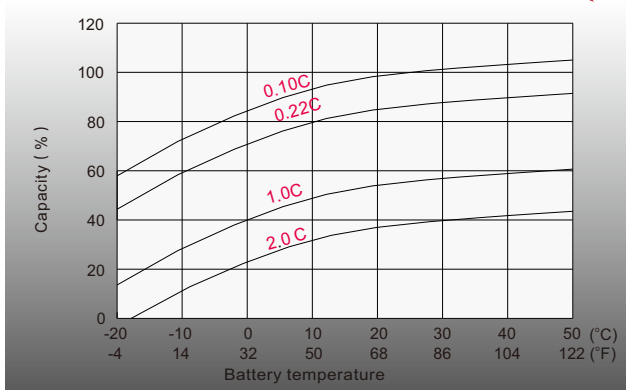
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Temperature Effects on Long Term Float Life

