



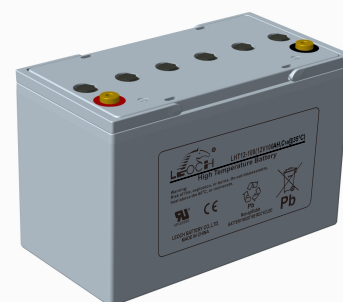
# LHT Series-High Temperature

## LHT12-100(12V100Ah)

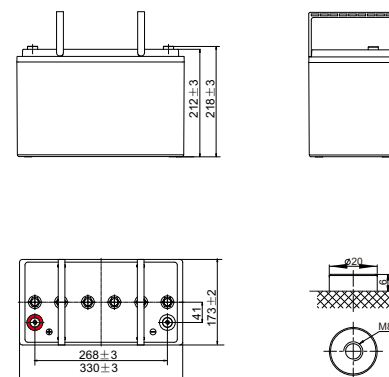


### Specifications

Rated Voltage	12V	
Nominal Capacity	100Ah	(C <sub>10</sub> , 1.80V/cell)
Dimension	Length	330±3mm (13.0 inches)
	Width	173±2mm (6.81 inches)
	Container Height	212±3mm (8.35 inches)
	Total Height	218±3mm (8.58 inches)
Approx Weight	33.5 Kg (73.9 lbs)	
Terminal	M8	
Container Material	PC-ABS flame retardant jar and cover to UL94 V-0	
Rated Capacity (35°C)	107.0 Ah	(20hr, 5.35A, 1.80V/cell)
	100.0 Ah	(10hr, 10.0A, 1.80V/cell)
	87.0 Ah	(5hr, 17.4A, 1.75V/cell)
	78.0 Ah	(3hr, 26.0A, 1.75V/cell)
	62.0 Ah	(1hr, 62.0A, 1.60V/cell)
Max. Discharge Current	1000A	
Internal Resistance (35°C)	Approx 8.0mΩ	
Operating Temp. Range	Discharge	-40 ~ 65°C (-40 ~ 149°F)
	Charge	-20 ~ 45°C (-4 ~ 113°F)
	Storage	-20 ~ 50°C (-4 ~ 122°F)
Nominal Operating Temp. Range	25±10°C (77±18°F)	
Cycle Use	Initial Charging Current less than 25A. Voltage 13.8V~14.4V at 35°C(95°F)Temp. Coefficient -30mV/°C	
	Initial Charging Current less than 25A. Voltage 13.2V~13.62V at 35°C(95°F)Temp. Coefficient -18mV/°C	
Effect of temp. to Capacity	40°C (104°F)	103%
	35°C (95°F)	100%
	0°C (32°F)	79%
Self Discharge	LHT series batteries may be stored for up to 9 months at 35°C(95°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



### Layout



### Constant Current Discharge (Amperes) at 35 °C (95°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	117.0	98.4	87.3	72.4	55.9	47.8	31.0	23.3	19.1	16.0	14.1	11.3	9.69	5.17
1.80V/cell	133.9	110.5	96.5	78.6	60.3	50.5	33.3	25.0	20.3	17.0	14.9	11.9	10.0	5.35
1.75V/cell	152.1	124.5	106.7	85.5	65.7	55.0	34.6	26.0	21.0	17.4	15.4	12.3	10.3	5.49
1.70V/cell	171.7	138.2	117.7	93.3	70.8	58.2	36.5	27.4	21.9	18.4	16.1	12.8	10.7	5.63
1.67V/cell	184.4	147.9	125.3	98.5	74.9	60.2	37.8	28.5	22.8	19.0	16.7	13.2	11.0	5.80
1.60V/cell	202.9	162.0	136.1	105.1	77.9	62.0	38.8	29.2	23.3	19.4	17.0	13.4	11.2	5.89

### Constant Power Discharge(Watts/cell) at 35 °C (95°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	218.5	185.6	166.3	139.4	108.5	93.2	60.7	45.8	37.7	31.8	27.9	22.5	19.4	10.3
1.80V/cell	247.1	205.6	181.2	149.2	116.1	97.8	64.8	49.0	39.8	33.5	29.4	23.6	20.0	10.7
1.75V/cell	276.2	228.9	198.3	160.8	125.5	106.1	67.2	50.7	41.0	34.2	30.3	24.3	20.5	10.9
1.70V/cell	304.9	250.5	217.3	174.6	134.7	112.0	70.6	53.3	42.8	36.1	31.7	25.3	21.2	11.2
1.67V/cell	324.5	266.2	229.5	182.7	141.2	115.0	72.8	55.2	44.3	37.1	32.7	26.1	21.8	11.6
1.60V/cell	348.9	286.8	246.6	193.6	146.0	117.8	74.3	56.4	45.2	37.9	33.3	26.5	22.2	11.7



# LHT Series-High Temperature

## LHT12-100(12V100Ah)



### Applications

- Tele-communication base station
- High temperature station without air-condition
- Station in the open air
- Electric power system, UPS
- Solar energy, wind saving energy power supply

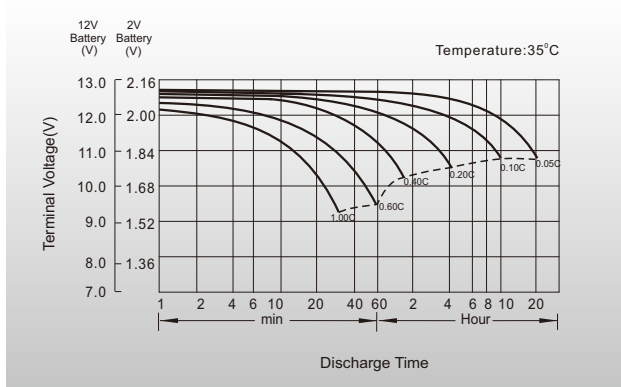
### General Features

- Battery design life up to 10 years at 35°C
- Special anti-high-temperature paste formula
- Special anti-high-temperature container
- Special double sealing and anti-high-temperature sealing agent
- High performance separator and special electrolyte formula

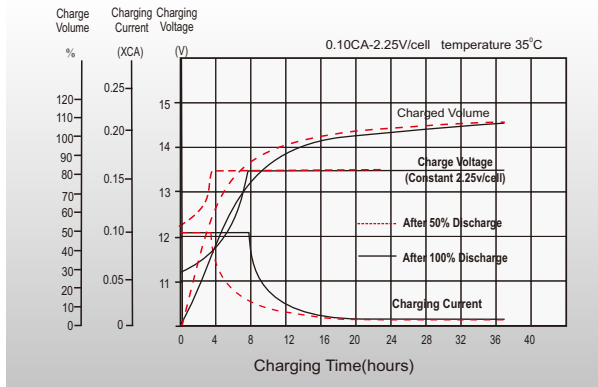
### Standards

- Compliance with IEC 60896 Certified
- Classified as "Long Life" according to Eurobat
- UL, CE Certified
- Manufactured in Leoch® IATF 16949, ISO 9001, ISO 14001 and ISO 45001 certified production facilities

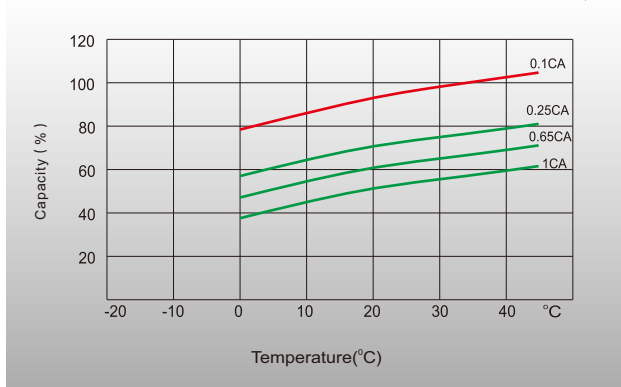
### Discharge Characteristics



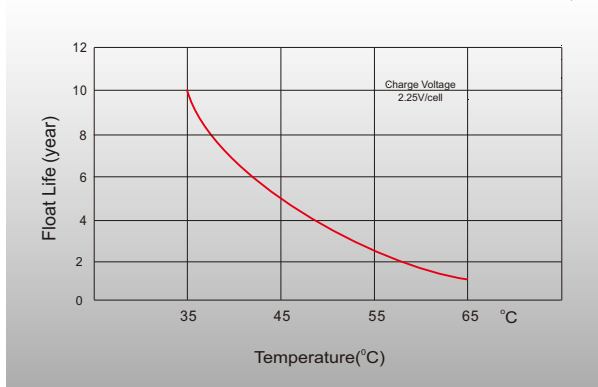
### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life



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