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Sizing by  
**MooreU**  
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# LHR Series-High Rate

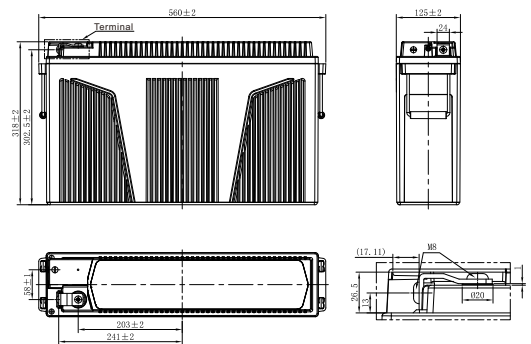
## LHR12700FT(12V700W)



### Specifications

Rated Voltage	12V	
Nominal Rate(W <sub>15</sub> , 1.67V/cell)	700W/cell	
Nominal Capacity(C <sub>10</sub> , 1.80V/cell)	180Ah	
Dimension	Length	560±2mm (22.0 inches)
	Width	125±2mm (4.92 inches)
	Container Height	318±2mm (12.5 inches)
	Total Height	318±2mm (12.5 inches)
Approx Weight	60.0kg (132.3 lbs)	
Terminal	M8	
Container Material	ABS: UL 94 HB or V-0 optional	
Rated Capacity(25°C)	180.0 Ah	C10(18.0A, 1.80V/cell)
	167.2 Ah	C8(20.9A, 1.80V/cell)
	158.5 Ah	C5(31.7A, 1.75V/cell)
	144.0 Ah	C3(48.0A, 1.75V/cell)
	113.1 Ah	C1(113.1A, 1.60V/cell)
Max. Discharge Current	1800A (5s)	
Internal Resistance(25°C)	Approx 3.2mΩ	
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)	45.0A	
Charge voltage(25°C)	Float	2.25 ~ 2.30V/cell    -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	409.5	328.3	282.5	222.1	162.3	122.4	95.0	73.9	59.5	44.3	35.0	29.6	20.5	17.5
1.80V/cell	467.0	373.7	321.0	251.8	183.5	127.8	97.2	78.5	63.0	46.4	36.3	30.8	20.9	18.0
1.75V/cell	513.5	410.3	351.8	275.2	199.8	134.6	100.8	81.6	65.4	48.0	37.5	31.7	21.1	18.1
1.70V/cell	543.6	433.2	370.0	289.0	209.8	140.0	106.0	83.7	67.0	49.0	38.4	32.4	21.4	18.2
1.67V/cell	574.3	456.2	388.7	303.0	219.3	144.4	110.2	85.8	68.6	50.0	38.9	32.8	21.7	18.5
1.60V/cell	594.6	471.8	400.7	310.8	224.6	149.4	113.1	87.4	69.9	51.3	39.8	33.5	21.8	18.6

### 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	764.8	617.7	534.8	422.5	310.2	235.3	183.8	143.3	115.7	86.6	68.7	58.4	40.7	34.8
1.80V/cell	857.9	692.9	599.9	473.9	347.9	244.1	187.0	151.4	121.9	90.2	71.0	60.4	41.4	35.7
1.75V/cell	926.9	748.7	648.2	512.1	376.0	255.6	193.0	156.7	126.1	93.0	73.1	61.9	41.7	35.9
1.70V/cell	965.0	779.4	674.8	533.1	391.4	264.0	201.9	159.9	128.6	94.7	74.6	63.2	42.3	36.1
1.67V/cell	1001.0	808.5	700.0	553.0	406.0	270.8	208.8	163.1	131.1	96.2	75.3	63.8	42.6	36.6
1.60V/cell	1015.0	819.8	709.8	560.7	411.7	277.5	212.7	165.0	132.8	98.1	76.7	64.8	42.8	36.7



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# LHR Series-High Rate

## LHR12700FT(12V700W)

### Applications

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

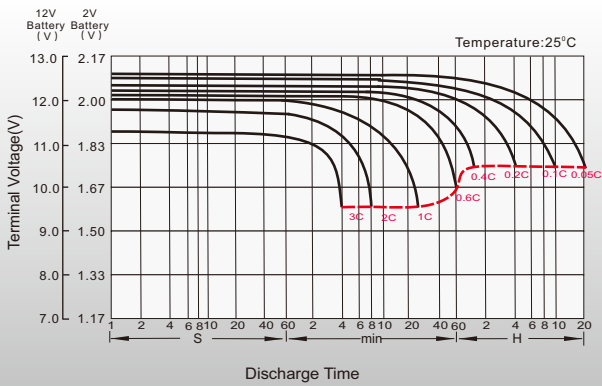
### General Features

- 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

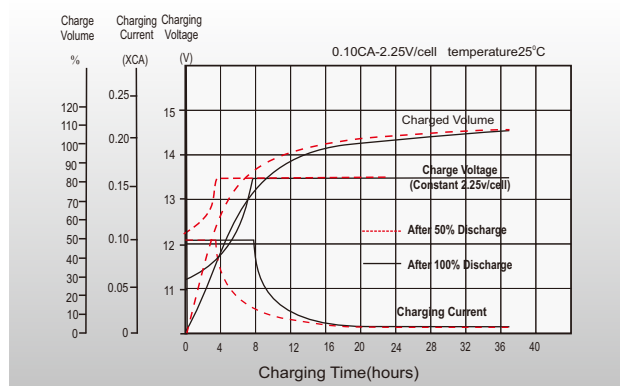
### Standards

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

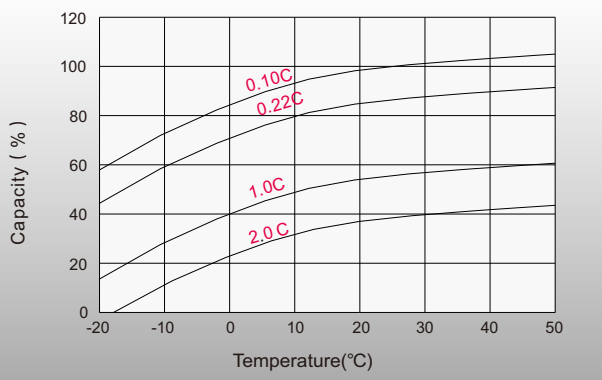
### Discharge Characteristics



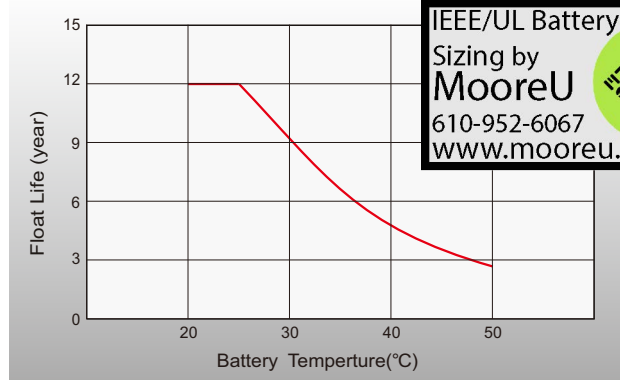
### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Temperature Effects on Long Term Float Life



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