



## LP Series- Battery

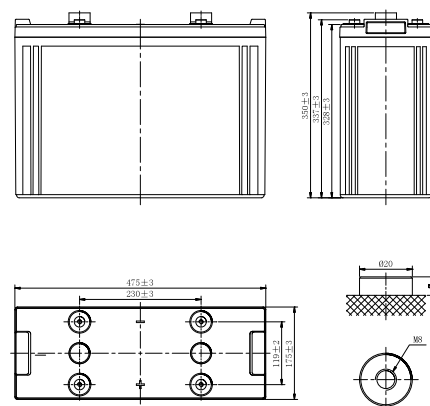
### LP2-1000(2V1000Ah)

#### Specifications of LP2-1000

|                               |                                                                                                                                                                                  |                         |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Rated Voltage                 | 2V                                                                                                                                                                               |                         |
| Nominal Capacity              | C <sub>10</sub> , 1.80V/cell                                                                                                                                                     | 1000Ah                  |
| Dimension                     | Length                                                                                                                                                                           | 475±3mm(18.7 inches)    |
|                               | Width                                                                                                                                                                            | 175±3mm(6.89 inches)    |
|                               | Container Height                                                                                                                                                                 | 328±3mm(12.9 inches)    |
|                               | Total Height                                                                                                                                                                     | 350±3mm(13.8 inches)    |
| Approx Weight                 | 60.0kg (132.3 lbs)                                                                                                                                                               |                         |
| Terminal                      | M8                                                                                                                                                                               |                         |
| Container Material            | ABS                                                                                                                                                                              |                         |
| Rated Capacity(25°C)          | 1060.0 Ah                                                                                                                                                                        | C20(53.0A, 1.80V/cell)  |
|                               | 1000.0 Ah                                                                                                                                                                        | C10(100.0A, 1.80V/cell) |
|                               | 875.0 Ah                                                                                                                                                                         | C5(175.0A, 1.75V/cell)  |
|                               | 780.0 Ah                                                                                                                                                                         | C3(260.0A, 1.75V/cell)  |
|                               | 613.5 Ah                                                                                                                                                                         | C1(613.5A, 1.60V/cell)  |
| Max. Discharge Current        | 8000A (5s)                                                                                                                                                                       |                         |
| Internal Resistance(25°C)     | Approx 0.30mΩ                                                                                                                                                                    |                         |
| Operating Temp. Range         | Discharge                                                                                                                                                                        | -15 ~ 50°C(5 ~ 122°F)   |
|                               | Charge                                                                                                                                                                           | 0 ~ 40°C(32 ~ 104°F)    |
|                               | Storage                                                                                                                                                                          | -15 ~ 40°C(5 ~ 104°F)   |
| Nominal Operating Temp. Range | 25±3°C (77±5°F)                                                                                                                                                                  |                         |
| Standby Use                   | Initial Charging Current less than 300.0A Voltage                                                                                                                                |                         |
|                               | 2.25V~2.3 V at 25°C(77°F)Temp. Coefficient -3mV/°C                                                                                                                               |                         |
|                               |                                                                                                                                                                                  |                         |
| Cycle Use                     | Initial Charging Current less than 300.0AVoltage                                                                                                                                 |                         |
|                               | 2.4V~2.5V at 25°C(77°F)Temp. Coefficient -5mV/°C                                                                                                                                 |                         |
| Effect of temp. to Capacity   | 40°C (104°F)                                                                                                                                                                     | 103%                    |
|                               | 25°C ( 77°F)                                                                                                                                                                     | 100%                    |
|                               | 0°C ( 32°F)                                                                                                                                                                      | 86%                     |
| Self Discharge                | Marstech LP series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter. |                         |



#### Layout



#### Constant Current Discharge (Amperes) at 25°C (77°F )

| F.V/Time   | 30min | 45min | 1h    | 1.5h  | 2h    | 3h    | 4h    | 5h    | 6h    | 8h    | 10h   | 20h  |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 1.85V/cell | 696.0 | 550.3 | 481.6 | 379.8 | 307.7 | 234.1 | 188.3 | 158.9 | 137.9 | 112.1 | 93.7  | 50.2 |
| 1.80V/cell | 786.9 | 615.3 | 533.0 | 415.5 | 334.7 | 253.2 | 202.9 | 171.1 | 147.9 | 120.0 | 100.0 | 53.0 |
| 1.75V/cell | 822.4 | 640.3 | 552.7 | 429.5 | 345.0 | 260.0 | 208.0 | 175.0 | 151.0 | 122.2 | 101.6 | 53.7 |
| 1.70V/cell | 878.2 | 664.6 | 573.0 | 444.0 | 356.0 | 267.6 | 213.2 | 179.0 | 154.3 | 124.4 | 103.1 | 54.4 |
| 1.65V/cell | 938.9 | 679.6 | 585.0 | 452.0 | 362.0 | 271.6 | 216.2 | 181.2 | 156.1 | 125.6 | 104.0 | 54.8 |
| 1.60V/cell | 949.7 | 714.7 | 613.5 | 472.2 | 377.0 | 281.6 | 223.4 | 186.8 | 160.5 | 128.6 | 106.3 | 55.7 |

#### Constant Power Discharge (Watts/cell) at 25°C (77°F )

| F.V/Time   | 30min  | 45min  | 1h     | 1.5h  | 2h    | 3h    | 4h    | 5h    | 6h    | 8h    | 10h   | 20h   |
|------------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.85V/cell | 1345.2 | 1067.0 | 936.2  | 740.5 | 601.3 | 458.9 | 370.0 | 312.7 | 271.9 | 221.5 | 185.4 | 99.9  |
| 1.80V/cell | 1508.1 | 1184.4 | 1029.1 | 805.6 | 650.9 | 494.5 | 397.4 | 335.8 | 290.9 | 236.6 | 197.6 | 105.3 |
| 1.75V/cell | 1562.9 | 1223.1 | 1059.6 | 827.6 | 667.2 | 505.5 | 405.8 | 342.4 | 296.2 | 240.5 | 200.3 | 106.6 |
| 1.70V/cell | 1653.7 | 1259.5 | 1090.9 | 850.4 | 684.9 | 517.9 | 414.6 | 349.2 | 301.8 | 244.2 | 203.1 | 107.8 |
| 1.65V/cell | 1751.0 | 1281.4 | 1108.4 | 862.5 | 693.9 | 524.2 | 419.3 | 352.8 | 304.8 | 246.4 | 204.7 | 108.6 |
| 1.60V/cell | 1755.9 | 1333.3 | 1151.4 | 893.6 | 717.5 | 540.4 | 431.1 | 362.0 | 312.1 | 251.5 | 208.5 | 110.4 |



## LP Series-Battery

### LP2-1000(2V1000Ah)

#### Applications

- Telecommunications
- UPS system
- Wind power system
- Engine starting
- Wheelchair, Floor cleaning machines, Golf trolley, Boats

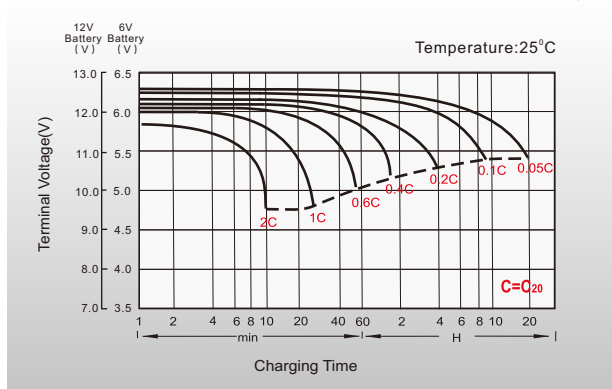
#### General Features

- Battery design life up to 15 years
- Special plate design guarantees battery floating life more than 1800 times
- High thermal capacity reduce the risk of thermal out of control and drying hard, and the battery can be used in bad environment
- Little water losing, and no electrolyte stratification phenomenon

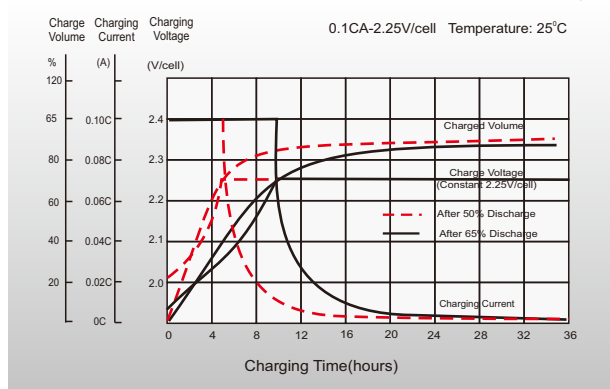
#### Standards

- IEC 60896 Certified
- Classified as "Long Life"
- ISO 9001 Certified
- Manufactured in standard IATF16949,

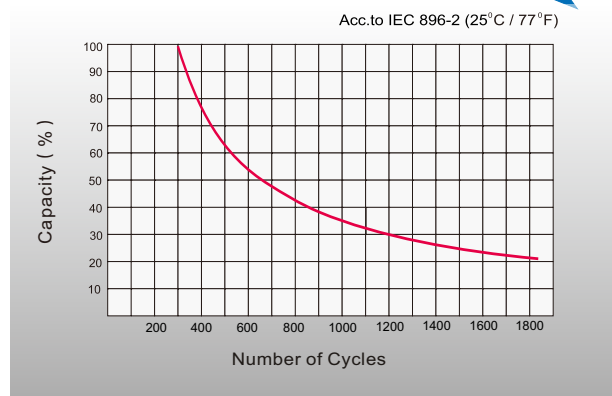
#### Discharge Characteristics



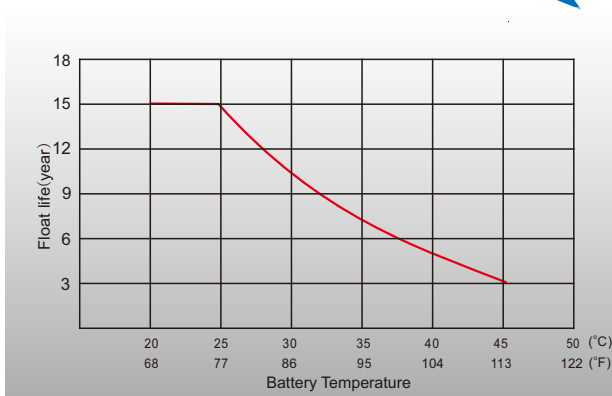
#### Float Charging Characteristics



#### Cycle Life in Relation to Depth of Discharge



#### Effect of Temperature on Long Term Float Life



#### Sales Office

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