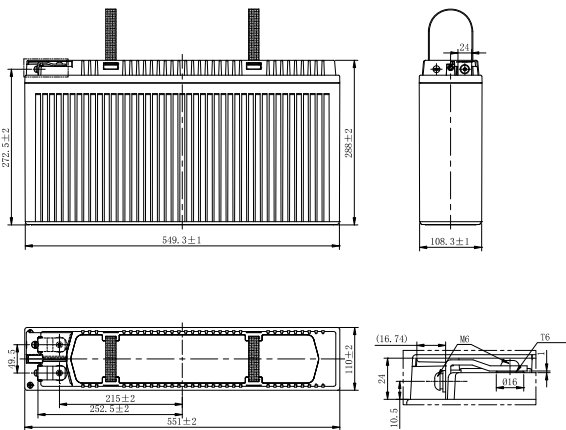
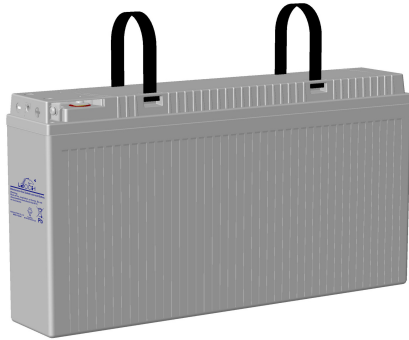


# LHT SERIES-HIGH TEMPERATURE

## LHTF12-150 (12V150Ah)



### CHARACTERISTICS

| Item                          | Specifications  |                      |
|-------------------------------|---|----------------------|
| Rated Voltage                 | 12V   |                      |
| Nominal Capacity (35°C)       | C <sub>10</sub> , 1.80V/cell  | 150Ah                |
| Dimension                     | Length  | 551mm (21.7inches)   |
|                               | Width   | 110mm (4.33inches)   |
|                               | Container Height  | 288mm (11.3inches)   |
|                               | Total Height  | 288mm (11.3inches)   |
| Approx Weight                 | 46.6kg (102.7lbs)   |                      |
| Terminal                      | T6(M6)  |                      |
| Container Material            | ABS (UL94 V-0)  |                      |
| Short-circuit current         | 2400A   |                      |
| Internal Resistance (35°C)    | Approx 4.8 mΩ (Fully charged)   |                      |
| Operating Temp. Range         | Discharge   | -40~65°C (-40~149°F) |
|                               | Charge  | -20~45°C (-4~113°F)  |
|                               | Storage   | -20~50°C (-4~122°F)  |
| Nominal Operating Temp. Range | 25±10°C (77±18°F)   |                      |
| Max.Charging Current (35°C)   | 0.25C   |                      |
| Charge voltage (35°C)         | Standby Use   | Cycle Use            |
|                               | 2.23-2.27V/cell   | 2.35-2.40V/cell      |
| Temp. Coefficient             | -3mV/cell/°C  |                      |
|                               | -5mV/cell/°C  |                      |
| Effect of temp. to Capacity   | 40°C (104°F)  | 103%                 |
|                               | 35°C (95°F)   | 100%                 |
|                               | 0°C (32°F)  | 86%                  |
| Self Discharge                | LHT series batteries may be stored for up to 6 months at 35°C (95°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter. |                      |

### DISCHARGE TABLE

| Constant Current Discharge (Amperes) at 35°C (95°F) |       |       |       |      |      |      |      |      |      |      |      |
|---|-------|-------|-------|------|------|------|------|------|------|------|------|
| F.V/Time  | 30min | 45min | 1h    | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
| 1.85V/cell  | 125.4 | 93.6  | 79.0  | 47.4 | 35.8 | 28.5 | 23.8 | 20.7 | 16.8 | 14.1 | 7.53 |
| 1.80V/cell  | 141.7 | 104.6 | 87.5  | 51.6 | 38.7 | 30.7 | 25.7 | 22.2 | 18.0 | 15.0 | 7.95 |
| 1.75V/cell  | 148.1 | 108.9 | 90.7  | 53.2 | 39.8 | 31.5 | 26.3 | 22.7 | 18.3 | 15.2 | 8.05 |
| 1.70V/cell  | 154.7 | 113.0 | 94.0  | 54.9 | 40.9 | 32.3 | 26.8 | 23.1 | 18.7 | 15.5 | 8.15 |
| 1.67V/cell  | 158.6 | 115.5 | 96.0  | 55.8 | 41.5 | 32.7 | 27.2 | 23.4 | 18.8 | 15.6 | 8.21 |
| 1.60V/cell  | 167.6 | 121.5 | 100.7 | 58.1 | 43.1 | 33.8 | 28.0 | 24.1 | 19.3 | 15.9 | 8.36 |

| Constant Power Discharge (Watts/cell) at 35°C (95°F) |       |       |       |       |      |      |      |      |      |      |      |
|--|-------|-------|-------|-------|------|------|------|------|------|------|------|
| F.V/Time   | 30min | 45min | 1h    | 2h    | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
| 1.85V/cell   | 242.3 | 181.4 | 153.6 | 92.7  | 70.2 | 56.0 | 46.9 | 40.8 | 33.2 | 27.8 | 15.0 |
| 1.80V/cell   | 271.7 | 201.4 | 168.9 | 100.4 | 75.6 | 60.2 | 50.4 | 43.6 | 35.5 | 29.6 | 15.8 |
| 1.75V/cell   | 281.5 | 207.9 | 173.9 | 102.9 | 77.3 | 61.5 | 51.4 | 44.4 | 36.1 | 30.1 | 16.0 |
| 1.70V/cell   | 291.3 | 214.1 | 179.0 | 105.6 | 79.2 | 62.8 | 52.4 | 45.3 | 36.6 | 30.5 | 16.2 |
| 1.67V/cell   | 297.0 | 217.8 | 181.9 | 107.0 | 80.1 | 63.5 | 52.9 | 45.7 | 37.0 | 30.7 | 16.3 |
| 1.60V/cell   | 309.8 | 226.7 | 188.9 | 110.7 | 82.6 | 65.3 | 54.3 | 46.8 | 37.7 | 31.3 | 16.6 |

# LHT SERIES-HIGH TEMPERATURE

## LHTF12-150 (12V150Ah)



### APPLICATIONS

- Tele-communication base station
- High temperature station without air-condition
- Station in the open air
- Electric power system, UPS
- Solar energy, wind saving energy power supply

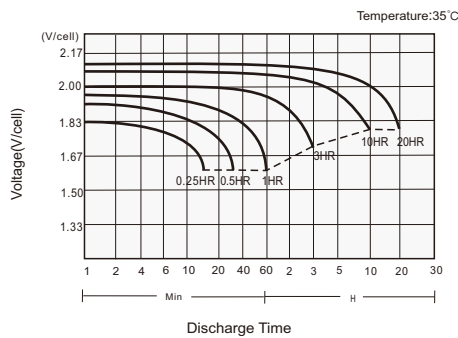
### GENERAL FEATURES

- Design life up to 10 years at 35°C
- Specifically formulated heat resistant plastic case and cover optimizes compression, resists bulging and meets safety requirements (UL 94 V-0)
- Unique alloy inhibits corrosion under the highest temperature extremes
- Puncture resistant micro-porous glass mat separators extend life
- Front access design for easy installation and maintenance

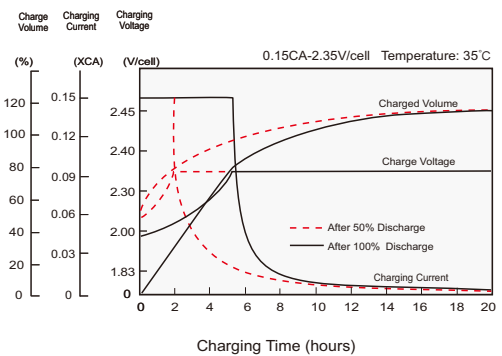
### STANDARDS

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

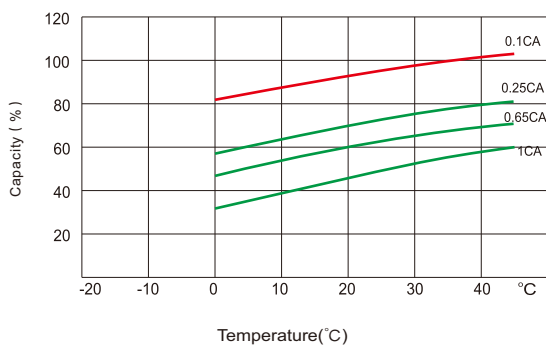
#### Discharge Characteristics



#### Charging Characteristics



#### Temperature Effects in Relation to Battery Capacity



#### Self Discharge Characteristics

