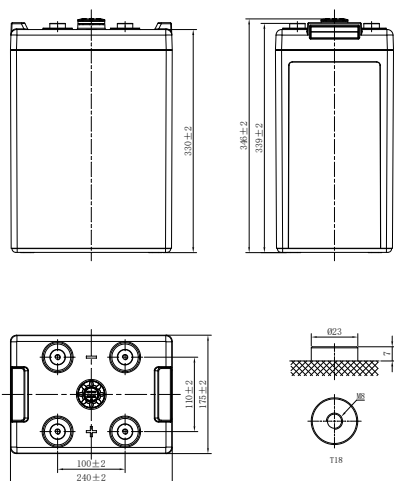


# LHR SERIES-HIGH RATE

## LHR2000W (2V2000W)



### CHARACTERISTICS

| Item                          |                      | Specifications                |
|-------------------------------|----------------------|-------------------------------|
| Rated Voltage                 |                      | 2V                            |
| Nominal Rate (25°C)           | $W_{15}, 1.67V/cell$ | 2000W/cell                    |
| Nominal Capacity (25°C)       | $C_{10}, 1.80V/cell$ | 600Ah                         |
| Dimension                     | Length               | 240mm (9.45inches)            |
|                               | Width                | 175mm (6.89inches)            |
|                               | Container Height     | 330mm (13.0inches)            |
|                               | Total Height         | 346mm (13.6inches)            |
| Approx Weight                 |                      | 36.7kg (80.9lbs)              |
| Terminal                      |                      | T18(M8)                       |
| Container Material            |                      | ABS (UL94 HB or V-0 optional) |
| Short-circuit current         |                      | 7200A                         |
| Internal Resistance (25°C)    |                      | Approx 0.4 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                                           | 941.9  | 872.3  | 819.1  | 671.0  | 526.7  | 367.3 | 316.8 | 237.0 | 186.6 | 145.7 | 115.7 | 101.3 | 68.3  | 58.5  |
| 1.80V/cell                                           | 1060.6 | 982.2  | 911.9  | 733.4  | 548.9  | 387.0 | 330.0 | 247.5 | 195.0 | 150.3 | 117.9 | 103.5 | 70.5  | 60.0  |
| 1.75V/cell                                           | 1088.4 | 1033.9 | 960.6  | 777.4  | 578.0  | 400.5 | 333.3 | 255.0 | 199.3 | 153.4 | 120.1 | 105.9 | 71.4  | 60.8  |
| 1.70V/cell                                           | 1203.1 | 1087.8 | 1010.2 | 818.3  | 606.4  | 415.1 | 346.5 | 262.5 | 204.9 | 159.5 | 123.1 | 107.2 | 72.3  | 61.5  |
| 1.67V/cell                                           | 1369.4 | 1162.2 | 1063.8 | 851.1  | 627.6  | 425.3 | 353.1 | 270.0 | 209.2 | 162.6 | 126.8 | 109.5 | 73.2  | 62.3  |
| 1.60V/cell                                           | 1388.6 | 1178.5 | 1078.7 | 863.0  | 636.3  | 435.5 | 359.7 | 277.5 | 214.8 | 165.6 | 129.0 | 111.7 | 74.0  | 63.0  |
| 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                                           | 1770.7 | 1640.0 | 1539.8 | 1261.5 | 990.1  | 705.3 | 608.3 | 466.9 | 367.5 | 287.0 | 227.9 | 199.5 | 136.5 | 117.0 |
| 1.80V/cell                                           | 1993.8 | 1846.5 | 1714.3 | 1378.8 | 1032.0 | 743.0 | 633.6 | 487.6 | 384.2 | 296.1 | 232.3 | 203.9 | 141.0 | 120.0 |
| 1.75V/cell                                           | 2046.2 | 1943.7 | 1805.9 | 1461.5 | 1086.7 | 769.0 | 639.9 | 502.4 | 392.6 | 302.1 | 236.6 | 208.6 | 142.8 | 121.5 |
| 1.70V/cell                                           | 2262.0 | 2045.0 | 1899.2 | 1538.5 | 1140.0 | 797.1 | 665.3 | 517.1 | 403.7 | 314.2 | 242.5 | 211.2 | 144.6 | 123.0 |
| 1.67V/cell                                           | 2574.5 | 2185.0 | 2000.0 | 1600.0 | 1179.8 | 816.7 | 678.0 | 531.9 | 412.1 | 320.3 | 249.8 | 215.6 | 146.4 | 124.5 |
| 1.60V/cell                                           | 2610.5 | 2215.6 | 2028.0 | 1622.4 | 1196.3 | 836.2 | 690.6 | 546.7 | 423.2 | 326.3 | 254.2 | 220.0 | 147.9 | 126.0 |

# LHR SERIES-HIGH RATE

## LHR2000W (2V2000W)



### APPLICATIONS

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

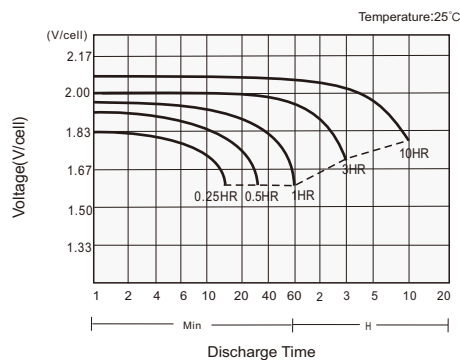
### GENERAL FEATURES

- 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

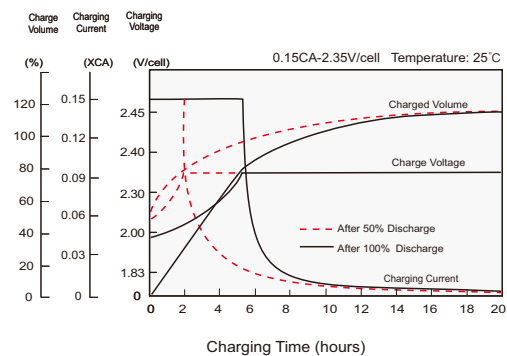
### STANDARDS

- 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

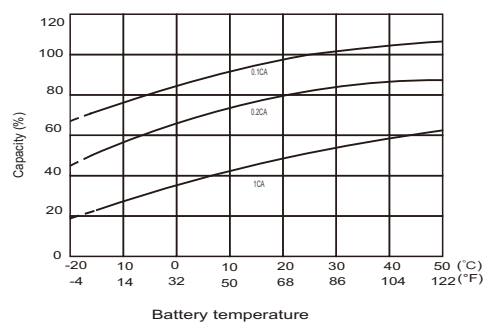
#### Discharge Characteristics



#### Charging Characteristics



#### Effects of Temperature on Capacity



#### Self Discharge Characteristics

