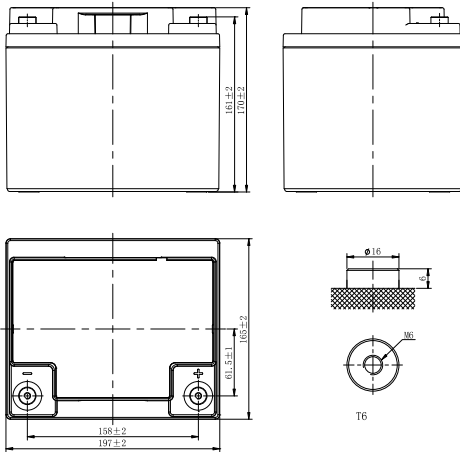


LHR SERIES-HIGH RATE

LHR12160W (12V160W)



CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Rate (25°C)	$W_{15}, 1.67V/cell$	160W/cell
Nominal Capacity (25°C)	$C_{10}, 1.80V/cell$	45Ah
Dimension	Length	197mm (7.76inches)
	Width	165mm (6.50inches)
	Container Height	170mm (6.69inches)
	Total Height	170mm (6.69inches)
Approx Weight	14.2kg (31.3lbs)	
Terminal	T6(M6)	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	1125A	
Internal Resistance (25°C)	Approx 9 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	95.7	76.4	66.3	52.1	36.8	31.8	24.9	18.5	14.9	11.1	8.76	7.41	5.12	4.38
1.80V/cell	108.8	86.7	75.1	58.9	41.5	33.7	26.5	19.6	15.7	11.6	9.08	7.70	5.23	4.50
1.75V/cell	118.2	94.1	81.3	63.6	44.6	35.0	27.6	20.4	16.3	12.0	9.38	7.92	5.28	4.52
1.70V/cell	126.4	100.3	86.3	67.4	47.3	36.1	28.3	20.9	16.7	12.2	9.61	8.10	5.36	4.55
1.67V/cell	130.8	103.5	88.8	69.3	48.4	37.1	29.0	21.5	17.1	12.5	9.74	8.21	5.42	4.62
1.60V/cell	135.4	107.0	91.6	71.0	49.6	37.8	29.5	21.9	17.5	12.8	10.0	8.37	5.45	4.64

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	178.8	143.8	125.4	99.1	70.2	61.1	48.2	35.8	28.9	21.6	17.2	14.6	10.2	8.70
1.80V/cell	200.0	160.8	140.3	110.9	78.6	64.3	51.0	37.9	30.5	22.5	17.8	15.1	10.3	8.94
1.75V/cell	213.4	171.6	149.8	118.3	83.9	66.5	52.8	39.2	31.5	23.3	18.3	15.5	10.4	8.96
1.70V/cell	224.4	180.4	157.4	124.4	88.2	68.1	53.8	40.0	32.1	23.7	18.6	15.8	10.6	9.02
1.67V/cell	228.0	183.4	160.0	126.4	89.6	69.6	55.0	40.8	32.8	24.1	18.8	15.9	10.7	9.14
1.60V/cell	231.2	185.9	162.2	128.2	90.9	70.1	55.6	41.3	33.2	24.5	19.2	16.2	10.7	9.18

LHR SERIES-HIGH RATE

LHR12160W (12V160W)



APPLICATIONS

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

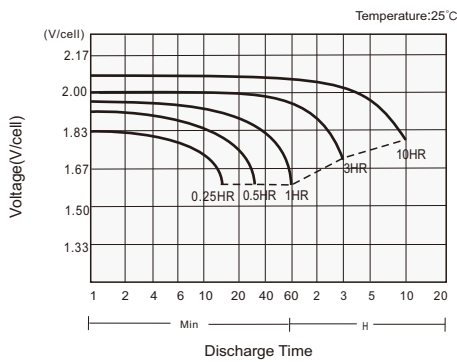
GENERAL FEATURES

- 12 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

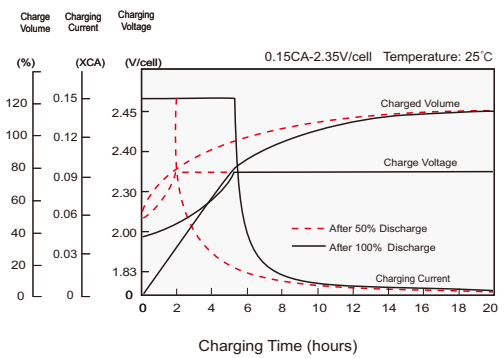
STANDARDS

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

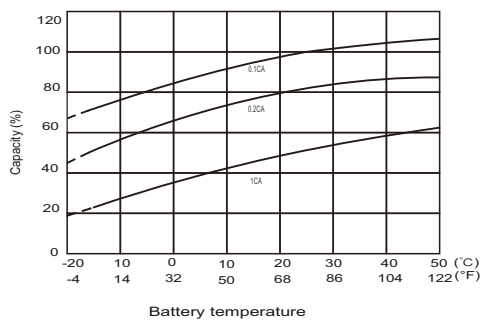
Discharge Characteristics



Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics

