



# LHR Series-High Rate

## LHR12800W(12V800W)

IEEE/UL Battery  
Sizing by  
**MooreU**  
610-952-6067  
www.mooreu.com

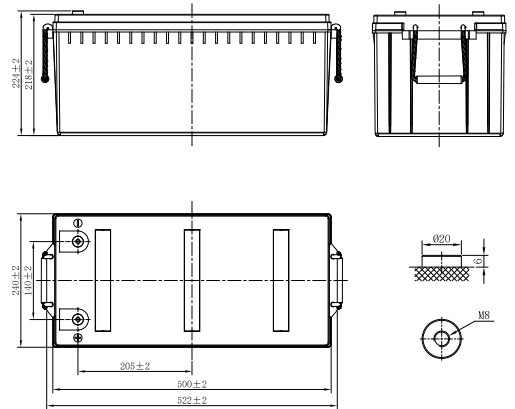


### Specifications

Rated Voltage	12V		
Nominal Rate(W <sub>15</sub> , 1.67V/cell)	800W/cell		
Nominal Capacity(C <sub>10</sub> , 1.80V/cell)	205Ah		
Dimension	Length	522±2mm (20.6 inches)	
	Width	240±2mm (9.45 inches)	
	Container Height	218±2mm (8.58 inches)	
	Total Height	224±2mm (8.82 inches)	
Approx Weight	68.7kg (151.5 lbs)		
Terminal	M8		
Container Material	ABS: UL 94 HB or V-0 optional		
Rated Capacity(25°C)	205.0 Ah	C10(20.5A, 1.80V/cell)	
	190.4 Ah	C8(23.8A, 1.80V/cell)	
	180.5 Ah	C5(36.1A, 1.75V/cell)	
	159.6 Ah	C3(53.2A, 1.75V/cell)	
	130.5 Ah	C1(130.5A, 1.60V/cell)	
Max. Discharge Current	2050A (5s)		
Internal Resistance(25°C)	Approx 2.6mΩ		
Operating Temp. Range	Discharge	-20 ~ 55°C (-4 ~ 131°F)	
	Charge	-20 ~ 40°C (-4 ~ 104°F)	
	Storage	-15 ~ 50°C (5 ~ 122°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)		
Max.Charging Current(25°C)	51.25A		
Charge voltage(25°C)	Float	2.25 ~ 2.30V/cell	Temp. Coefficient -3mV/cell/°C
	Equalization	2.30~2.40V/cell	-4mV/cell/°C
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	478.6	382.1	331.3	260.5	180.5	139.2	112.8	82.9	67.8	50.4	39.9	33.7	23.3	19.9
1.80V/cell	544.2	433.7	375.4	294.5	203.6	147.8	116.6	85.4	71.7	52.1	41.4	35.1	23.8	20.5
1.75V/cell	593.7	472.3	408.1	319.3	219.8	156.7	121.4	88.9	74.5	53.2	42.8	36.1	24.0	20.6
1.70V/cell	632.0	501.5	431.6	337.1	232.1	164.5	126.7	92.6	76.3	54.4	43.8	36.9	24.4	20.7
1.67V/cell	654.0	517.3	444.2	346.3	237.6	169.0	128.1	95.0	78.1	55.6	44.4	37.4	24.7	21.0
1.60V/cell	677.2	535.0	458.0	355.2	243.4	173.2	130.5	98.2	79.6	57.0	45.4	38.1	24.8	21.2

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

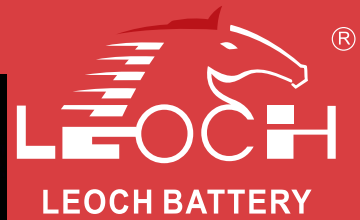
F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	893.8	718.8	627.2	495.5	345.0	267.7	218.2	160.6	131.8	98.6	78.2	66.5	46.3	39.7
1.80V/cell	999.8	804.0	701.6	554.3	385.9	282.4	224.3	164.6	138.9	101.4	80.9	68.8	47.1	40.7
1.75V/cell	1071.6	861.8	752.0	594.1	413.6	297.6	232.5	170.6	143.6	103.3	83.3	70.5	47.4	40.8
1.70V/cell	1121.8	902.1	787.2	621.9	433.0	310.2	241.4	176.9	146.4	105.2	84.9	71.9	48.1	41.1
1.67V/cell	1140.0	916.8	800.0	632.0	440.0	316.9	242.7	180.6	149.3	107.0	85.8	72.6	48.6	41.7
1.60V/cell	1156.0	929.6	811.2	640.8	446.2	321.6	245.4	185.4	151.3	109.1	87.3	73.7	48.7	41.8



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### Applications

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

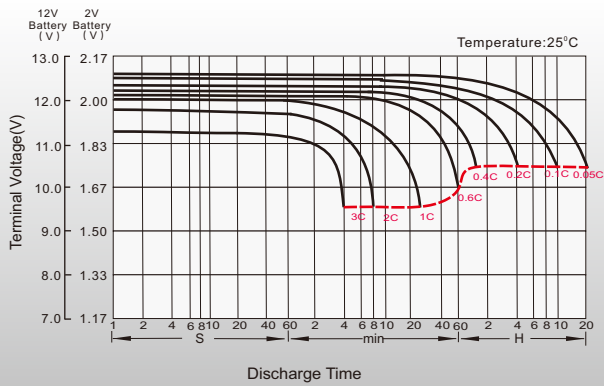
### General Features

- High quality AGM separator: extend cycle life and prevent micro short circuit
- PbCaSn alloy for plate grids: less gassing, less self-discharging
- Unique vent valve design: reduce water losing and prevent air/spark going inside

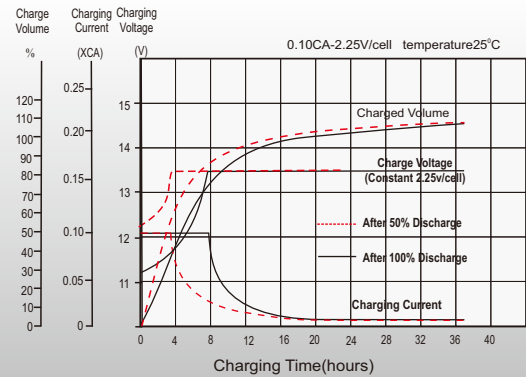
### Standards

- Compliance with IEC 60896 and YD/T 3427 standards
- Manufactured in Leoch@IATF16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

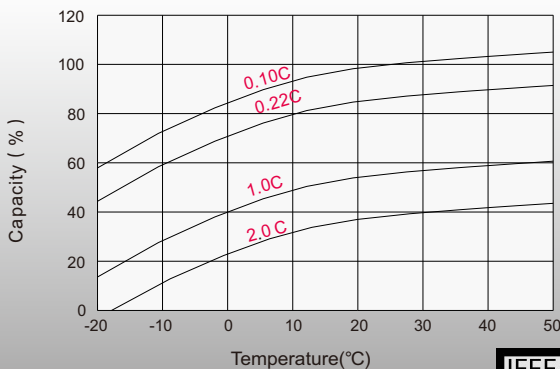
### Discharge Characteristics



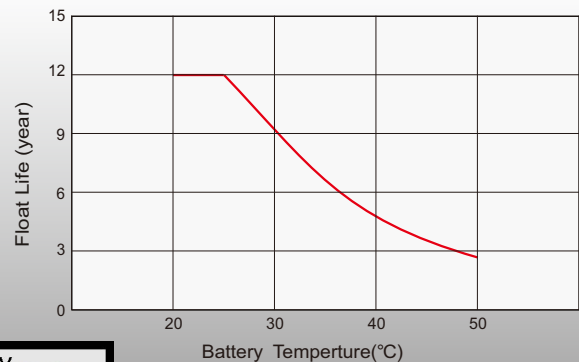
### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Temperature Effects on Long Term Float Life



### Sales Offices Worldwide

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