



LHR Series- Battery

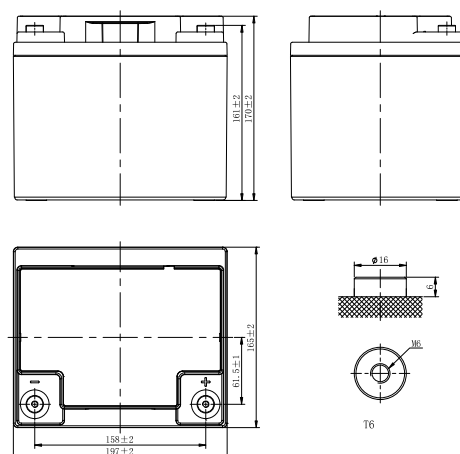
LHR12-160(12V- 160W)

Specifications of LHR12-160

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)	Standby Use	Equalization Use
	2.25-2.30V/cell	2.30-2.40V/cell
Temp. Coefficient		-3mV/cell/°C -4mV/cell/°C
Effect of temp. to Capacity	40°C (104°F)	106%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge		≤3% per month at 25°C (77°F)



Layout



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- Battery

LHR12-160(12V- 160W)

Applications

- UPS
- Hospitals and Testing Laboratories
- Emergency Power Supply
- Electric starting
- Telecommunications
- Data Centers

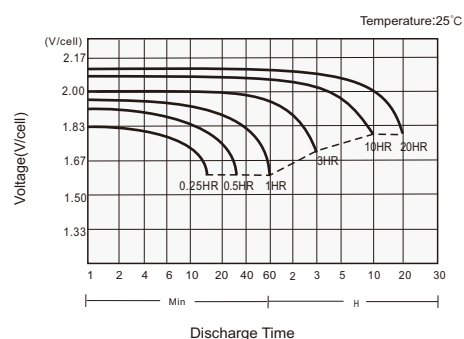
General Features

- 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

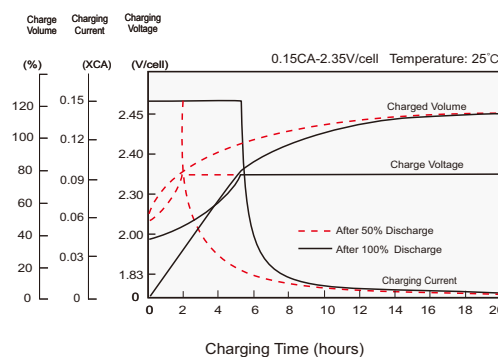
Standards

- 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

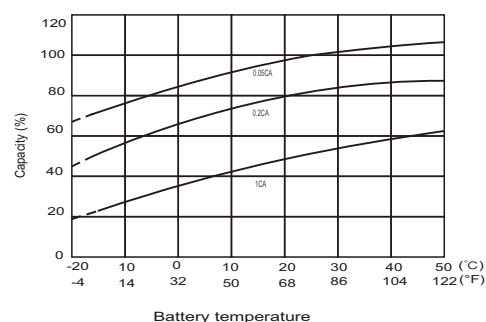
Discharge Characteristics



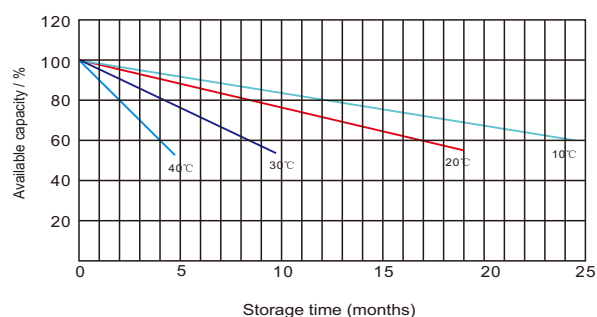
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



Sales Office

Head Office in MARSTECH SYSTEMS PTE LTD
Block 24, Sin Ming Lane #05-107 Midview City
Singapore

Manufacture in ANHUI LEOCH POWER SUPPLY CORP
No.1,Yingchun Road, Suixi Economic Development Zone,
Suixi Country, Huaibei City, Anhui Province.
P.R.China

Manufacture in LEOCH ACCUPOWER (M) SDN BHD
Lot 13338 & 2493, Jalan Sukeppi, Kawasan Perindustrian,
Jenjarom 42600 Kuala Langat, Selangor Darul Ehsan.
Malaysia