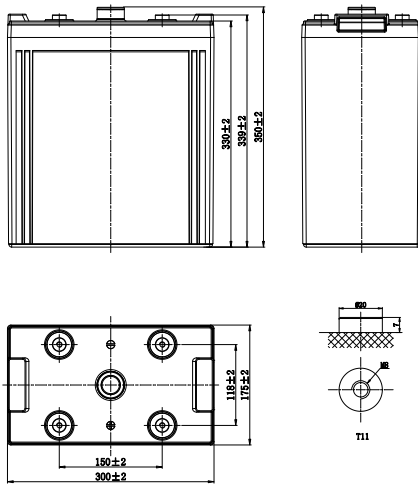


# LP SERIES-GENERAL PURPOSE

## LP2-600 (2V600Ah)



### CHARACTERISTICS

| Item                          | Specifications   |                     |
|-------------------------------|--|---------------------|
| Rated Voltage                 | 2V   |                     |
| Nominal Capacity (25°C)       | C <sub>10</sub> , 1.80V/cell   | 600Ah               |
| Dimension                     | Length   | 300mm (11.8inches)  |
|                               | Width  | 175mm (6.89inches)  |
|                               | Container Height   | 330mm (13.0inches)  |
|                               | Total Height   | 350mm (13.8inches)  |
| Approx Weight                 | 35.0kg (77.2lbs)   |                     |
| Terminal                      | T11(M8)  |                     |
| Container Material            | ABS (UL94 HB or V-0 optional)  |                     |
| Short-circuit current         | 6600A  |                     |
| 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   |                     |
| Effect of temp. to Capacity   | 40°C (104°F)   | 103%                |
|                               | 25°C (77°F)  | 100%                |
|                               | 0°C (32°F)   | 86%                 |
| Self Discharge                | ≤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   | 445.9  | 400.1  | 370.4 | 323.6 | 283.2 | 223.3 | 183.0 | 140.4 | 113.0 | 95.3  | 82.7  | 67.2  | 56.2  | 30.1 |
| 1.80V/cell   | 534.1  | 471.8  | 425.4 | 361.8 | 313.4 | 244.3 | 193.9 | 151.9 | 121.8 | 102.7 | 88.8  | 72.0  | 60.0  | 31.8 |
| 1.75V/cell   | 613.6  | 514.8  | 445.1 | 376.5 | 330.6 | 252.5 | 202.8 | 156.0 | 124.8 | 105.0 | 90.6  | 73.3  | 60.9  | 32.2 |
| 1.70V/cell   | 683.9  | 577.0  | 481.2 | 390.8 | 336.9 | 261.1 | 209.7 | 160.6 | 127.9 | 107.4 | 92.6  | 74.6  | 61.9  | 32.6 |
| 1.67V/cell   | 708.2  | 597.2  | 487.0 | 399.6 | 344.0 | 265.8 | 210.0 | 163.0 | 129.7 | 108.7 | 93.7  | 75.4  | 62.4  | 32.9 |
| 1.60V/cell   | 744.3  | 622.6  | 496.1 | 420.2 | 360.7 | 277.6 | 219.4 | 169.0 | 134.0 | 112.1 | 96.3  | 77.2  | 63.8  | 33.4 |
| 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   | 801.0  | 734.8  | 680.2 | 627.4 | 550.5 | 435.4 | 356.6 | 275.3 | 222.0 | 187.6 | 163.1 | 132.9 | 111.3 | 59.9 |
| 1.80V/cell   | 948.6  | 857.9  | 774.6 | 696.4 | 605.2 | 473.6 | 374.2 | 296.7 | 238.4 | 201.5 | 174.5 | 142.0 | 118.6 | 63.2 |
| 1.75V/cell   | 1077.8 | 926.5  | 803.4 | 719.1 | 623.1 | 486.6 | 389.8 | 303.3 | 243.5 | 205.4 | 177.7 | 144.3 | 120.2 | 63.9 |
| 1.70V/cell   | 1186.7 | 1027.6 | 847.4 | 740.6 | 641.5 | 500.1 | 396.5 | 310.7 | 248.7 | 209.5 | 181.1 | 146.5 | 121.9 | 64.7 |
| 1.67V/cell   | 1203.2 | 1050.6 | 862.2 | 753.4 | 651.7 | 507.2 | 399.6 | 314.5 | 251.6 | 211.7 | 182.9 | 147.9 | 122.8 | 65.1 |
| 1.60V/cell   | 1258.2 | 1083.4 | 870.6 | 784.0 | 677.0 | 525.4 | 417.6 | 324.2 | 258.6 | 217.2 | 187.3 | 150.9 | 125.1 | 66.2 |

# LP SERIES-GENERAL PURPOSE

## LP2-600 (2V600Ah)

### 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)

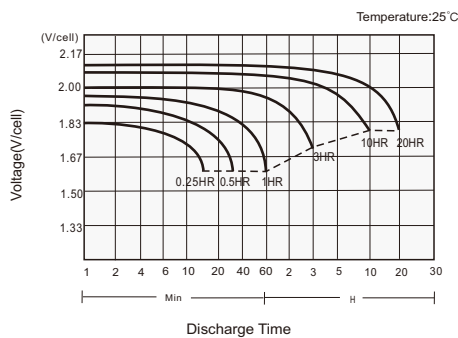
### GENERAL FEATURES

- 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

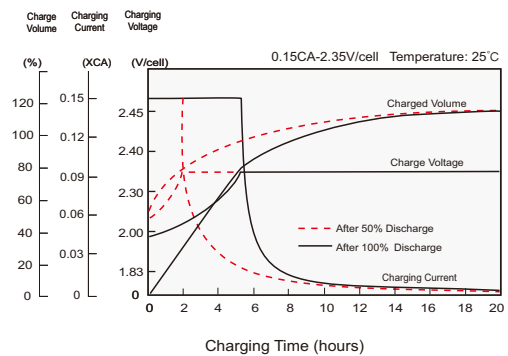
### STANDARDS

- 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

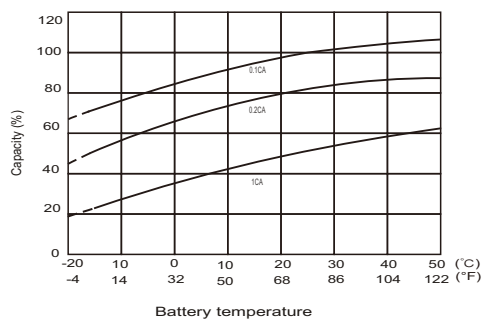
#### Discharge Characteristics



#### Charging Characteristics



#### Effects of Temperature on Capacity



#### Self Discharge Characteristics

