



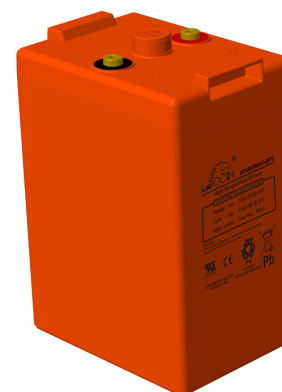
LHT Series-High Temperature

LHT2-500(2V500Ah)

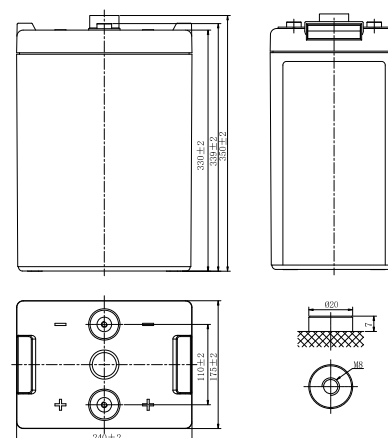


Specifications

Rated Voltage	2V	
Nominal Capacity	500Ah	(C ₁₀ , 1.80V/cell)
Dimension	Length	240±2mm (9.45 inches)
	Width	175±2mm (6.89 inches)
	Container Height	330±2mm (13.0 inches)
	Total Height	350±2mm (13.8 inches)
Approx Weight	30.0kg (66.1 lbs)	
Terminal	M8	
Container Material	PC-ABS flame retardant jar and cover to UL94 V-0	
Rated Capacity (35°C)	530.0 Ah	(20hr, 26.5A, 1.80V/cell)
	500.0 Ah	(10hr, 50.0A, 1.80V/cell)
	444.0 Ah	(5hr, 88.8A, 1.75V/cell)
	397.5 Ah	(3hr, 132.5A, 1.75V/cell)
	320.6 Ah	(1hr, 320.6A, 1.60V/cell)
Max. Discharge Current	4000A	
Internal Resistance (35°C)	Approx 0.6mΩ	
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 125A. Voltage 2.30V~2.40V at 35°C(95°F) Temp. Coefficient -5mV/°C	
	Standby Use	
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	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	583.4	495.0	451.8	406.5	342.0	280.0	235.5	156.0	120.3	97.1	81.9	71.4	57.0	47.8	25.3
1.80V/cell	710.0	579.0	514.9	457.5	377.0	304.0	255.3	166.5	126.3	101.3	85.3	74.0	59.4	50.0	26.5
1.75V/cell	829.8	666.0	582.5	513.0	413.0	331.3	278.8	176.0	132.5	106.3	88.8	76.8	61.0	51.0	27.0
1.70V/cell	949.7	747.0	643.8	558.0	444.0	351.3	295.0	184.8	138.3	110.0	91.4	79.2	62.8	52.3	27.7
1.67V/cell	1019.6	804.0	694.0	600.0	470.0	366.7	307.5	192.0	142.7	113.1	94.0	81.0	63.6	53.1	28.1
1.60V/cell	1110.0	861.0	736.0	630.0	491.0	382.7	320.6	199.3	146.1	115.6	95.9	82.5	64.8	53.6	28.4

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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	1089.5	931.2	855.4	773.2	653.6	538.4	455.5	303.4	235.1	190.5	161.3	141.1	113.1	95.1	50.4
1.80V/cell	1304.3	1073.5	962.3	861.0	714.7	580.6	491.1	322.3	245.7	197.9	167.3	145.6	117.5	99.3	52.7
1.75V/cell	1497.9	1215.1	1073.3	954.4	777.0	629.1	533.9	339.3	257.1	207.0	173.6	150.6	120.4	101.2	53.7
1.70V/cell	1685.7	1343.9	1174.2	1029.3	828.3	662.5	561.9	354.7	267.4	213.4	178.2	155.1	123.9	103.6	55.0
1.67V/cell	1777.1	1424.8	1249.9	1094.9	870.3	687.5	582.4	367.1	274.7	218.7	182.5	158.2	125.2	105.1	55.8
1.60V/cell	1894.8	1496.0	1303.6	1136.5	900.0	710.8	603.0	378.6	279.7	222.6	185.5	160.6	127.1	105.9	56.1



LHT Series-High Temperature

LHT2-500(2V500Ah)



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

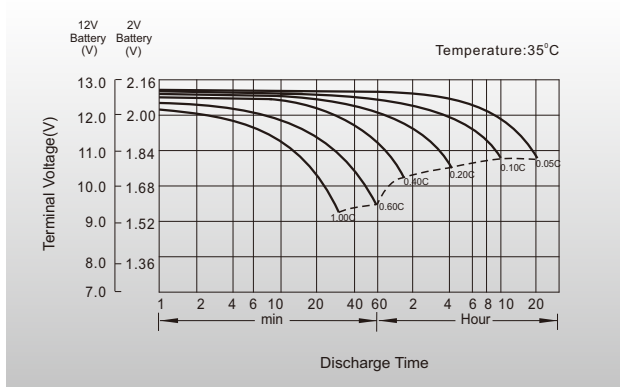
General Features

- Battery design life up to 15 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

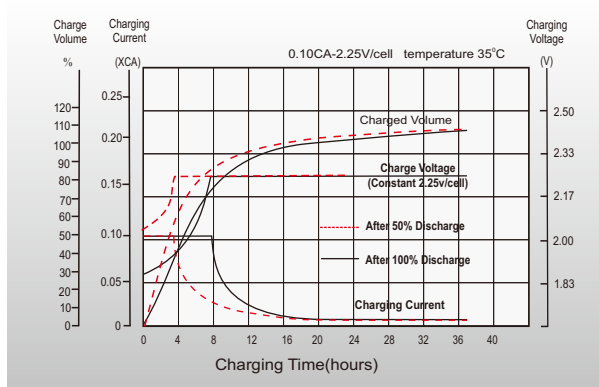
Standards

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

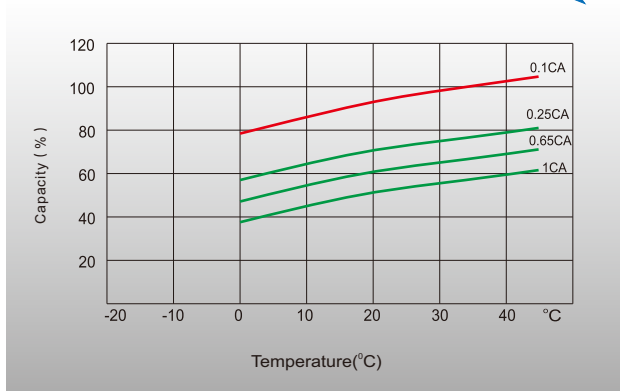
Discharge Characteristics



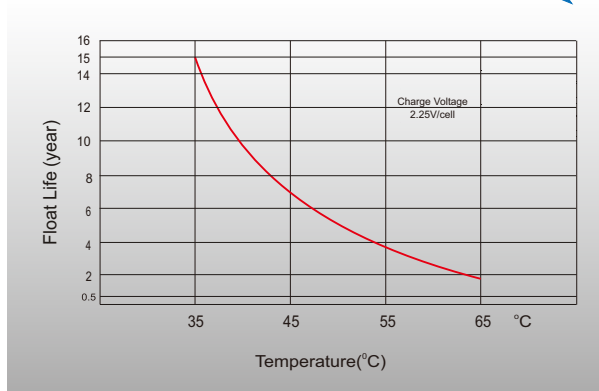
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



distributed by: Power Storage Deutschland GmbH

+49 (0)6081 96582-0

info@psd-power.de



www.psd-power.de



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