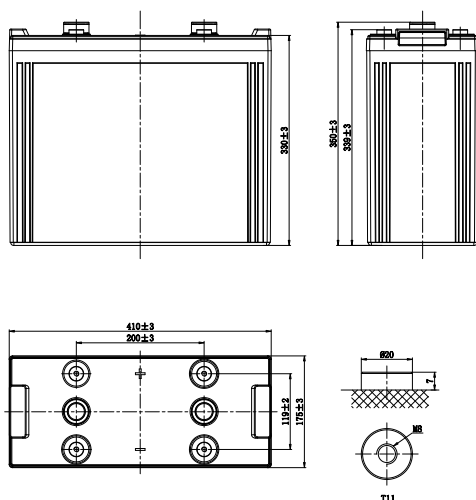


# LP SERIES-GENERAL PURPOSE

LP2-800 (2V800Ah)



## CHARACTERISTICS

| Item                          | Specifications                                                                                                                                                                                           |                     |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Rated Voltage                 | 2V                                                                                                                                                                                                       |                     |
| Nominal Capacity (25°C)       | C <sub>10</sub> , 1.80V/cell                                                                                                                                                                             | 800Ah               |
| Dimension                     | Length                                                                                                                                                                                                   | 410mm (16.1inches)  |
|                               | Width                                                                                                                                                                                                    | 175mm (6.89inches)  |
|                               | Container Height                                                                                                                                                                                         | 330mm (13.0inches)  |
|                               | Total Height                                                                                                                                                                                             | 350mm (13.8inches)  |
| Approx Weight                 | 47.4kg (104.5lbs)                                                                                                                                                                                        |                     |
| Terminal                      | T11(M8)                                                                                                                                                                                                  |                     |
| Container Material            | ABS (UL94 HB or V-0 optional)                                                                                                                                                                            |                     |
| Short-circuit current         | 8800A                                                                                                                                                                                                    |                     |
| Internal Resistance (25°C)    | Approx 0.4 mΩ (Fully charged)                                                                                                                                                                            |                     |
| Operating Temp. Range         | Discharge                                                                                                                                                                                                | -15~50°C (5~122°F)  |
|                               | Charge                                                                                                                                                                                                   | -20~40°C (-4~104°F) |
|                               | Storage                                                                                                                                                                                                  | -15~40°C (5~104°F)  |
| Nominal Operating Temp. Range | 25±3°C (77±5°F)                                                                                                                                                                                          |                     |
| Max.Charging Current (25°C)   | 0.3C                                                                                                                                                                                                     |                     |
| Charge voltage (25°C)         | Standby Use                                                                                                                                                                                              | Cycle Use           |
|                               | 2.25-2.30V/cell                                                                                                                                                                                          | 2.35-2.40V/cell     |
| Temp. Coefficient             | -3mV/cell/°C                                                                                                                                                                                             | -5mV/cell/°C        |
|                               | 40°C (104°F)                                                                                                                                                                                             | 103%                |
| Effect of temp. to Capacity   | 25°C (77°F)                                                                                                                                                                                              | 100%                |
|                               | 0°C (32°F)                                                                                                                                                                                               | 86%                 |
|                               | ≤3% per month at 25°C (77°F).<br>LP series batteries may be stored up to 6 months at 25°C (77°F) and then a freshening charge is required.<br>For higher temperatures the time interval will be shorter. |                     |

## DISCHARGE TABLE

| Constant Current Discharge (Amperes) at 25°C (77°F)  |        |        |        |        |       |       |       |       |       |       |       |       |       |      |
|------------------------------------------------------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| F.V/Time                                             | 15min  | 20min  | 30min  | 45min  | 1h    | 1.5h  | 2h    | 3h    | 4h    | 5h    | 6h    | 8h    | 10h   | 20h  |
| 1.85V/cell                                           | 594.6  | 533.4  | 493.9  | 431.4  | 377.6 | 297.7 | 244.3 | 187.2 | 150.6 | 127.1 | 110.3 | 89.7  | 75.0  | 40.2 |
| 1.80V/cell                                           | 712.1  | 629.1  | 567.2  | 482.5  | 417.9 | 325.8 | 259.1 | 202.6 | 162.3 | 136.9 | 118.3 | 96.0  | 80.0  | 42.4 |
| 1.75V/cell                                           | 818.2  | 686.4  | 593.5  | 502.1  | 440.2 | 336.7 | 271.0 | 208.0 | 166.4 | 140.0 | 120.8 | 97.7  | 81.2  | 42.9 |
| 1.70V/cell                                           | 911.9  | 769.4  | 641.6  | 521.1  | 449.2 | 348.1 | 278.0 | 214.1 | 170.6 | 143.2 | 123.4 | 99.5  | 82.5  | 43.5 |
| 1.67V/cell                                           | 944.3  | 796.3  | 649.3  | 532.8  | 458.6 | 354.4 | 279.0 | 217.3 | 173.0 | 145.0 | 124.9 | 100.5 | 83.2  | 43.8 |
| 1.60V/cell                                           | 992.4  | 830.2  | 661.4  | 560.3  | 481.0 | 370.2 | 292.6 | 225.3 | 178.7 | 149.4 | 128.4 | 102.9 | 85.0  | 44.6 |
| Constant Power Discharge (Watts/cell) at 25°C (77°F) |        |        |        |        |       |       |       |       |       |       |       |       |       |      |
| F.V/Time                                             | 15min  | 20min  | 30min  | 45min  | 1h    | 1.5h  | 2h    | 3h    | 4h    | 5h    | 6h    | 8h    | 10h   | 20h  |
| 1.85V/cell                                           | 1068.0 | 979.7  | 907.0  | 836.5  | 734.0 | 580.6 | 476.1 | 367.1 | 296.0 | 250.2 | 217.5 | 177.2 | 148.4 | 79.9 |
| 1.80V/cell                                           | 1264.7 | 1143.8 | 1032.7 | 928.6  | 806.8 | 631.6 | 500.5 | 395.6 | 317.9 | 268.7 | 232.7 | 189.3 | 158.1 | 84.2 |
| 1.75V/cell                                           | 1437.0 | 1235.4 | 1071.2 | 958.9  | 830.7 | 648.9 | 520.0 | 404.4 | 324.6 | 273.9 | 236.9 | 192.4 | 160.3 | 85.2 |
| 1.70V/cell                                           | 1582.3 | 1370.2 | 1129.8 | 987.4  | 855.3 | 666.8 | 528.8 | 414.3 | 331.6 | 279.9 | 241.4 | 195.4 | 162.5 | 86.2 |
| 1.67V/cell                                           | 1604.3 | 1400.8 | 1149.7 | 1004.6 | 869.0 | 676.2 | 538.8 | 419.4 | 335.4 | 282.2 | 243.9 | 197.1 | 163.8 | 86.8 |
| 1.60V/cell                                           | 1677.6 | 1444.5 | 1160.9 | 1045.3 | 902.7 | 700.6 | 557.8 | 432.3 | 344.8 | 289.6 | 249.7 | 201.2 | 166.8 | 88.3 |

# LP SERIES-GENERAL PURPOSE

LP2-800 (2V800Ah)



## APPLICATIONS

- Tele-communication central station (wired or cellular)
- Power system communication, military communication, etc.
- Network communication including: data transmission, television signal transmission, etc.
- Uninterruptable Power System (UPS - for Telecom)

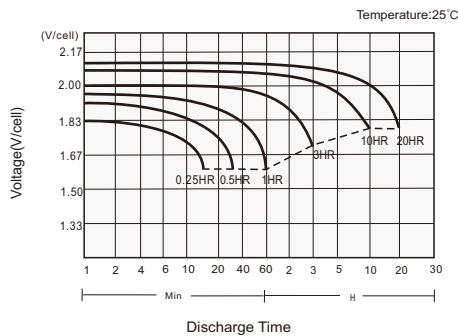
## GENERAL FEATURES

- 15 years design life (25°C)
- Lead calcium alloy, sealed design, no watering required
- Puncture resistant micro-porous glass mat separators extend life
- Unique technology optimizes power capacity, cell consistency, and long-term reliability
- Designed for a wide range of applications

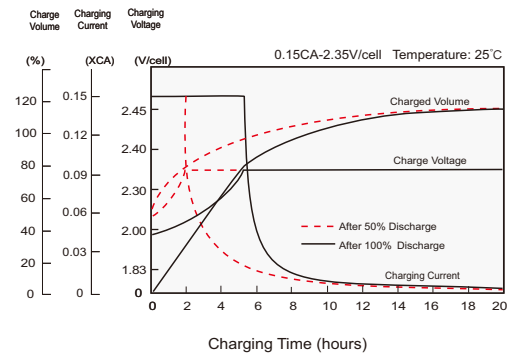
## STANDARDS

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Approved
- Manufactured in Leoch® IATF 16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

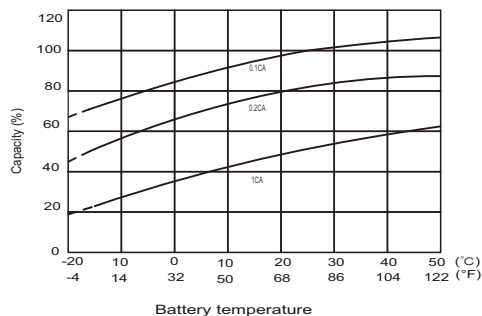
### Discharge Characteristics



### Charging Characteristics



### Effects of Temperature on Capacity



### Self Discharge Characteristics

