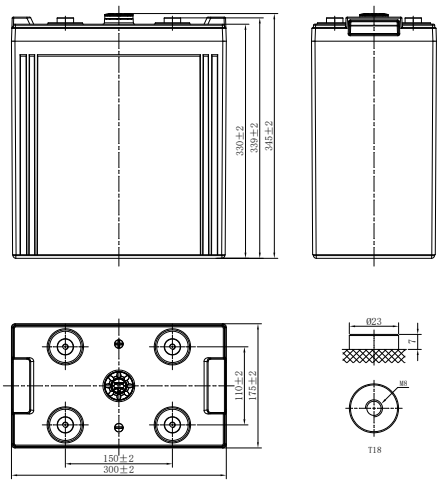
# LHR SERIES-HIGH RATE

LHR2500W (2V2500W)

LEOCH BATTERY






## CHARACTERISTICS

| Item | | Specifications |
|---|---|---|
| Rated Voltage | | 2V |
| Nominal Rate (25℃) | $W_{15}$,1.67V/cell | 2500W/cell |
| Nominal Capacity (25℃) | $C_{10}$,1.80V/cell | 720Ah |
| Dimension | Length | 300mm (11.8inches) |
| | Width | 175mm (6.89inches) |
| | Container Height | 330mm (13.0inches) |
| | Total Height | 345mm (13.6inches) |
| Approx Weight | | 45.5kg (100.3lbs) |
| Terminal | | T18(M8) |
| Container Material | | ABS (UL94 HB or V-0 optional) |
| Short-circuit current | | 8640A |
| Internal Resistance (25℃) | | Approx 0.3 mΩ (Fully charged) |
| Operating Temp. Range | Discharge | -20~55℃ (-4~131°F) |
| | Charge | -20~40℃ (-4~104°F) |
| | Storage | -15~50℃ (5~122°F) |
| Nominal Operating Temp. Range | | 25±3℃ (77±5°F) |
| Max.Charging Current (25℃) | | 0.25C |
| Charge voltage (25℃) | Float Charge | Equalization Charge |
| | 2.25-2.30V/cell | 2.30-2.40V/cell |
| Temp. Coeffcient | -3mV/cell/℃ | -4mV/cell/℃ |
| Effect of temp. to Capacity | 40℃ (104°F) | 106% |
| | 25℃ (77°F) | 100% |
| | 0℃ (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 | 1029.9 | 1024.3 | 960.8 | 767.2 | 622.5 | 440.8 | 380.2 | 284.4 | 223.9 | 174.9 | 138.8 | 121.5 | 81.9 | 70.2 |
| 1.80V/cell | 1202.2 | 1138.1 | 1042.5 | 832.7 | 648.8 | 464.4 | 396.0 | 297.0 | 234.1 | 180.4 | 141.5 | 124.2 | 84.6 | 72.0 |
| 1.75V/cell | 1332.0 | 1251.9 | 1114.0 | 888.8 | 683.9 | 480.7 | 400.0 | 306.0 | 239.1 | 184.1 | 144.2 | 127.1 | 85.7 | 72.9 |
| 1.70V/cell | 1386.6 | 1327.8 | 1154.9 | 935.6 | 719.0 | 498.2 | 415.8 | 315.0 | 246.0 | 191.4 | 147.7 | 128.7 | 86.8 | 73.8 |
| 1.67V/cell | 1497.4 | 1346.8 | 1216.3 | 973.0 | 741.8 | 510.4 | 423.7 | 324.0 | 251.0 | 195.1 | 152.2 | 131.3 | 87.8 | 74.7 |
| 1.60V/cell | 1518.4 | 1365.6 | 1233.3 | 986.6 | 752.1 | 522.6 | 431.6 | 333.0 | 257.8 | 198.7 | 154.8 | 134.0 | 88.7 | 75.6 |

**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 | 2083.8 | 2000.2 | 1895.8 | 1498.1 | 1190.0 | 865.1 | 738.0 | 560.3 | 441.0 | 344.4 | 273.4 | 239.4 | 163.8 | 140.4 |
| 1.80V/cell | 2321.5 | 2222.4 | 2078.6 | 1625.9 | 1240.3 | 911.4 | 768.8 | 585.1 | 461.1 | 355.3 | 278.7 | 244.6 | 169.2 | 144.0 |
| 1.75V/cell | 2572.1 | 2444.7 | 2244.1 | 1735.6 | 1307.4 | 943.4 | 776.4 | 602.8 | 471.2 | 362.5 | 284.0 | 250.3 | 171.4 | 145.8 |
| 1.70V/cell | 2677.5 | 2592.8 | 2350.2 | 1826.9 | 1374.4 | 977.8 | 807.2 | 620.6 | 484.5 | 377.1 | 291.0 | 253.4 | 173.5 | 147.6 |
| 1.67V/cell | 2891.6 | 2629.9 | 2500.0 | 1900.0 | 1418.1 | 1001.8 | 822.5 | 638.3 | 494.5 | 384.3 | 299.8 | 258.8 | 175.7 | 149.4 |
| 1.60V/cell | 2932.1 | 2666.7 | 2535.0 | 1926.6 | 1437.9 | 1025.8 | 837.9 | 656.0 | 507.9 | 391.6 | 305.0 | 264.1 | 177.5 | 151.2 |

# LHR SERIES-HIGH RATE

LHR2500W (2V2500W)

LEOCH BATTERY

## APPLICATIONS

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

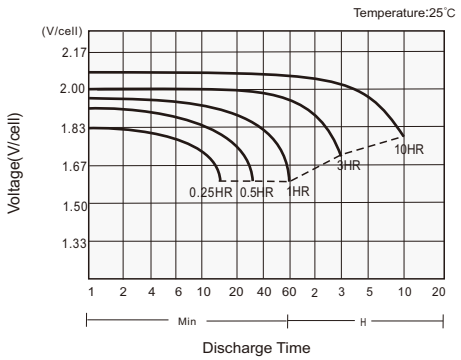
## GENERAL FEATURES

- 16 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

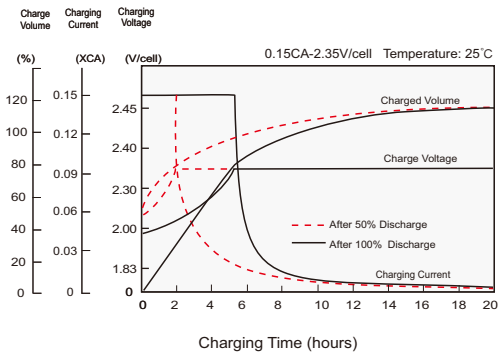
## STANDARDS

- Compliance with IEC 60896 standards
- Classified as "Very Long Life" according to Eurobat
- CE,UL Approved
- Manufactured in Leoch®IATF16949, ISO 45001,ISO 9001 and ISO 14001 certified production facilities

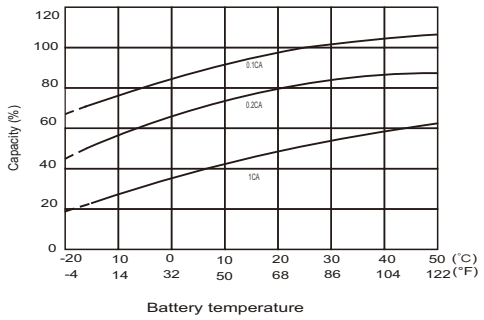
## Discharge Characteristics



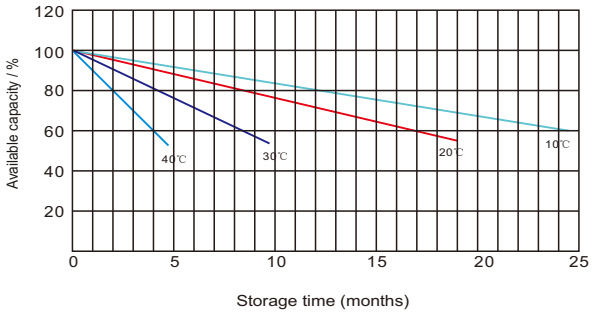

## Charging Characteristics




## Effects of Temperature on Capacity




## Self Discharge Characteristics





**Leoch International Technology Ltd.**
www.leoch.com

**Leoch Batteries Pte Ltd**
www.leoch.sg

**Leoch Battery Corporation**
www.leochamericas.com

**Leoch Europe S.A.**
www.leoch.eu



Data above is recommended and the picture is only for battery effect display, Leoch reserve the final right of explanation.
© LEOCH. All rights reserved.Trademarks and logos are the property of LEOCH and its affiliates unless otherwise noted.Subject to revisions without prior notice. E&OE.



Publication No.:LB-LHR2500W-PD-EN-V2.1-20260403