

LSE Series

The LSE range of VRLA batteries offers outstanding performance including a 15+ year design life and a cycle life in excess of 1200 cycles to 80% DOD. Built to the highest standards and compliant with the latest IEC 60896-21/22 standard this range also offers 100% capacity out-of-the-box and is capable of handling deep discharges for complete peace of mind. The use of flexible connectors and the ability to be installed both horizontally and vertically allows for multiple installation possibilities. This robust design uses the latest AGM technology to create a range that is suitable for many applications including both fixed and mobile telecoms, UPS, utilities and solar.

Application

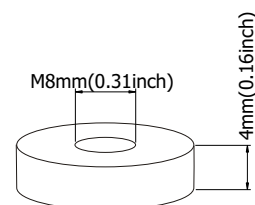
Cable Television	Control Equipment
Communication Equipment	Medical Equipment
Security System	Emergency Power System
UPS	Power Plant

General Features

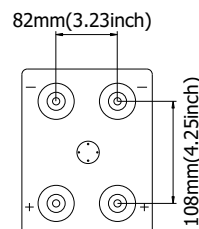
- Extra long life service design.
- Non-Spillable construction design.
- ABS containers and covers(UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof.
- Higher safety & reliable construction.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.
- Flexibility design for multiple install positions.

Construction

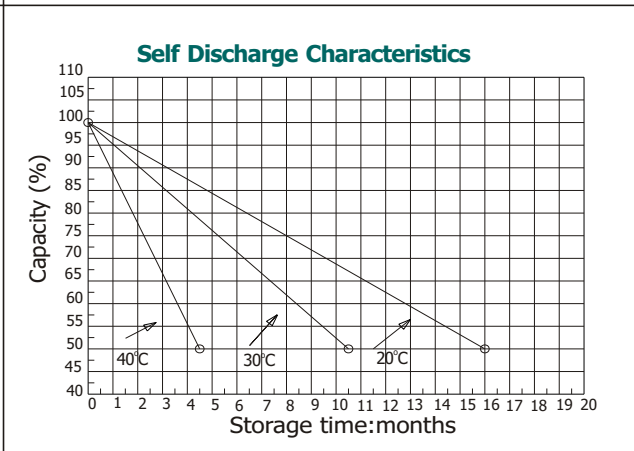
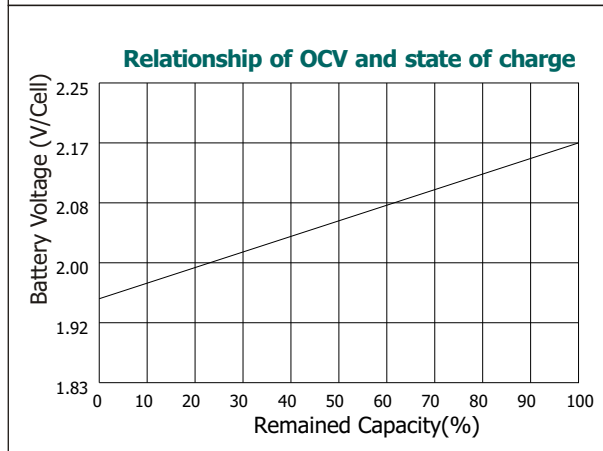
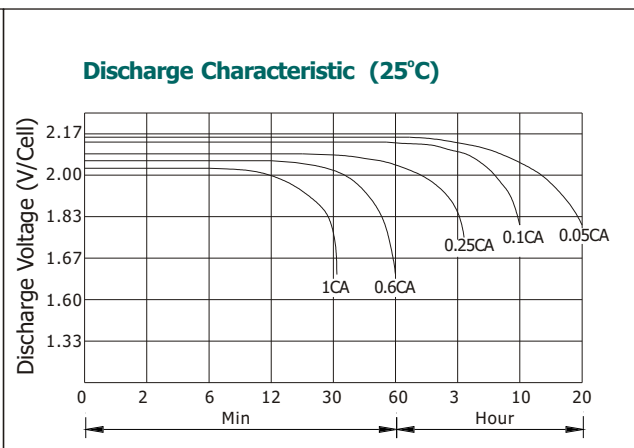
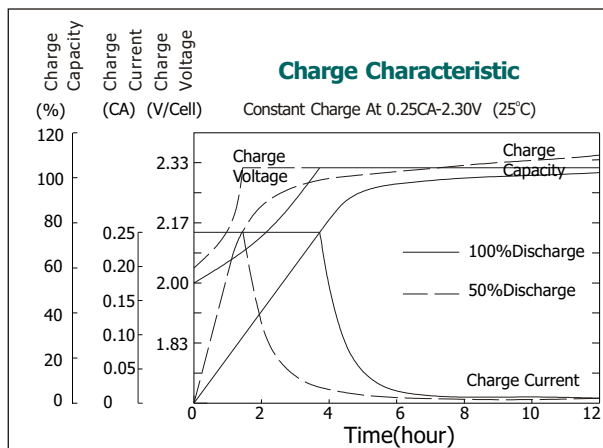
Component	Raw material	Sealant	Epoxy Resin
Positive	Lead dioxide	Safety valve	EPDR
Negative	Lead	Terminal	Copper
Container	ABS	Separator	Fiber glass
Cover	ABS	Electrolyte	Sulfuric acid



Terminal Dimensions



Battery Model	LSE2-1000			
Designed Floating Life	15 Years			
Capacity(25°C)	20HR(51.65A,1.75V)	10HR(100A,1.75V)	5HR(180A,1.75V)	1HR(647A,1.75V)
	1033AH	1000AH	900AH	647AH
Dimensions	Length	Width	Height	Total Height
	229mm(9.02inch)	186mm(7.32inch)	555mm(21.85inch)	566mm(22.28inch)
Approx. Weight	62Kg (136.57 lbs)			
Internal Resistance	Full charged at 25°C :0.18 mΩ			
Self Discharge	3% of capacity declined per month at (25°C)			
Capacity Affected by Temp.(20HR)	40°C	25°C	0°C	-15°C
	102%	100%	85%	65%
Charge Voltage(25°C)	Cycle use		Float use	
	2.3V-2.35V(-5mV/ °C), max. Current: 250A		2.25-2.27V(-3.3mV/ °C)	



Constant current discharge ratings -amperes at 25°C

Time End Voltage	5min	15min	30min	60min	2hour	3hour	5hour	6hour	8hour	10hour	24hour
1.60V	1447.9	1218.3	990.0	652.4	401.0	294.4	192.5	165.8	129.8	107.5	49.8
1.65V	1357.7	1146.7	902.9	615.8	389.6	286.4	190.1	163.8	128.7	106.9	49.1
1.70V	1276	1085.2	825.7	585.1	376.2	273.6	185.3	159.9	126.8	105.2	48.9
1.75V	1203.7	1021.4	761.3	552.4	362.3	267.3	182.2	157.5	125.1	104.3	48.5
1.80V	1137.2	952.5	712.8	524.7	351.5	261.4	178.0	154.4	122.8	103.0	47.4
1.83V	1053.2	876.8	665.3	495.0	336.6	253.4	175.2	152.5	122.0	102.5	47.4
1.85V	976.3	810.2	626.7	463.3	316.8	239.7	166.8	146.0	117.8	98.8	46.1
1.88V	896.4	732.9	580.1	420.8	294.8	226.1	159.0	139.1	113.5	95.0	44.7
1.90V	799.6	639.7	520.7	383.1	264.8	214.2	151.1	132.5	106.8	90.0	43.0
1.94V	719.8	518.5	478.2	344.5	236.4	183.6	132.9	117.2	95.8	81.7	38.3

Constant power discharge ratings-watts at 25°C

Time End Voltage	5min	15min	30min	60min	2hour	3hour	5hour	6hour	8hour	10hour	24hour
1.60V	2833.1	2372.7	1889.3	1346.4	868.7	643.5	425.0	363.0	283.7	231.7	104.4
1.65V	2694.5	2277.0	1787.0	1244.1	797.0	603.9	410.2	351.5	273.2	226.1	102.5
1.70V	2590.5	2196.2	1742.4	1184.7	773.9	582.5	401.0	344.5	267.3	219.5	100.5
1.75V	2509.7	2113.7	1683.0	1138.5	746.5	561.0	391.1	336.6	257.4	216.2	99.5
1.80V	2440.4	2014.7	1623.6	1112.1	732.6	541.2	380.2	326.7	250.8	212.9	98.0
1.83V	2306.7	1922.3	1531.2	1072.5	702.9	528.0	372.2	316.8	245.9	208.7	96.5
1.85V	2219.3	1834.8	1443.8	1011.5	673.2	512.5	362.3	309.4	242.6	204.6	94.1
1.88V	2095.5	1699.5	1342.4	950.4	625.7	495.0	350.5	298.3	236.0	199.7	91.6
1.90V	1958.6	1592.3	1217.7	871.2	584.1	475.2	338.6	289.1	226.9	189.8	88.1
1.94V	1770.5	1425.6	1091.0	772.2	539.7	441.5	320.8	277.2	217.8	181.5	87.1