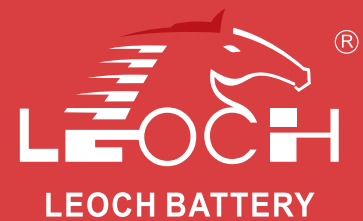




LHR Series-High Rate

LHR12450W(12V450W)

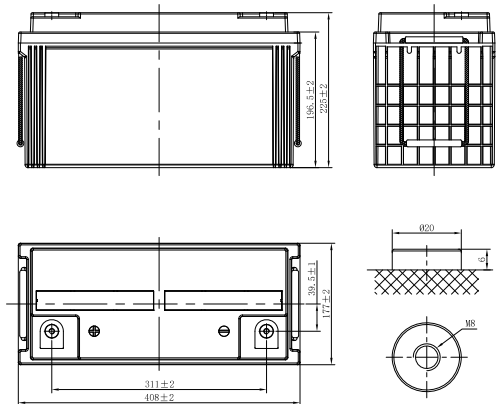


Specifications

| | | | |
|--|-------------------------------|-------------------------|--------------|
| Rated Voltage | 12V | | |
| Nominal Rate(W_{15} , 1.67V/cell) | 450W/cell | | |
| Nominal Capacity(C_{10} , 1.80V/cell) | 115Ah | | |
| Dimension | Length | 408±2mm (16.1 inches) | |
| | Width | 177±2mm (6.97 inches) | |
| | Container Height | 225±2mm (8.86 inches) | |
| | Total Height | 225±2mm (8.86 inches) | |
| Approx Weight | 37.1kg (81.8 lbs) | | |
| Terminal | M8 | | |
| Container Material | ABS: UL 94 HB or V-0 optional | | |
| Rated Capacity(25°C) | 115.0 Ah | C10(11.5A, 1.80V/cell) | |
| | 107.2 Ah | C8(13.4A, 1.80V/cell) | |
| | 101.0 Ah | C5(20.2A, 1.75V/cell) | |
| | 89.7 Ah | C3(29.9A, 1.75V/cell) | |
| | 73.2 Ah | C1(73.2A, 1.60V/cell) | |
| Max. Discharge Current | 1150A (5s) | | |
| Internal Resistance(25°C) | Approx 4.0mΩ | | |
| 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) | 28.75A | | |
| Charge voltage(25°C) | Float | 2.25 ~ 2.30V/cell | -3mV/cell/°C |
| | Equalization | 2.30~2.40V/cell | -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%/month @ 25°C | | |



Layout



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 | 269.2 | 214.9 | 186.3 | 146.5 | 101.5 | 78.1 | 63.3 | 46.5 | 38.0 | 28.3 | 22.4 | 18.9 | 13.1 | 11.2 |
| 1.80V/cell | 306.1 | 243.9 | 211.2 | 165.7 | 114.5 | 82.9 | 65.4 | 47.9 | 40.2 | 29.2 | 23.2 | 19.7 | 13.4 | 11.5 |
| 1.75V/cell | 332.9 | 264.8 | 228.8 | 179.0 | 123.3 | 87.9 | 68.1 | 49.8 | 41.8 | 29.9 | 24.0 | 20.2 | 13.5 | 11.5 |
| 1.70V/cell | 355.5 | 282.1 | 242.8 | 189.6 | 130.5 | 92.9 | 71.1 | 51.9 | 42.8 | 30.5 | 24.6 | 20.7 | 13.7 | 11.6 |
| 1.67V/cell | 367.9 | 291.0 | 249.9 | 194.8 | 133.7 | 95.0 | 71.9 | 53.3 | 43.8 | 31.2 | 24.9 | 21.0 | 13.9 | 11.8 |
| 1.60V/cell | 380.9 | 301.0 | 257.6 | 199.8 | 136.9 | 97.4 | 73.2 | 55.1 | 44.7 | 32.0 | 25.4 | 21.4 | 13.9 | 11.9 |

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 | 502.7 | 404.3 | 352.8 | 278.7 | 194.0 | 150.2 | 122.4 | 90.1 | 73.9 | 55.3 | 43.9 | 37.3 | 26.0 | 22.2 |
| 1.80V/cell | 562.4 | 452.3 | 394.7 | 311.8 | 217.1 | 158.4 | 125.8 | 92.3 | 77.9 | 56.9 | 45.4 | 38.6 | 26.4 | 22.8 |
| 1.75V/cell | 600.9 | 483.2 | 421.7 | 333.1 | 231.9 | 167.0 | 130.4 | 95.7 | 80.6 | 57.9 | 46.7 | 39.6 | 26.6 | 22.9 |
| 1.70V/cell | 631.0 | 507.4 | 442.8 | 349.8 | 243.5 | 175.2 | 135.4 | 99.2 | 82.1 | 59.0 | 47.6 | 40.4 | 27.0 | 23.0 |
| 1.67V/cell | 641.3 | 515.7 | 450.0 | 355.5 | 247.5 | 178.0 | 136.1 | 101.3 | 83.7 | 60.0 | 48.1 | 40.7 | 27.2 | 23.4 |
| 1.60V/cell | 650.2 | 522.9 | 456.3 | 360.5 | 251.0 | 181.0 | 137.7 | 104.0 | 84.9 | 61.2 | 49.0 | 41.4 | 27.3 | 23.5 |

