



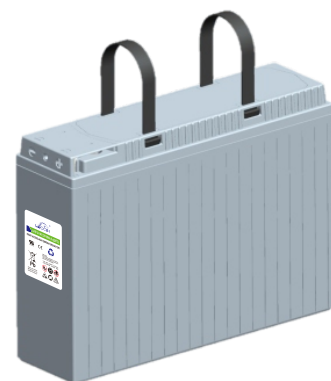
# LHT Series-High Temperature

## LHTF12-100(12V100Ah)

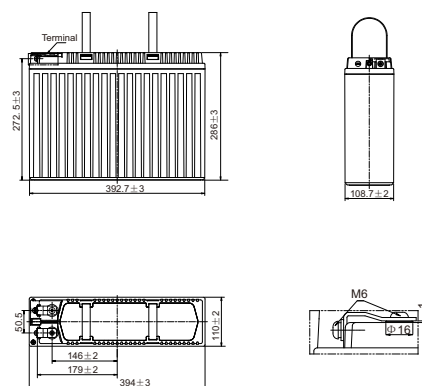


### Specifications

Rated Voltage	12V	
Nominal Capacity	100Ah	(C <sub>10</sub> , 1.80V/cell)
Dimension	Length	394±3mm (15.5 inches)
	Width	110±2mm (4.33 inches)
	Container Height	286±3mm (11.3 inches)
	Total Height	286±3mm (11.3 inches)
Approx Weight	31.5 Kg (69.4 lbs)	
Terminal	M6	
Container Material	PC-ABS flame retardant jar and cover to UL94 V-0	
Rated Capacity (35°C)	105.0 Ah	(20hr, 5.25A, 1.80V/cell)
	100.0 Ah	(10hr, 10.0A, 1.80V/cell)
	87.5 Ah	(5hr, 17.5A, 1.75V/cell)
	79.5 Ah	(3hr, 26.5A, 1.75V/cell)
	67.1 Ah	(1hr, 67.1A, 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	
Standby Use	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	155.4	129.4	108.7	83.6	62.4	52.7	31.6	23.9	19.0	15.9	13.8	11.2	9.37	5.02
1.80V/cell	183.2	150.5	125.3	94.5	69.7	58.3	34.4	25.8	20.5	17.1	14.8	12.0	10.0	5.25
1.75V/cell	196.4	159.2	131.5	98.8	72.6	60.5	35.5	26.5	21.0	17.5	15.1	12.2	10.2	5.32
1.70V/cell	209.5	168.2	138.4	103.1	75.3	62.7	36.6	27.3	21.5	17.9	15.4	12.4	10.3	5.39
1.67V/cell	217.2	173.5	142.3	105.7	77.0	64.0	37.2	27.7	21.8	18.1	15.6	12.6	10.4	5.46
1.60V/cell	235.0	186.0	151.5	111.7	81.0	67.1	38.8	28.7	22.6	18.7	16.0	12.9	10.6	5.57

### 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	297.4	248.6	209.5	161.5	120.9	102.4	61.8	46.8	37.4	31.3	27.2	22.1	18.5	10.0
1.80V/cell	346.5	286.1	239.1	181.1	134.2	112.6	66.9	50.4	40.1	33.6	29.1	23.7	19.8	10.5
1.75V/cell	367.0	299.5	248.5	187.7	138.6	115.9	68.6	51.5	41.0	34.2	29.6	24.0	20.0	10.7
1.70V/cell	386.3	313.0	258.9	194.2	142.8	119.4	70.4	52.8	41.9	34.9	30.2	24.4	20.3	10.8
1.67V/cell	397.3	323.6	264.5	198.0	145.2	121.3	71.3	53.4	42.3	35.3	30.5	24.6	20.5	10.9
1.60V/cell	421.2	337.7	277.2	206.5	151.1	126.0	73.8	55.1	43.5	36.2	31.2	25.1	20.9	11.0



# LHT Series-High Temperature

## LHTF12-100(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

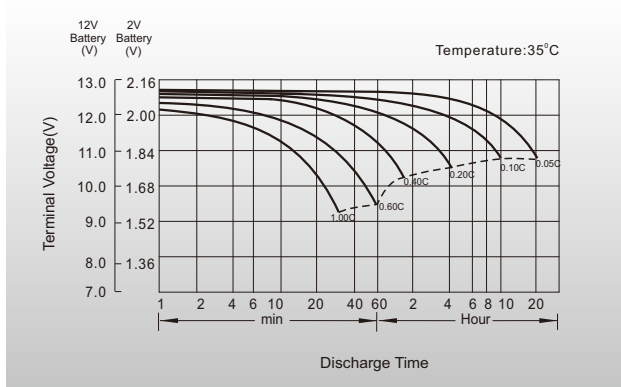
### General Features

- 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

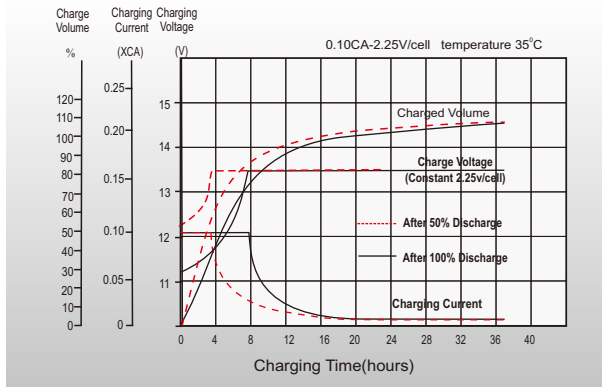
### Standards

- 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

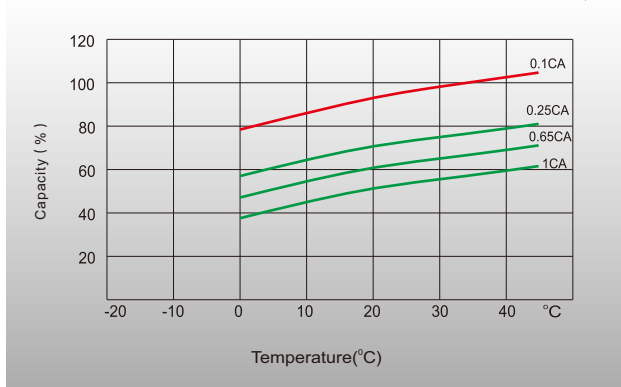
### Discharge Characteristics



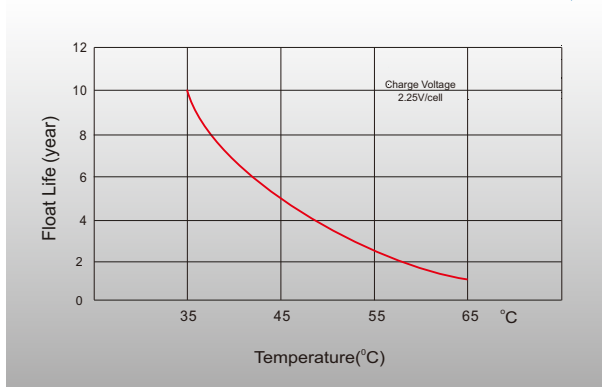
### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life



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