



# LHR Series-High Rate

## LHR12300W(12V300W)

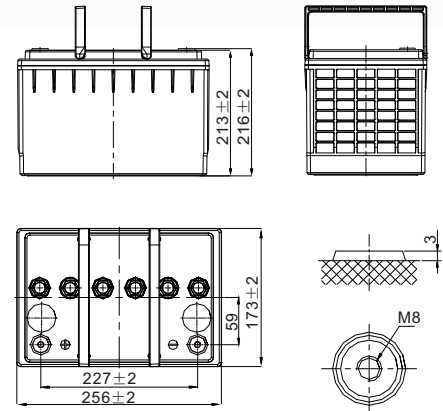


### Specifications

Rated Voltage	12V		
Nominal Rate( $W_{15}, 1.67V/cell$ )	300W/cell		
Nominal Capacity( $C_{10}, 1.80V/cell$ )	75Ah		
Dimension	Length	256±2mm (10.1 inches)	
	Width	173±2mm (6.81 inches)	
	Container Height	213±2mm (8.39 inches)	
	Total Height	216±2mm (8.50 inches)	
Approx Weight	23.4kg (51.6 lbs)		
Terminal	M8		
Container Material	ABS: UL 94 HB or V-0		
Rated Capacity(25°C)	75.0 Ah	C10(7.50A, 1.80V/cell)	
	71.6 Ah	C8(8.95A, 1.80V/cell)	
	62.5 Ah	C5(12.5A, 1.75V/cell)	
	53.4 Ah	C3(17.8A, 1.75V/cell)	
	47.6 Ah	C1(47.6A, 1.60V/cell)	
Max. Discharge Current	750A (5s)		
Internal Resistance(25°C)	Approx 5.0mΩ		
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)	18.75A		
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	232.1	172.0	136.9	106.8	65.0	46.7	36.8	26.0	21.6	16.1	13.4	11.7	8.72	7.36
1.80V/cell	258.7	191.7	152.5	119.0	70.0	50.5	39.8	28.1	23.0	17.1	14.1	12.2	8.95	7.50
1.75V/cell	269.9	200.1	159.2	124.2	75.2	53.6	42.2	29.7	24.2	17.8	14.4	12.5	9.11	7.57
1.70V/cell	273.3	202.6	161.2	125.7	82.8	57.9	44.9	31.6	25.0	18.3	14.8	12.7	9.23	7.65
1.67V/cell	288.0	207.9	163.6	127.6	88.4	60.9	46.9	33.0	25.7	18.7	15.2	13.0	9.37	7.72
1.60V/cell	306.0	215.1	166.1	129.6	89.1	61.8	47.6	33.4	26.3	19.1	15.5	13.2	9.49	7.80

### 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	380.0	315.4	250.9	195.7	127.9	92.8	73.6	52.9	43.3	32.5	27.1	23.7	17.8	15.1
1.80V/cell	429.5	351.5	279.6	236.7	137.1	99.9	79.2	56.9	46.1	34.4	28.4	24.7	18.2	15.3
1.75V/cell	462.9	366.8	291.8	247.0	146.4	105.5	83.8	60.1	48.2	35.6	29.0	25.2	18.5	15.5
1.70V/cell	491.9	371.4	295.5	250.0	160.4	113.2	88.4	63.4	49.7	36.7	29.8	25.7	18.7	15.6
1.67V/cell	510.0	377.1	300.0	253.9	166.6	118.2	91.8	65.8	51.0	37.3	30.4	26.1	19.0	15.7
1.60V/cell	517.3	382.8	304.5	257.7	169.5	118.9	92.5	66.2	51.7	37.9	30.8	26.5	19.2	15.8



# LHR Series-High Rate

## LHR12300W(12V300W)



### Applications

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

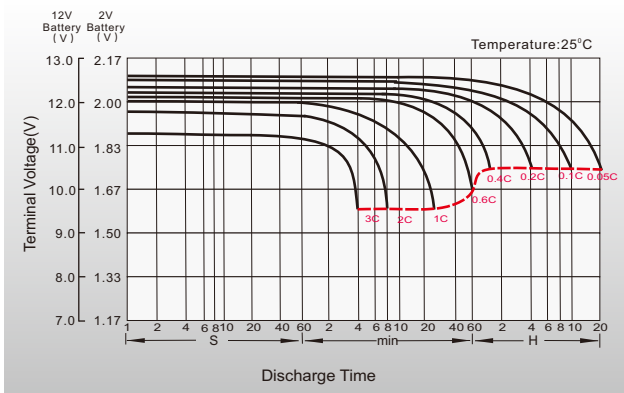
### General Features

- 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

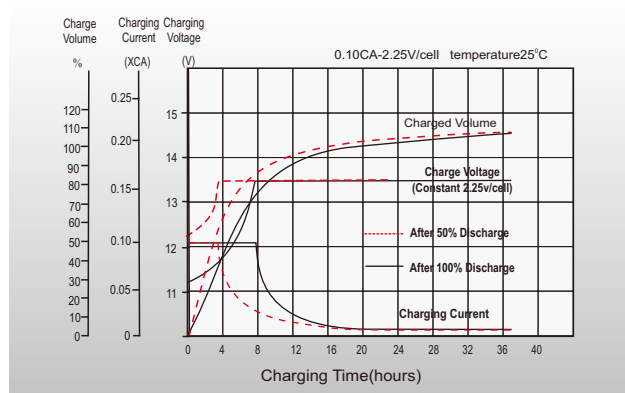
### Standards

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

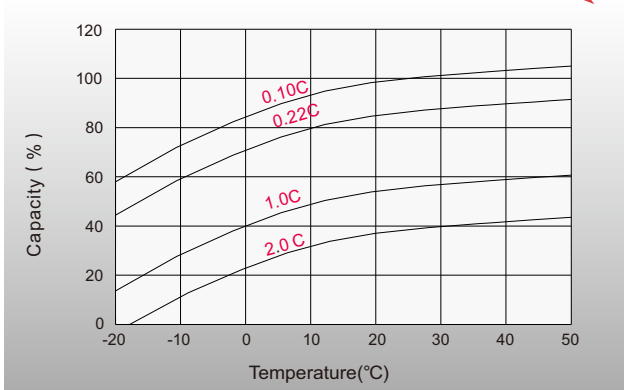
### Discharge Characteristics



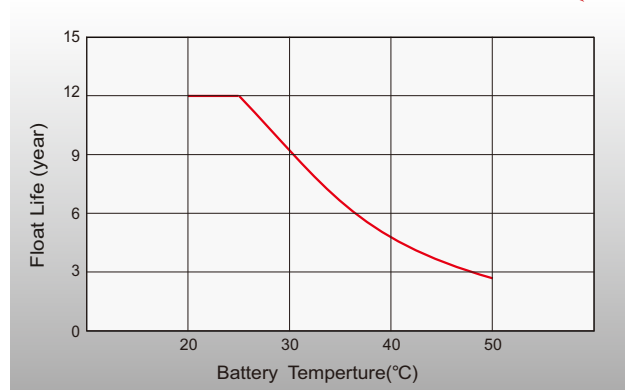
### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life



## Sales Offices Worldwide

#### China Sales Office

5th Floor, Xinbaohui Bldg., Nanhai Blvd.,  
Nanshan, Shenzhen, China. 518052  
Tel: +86-755-86036060 (100 lines)  
Fax: +86-755-26067269  
E-mail: export@leoch.com

#### North America Sales Office

19751 Descartes  
Foothill Ranch, CA 92610, USA  
Tel: 949-588-5853  
Fax: 949-588-5966  
E-mail: sales@leoch.us  
Http://www.leoch.us

#### HongKong Sales Office

Workshop C, 33/F, TML Tower, No. 3 Hoi Shing Road,  
Tsuen Wan, New Territories, Hong Kong  
Tel: +852 35786666  
Fax: +44 1452 690125  
E-mail: sales.hk@leoch.com

#### UK Sales Office

9B Wheatstone Court, Waterwells, Business Park,  
Gloucester, GL2-2AQ, UK United Kingdom  
Tel: +44(0) 1452 729428 / 1452 729696  
Fax: +44 1452 690125  
E-mail: Sales.Europe@leoch.com  
Http://www.leoch.eu

#### Singapore Sales Office

No. 1 Tech Park Crescent,  
Singapore 638131  
Tel: +65 68636078  
Fax: +65 6863 6079  
Email: sales.sg@Leoch.com

#### EMEA Sales Office

1 Deligiorgi St., 121 31 Athens,  
Greece  
Tel: +30 210 5760318 (2 lines)  
E-mail: support\_EMEA@leoch.com  
Http://www.leoch.eu

#### Australia Sales Office

2/29 Tarlington Place, Smithfield. NSW 2164  
Australia  
Tel: 02 9756 0950  
E-mail: sales.au@leoch.com

#### India Sales Office

Shed no. A-53(b), 2nd Stage of Peenya Industrial Area,  
Bangalore North Taluk, Bangalore-560058, India  
Tel: +91-80-23440018/23440019  
Fax: +91-80-23440017  
E-mail: indiasales@leoch.com



[Http://www.leoch.com](http://www.leoch.com)

© 1999-2022 LEOCH. All rights reserved.

Trademarks and logos are the property of LEOCH and its affiliates unless otherwise noted.

Subject to revisions without prior notice.

Publication No.: LB-LHR12300W-PD-EN-V1.4-202204