

## LHR Series High Rate

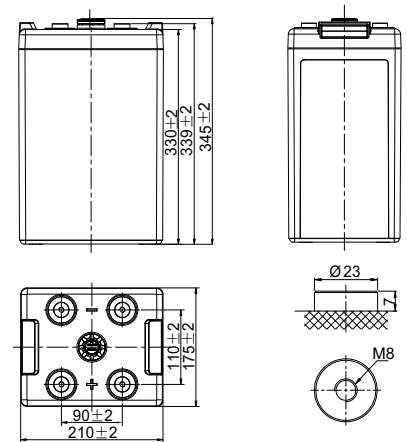
### LHR1186W(2V1186W)

#### Specifications

Rated Voltage	2V	
Nominal Rate ( $W_{15}, 1.67V/cell$ )	1186W	
Nominal Capacity( $C_{10}, 1.80V/cell$ )	400Ah	
Dimension	Length	210±2mm (8.27 inches)
	Width	175±2mm (6.89 inches)
	Container Height	330±2mm (12.99 inches)
	Total Height	345±2mm (13.58 inches)
Approx. Weight	26.4 Kg (58.2 lbs)	
Terminal	M8	
Container Material	ABS(UL94 V-0)	
Rated Capacity (25°C)	400.0 Ah	(10hr, 40.0A, 1.80V/cell)
	384.0 Ah	
	350.0 Ah	(8hr, 48.0A, 1.80V/cell)
	312.0 Ah	(5hr, 70.0A, 1.75V/cell)
	240.0 Ah	
Max. Discharge Current	3200A	
Internal Resistance (25°C)	Approx. 0.58mΩ	
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)	100.0A	
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	850.1	627.6	400.7	349.1	285.6	225.8	197.6	151.9	123.1	93.6	75.3	63.5	44.8	37.5
1.80V/cell	950.7	701.9	466.0	402.3	322.8	252.4	218.7	166.2	133.9	101.3	81.2	68.4	48.0	40.0
1.75V/cell	1014.2	748.8	492.9	422.1	337.4	262.7	226.8	171.8	138.0	104.0	83.2	70.0	48.9	40.6
1.70V/cell	1066.9	787.6	521.0	444.2	352.3	272.7	235.1	177.6	142.4	107.0	85.3	71.6	49.7	41.3
1.67V/cell	1083.8	800.1	537.4	456.8	361.2	278.8	240.0	180.8	144.8	108.7	86.5	72.5	50.3	41.6
1.60V/cell	1099.3	811.6	576.0	486.4	381.6	293.2	251.7	188.9	150.8	112.7	89.4	74.7	51.4	42.5

#### 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	1529.7	1129.3	900.7	787.0	645.7	512.2	403.3	311.0	252.5	192.7	148.0	125.1	88.6	74.2
1.80V/cell	1710.8	1263.0	1056.3	898.2	723.9	568.5	443.3	338.3	273.4	207.7	159.0	134.3	94.6	79.0
1.75V/cell	1825.0	1347.4	1103.4	933.3	750.2	587.1	456.4	347.6	280.2	212.3	162.3	137.0	96.2	80.1
1.70V/cell	1919.7	1417.2	1153.2	972.4	776.1	604.6	469.9	357.2	287.7	217.5	165.8	139.7	97.7	81.3
1.67V/cell	1950.4	1439.9	1186.0	993.6	791.5	615.1	477.5	362.3	291.4	220.2	167.7	141.1	98.6	81.9
1.60V/cell	1978.2	1460.5	1223.4	1041.4	825.5	640.0	496.0	375.3	301.4	227.0	172.4	144.8	100.6	83.4

## LHR Series High Rate LHR1186W(2V1186W)

### Applications

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

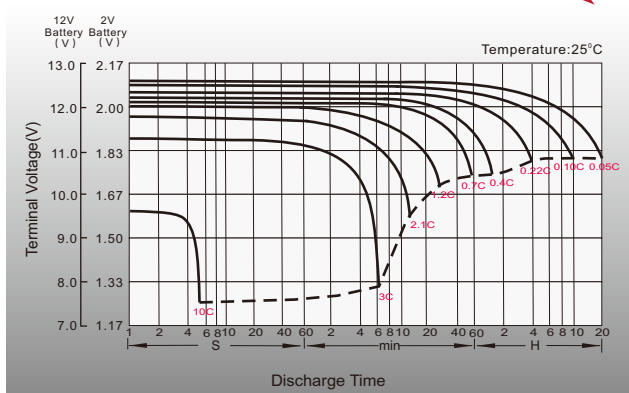
### General Features

- 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

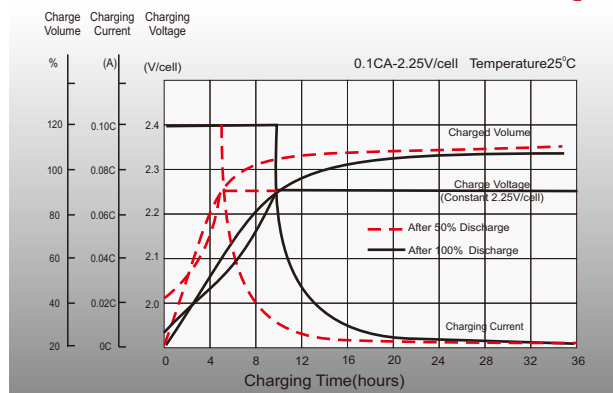
### Standards

- Compliance with IEC 60896 standards
- Classified as "Very Long Life" according to Eurobat
- CE, UL Certified
- Manufactured in Leoben (AT) 16949, 01513-1001, ISO 9001 and ISO 14001 certified production facilities

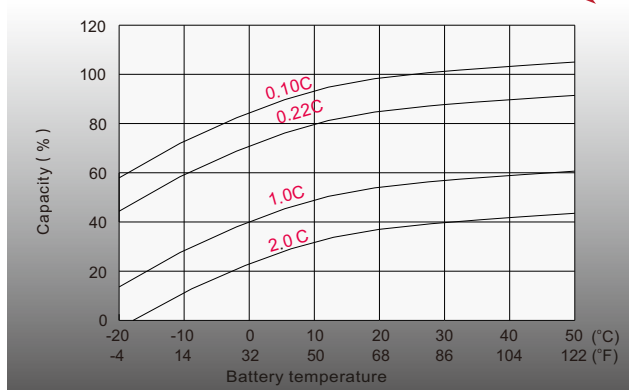
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Temperature Effects on Long Term Float Life

