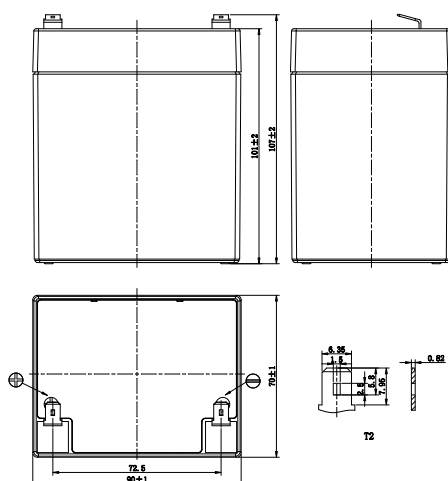


LHR SERIES-HIGH RATE

LHR1219W(A) (12V19W)



CHARACTERISTICS

Item		Specifications
Rated Voltage		12V
Nominal Rate (25°C)	$W_{15}, 1.67V/cell$	19W/cell
Nominal Capacity (25°C)	$C_{10}, 1.80V/cell$	4.68Ah
Dimension	Length	90mm(3.54inches)
	Width	70mm(2.76inches)
	Container Height	101mm(3.98inches)
	Total Height	107mm(4.21inches)
Approx Weight		1.52kg(3.35lbs)
Terminal		T1/T2
Container Material		ABS (UL94 HB or V-0 optional)
Short-circuit current		131A
Internal Resistance (25°C)		Approx 35 mΩ (Fully charged)
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)		0.25C
Charge voltage (25°C)	Float Charge	Equalization Charge
	2.25-2.30V/cell	2.30-2.40V/cell
Temp. Coefficient	-3mV/cell/°C	-4mV/cell/°C
	40°C (104°F)	106%
Effect of temp. to Capacity	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge		≤3% per month at 25°C (77°F)

DISCHARGE TABLE

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	16.1	11.0	8.69	7.02	5.09	3.69	2.97	2.18	1.71	1.24	0.984	0.838	0.565	0.462
1.80V/cell	17.4	11.6	9.12	7.30	5.24	3.79	3.05	2.22	1.74	1.26	1.00	0.850	0.573	0.468
1.75V/cell	18.3	12.1	9.42	7.50	5.38	3.87	3.11	2.26	1.77	1.28	1.01	0.861	0.579	0.473
1.70V/cell	19.2	12.6	9.74	7.72	5.52	3.96	3.17	2.30	1.80	1.29	1.03	0.872	0.585	0.478
1.67V/cell	19.8	12.9	9.98	7.88	5.61	4.02	3.21	2.33	1.82	1.31	1.04	0.880	0.590	0.481
1.60V/cell	21.0	13.5	10.3	8.11	5.77	4.12	3.29	2.38	1.86	1.33	1.05	0.894	0.598	0.487
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	30.5	20.9	16.6	13.5	9.83	7.16	5.78	4.25	3.35	2.43	1.94	1.65	1.12	0.918
1.80V/cell	32.6	22.0	17.4	14.0	10.1	7.32	5.91	4.33	3.41	2.46	1.96	1.68	1.14	0.930
1.75V/cell	34.1	22.8	17.9	14.3	10.3	7.45	6.00	4.40	3.46	2.50	1.99	1.69	1.15	0.938
1.70V/cell	35.5	23.5	18.3	14.6	10.5	7.59	6.10	4.46	3.50	2.53	2.01	1.72	1.16	0.947
1.67V/cell	36.5	24.1	19.0	14.9	10.7	7.69	6.18	4.51	3.53	2.55	2.03	1.73	1.17	0.954
1.60V/cell	38.5	25.0	19.3	15.3	10.9	7.83	6.29	4.58	3.59	2.59	2.06	1.75	1.18	0.965

LHR SERIES-HIGH RATE

LHR1219W(A) (12V19W)



APPLICATIONS

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

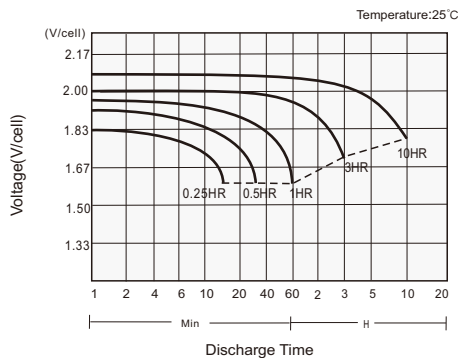
GENERAL FEATURES

- 6 years design life (25°C)
- Excellent high current performance - optimised for short discharge time
- Advanced AGM technology for superior high-rate power
- Long Life Alloy - minimizing grid growth, reducing gassing, and extending battery life
- Epoxy-sealed posts eliminate leaks
- Optimal energy density - saves floor space

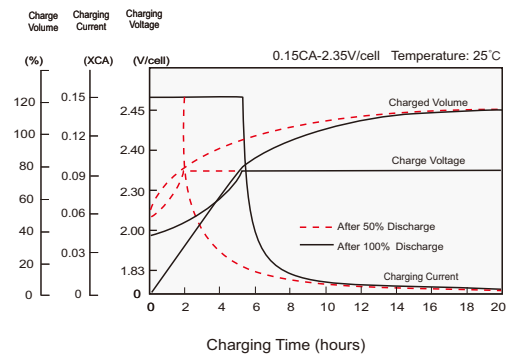
STANDARDS

- Compliance with IEC 60896 standards
- Classified as "General Purpose" according to Eurobat
- CE,UL Approved
- Manufactured in Leoch@IATF 16949, ISO 45001,ISO 9001 and ISO 14001 certified production facilities

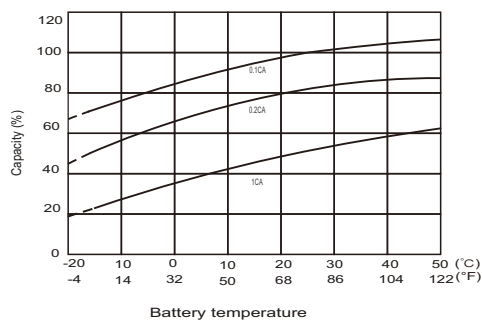
Discharge Characteristics



Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics

