



# Grid Power 1000-2HT M8V0 (2V1000Ah)

## Applications

- Uninterruptible power supply (UPS)
- Telecommunication base station
- High temperature station without air-condition
- Station in the open air

## Certificates



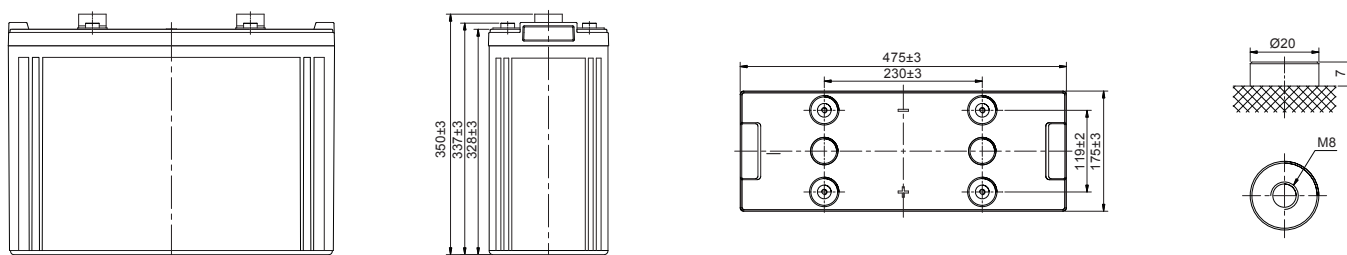
## Specifications

|                                               |                                       |                                   |                                                                                                                                                                                         |          |
|-----------------------------------------------|---------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>Nominal Voltage</b>                        | 2V                                    | <b>Operating Temp. Range</b>      | Discharge:                                                                                                                                                                              | -40~65°C |
| <b>Nominal Capacity</b>                       | 1000Ah (C <sub>10</sub> , 1.80V/cell) |                                   | Charge:                                                                                                                                                                                 | -20~45°C |
| <b>Approx. Weight</b>                         | 60.0kg                                |                                   | Storage:                                                                                                                                                                                | -20~50°C |
| <b>Terminal</b>                               | M8                                    | <b>Standby Use</b>                | Initial Charging Current less than 250A.                                                                                                                                                |          |
| <b>Container Material</b>                     | ABS UL94 V0                           |                                   | Voltage 2.25V at 35°C.                                                                                                                                                                  |          |
| <b>Rated Capacity (35°C)</b>                  | 1060.0Ah/53.0A, 20hr, 1.80V/cell      |                                   | Temperature Coefficient -3mV/°C.                                                                                                                                                        |          |
|                                               | 1000.0Ah/100.0A, 10hr, 1.80V/cell     | <b>Capacity affected by Temp.</b> | 40°C                                                                                                                                                                                    | 103%     |
|                                               | 888.0Ah/177.6A, 5hr, 1.75V/cell       |                                   | 35°C                                                                                                                                                                                    | 100%     |
|                                               | 795.0Ah/265.0A, 3hr, 1.75V/cell       |                                   | 0°C                                                                                                                                                                                     | 86%      |
|                                               | 641.1Ah/641.1A, 1hr, 1.60V/cell       | <b>Self Discharge</b>             | SSB Grid Power batteries may be stored for up to 6 months at 25°C/3 months at 35°C and then a freshening charge is required. For higher temperatures the time interval will be shorter. |          |
| <b>Max. Discharge Current</b>                 | 8000A (5s)                            | <b>Life Expectancy</b>            | Classified as „Very Long Life“ according EUROBAT.                                                                                                                                       |          |
| <b>Internal Resistance / Impedance (1kHz)</b> | Approx. 0.3mΩ                         |                                   |                                                                                                                                                                                         |          |
| <b>Nominal Oper. Temp. R.</b>                 | 35 (+5/-15)°C                         |                                   |                                                                                                                                                                                         |          |

## Dimensions

### ■ M8 Terminal

Unit: mm | Dimensions: 475 Length X 175 Width X 328 Height (350 Height incl. Terminal)



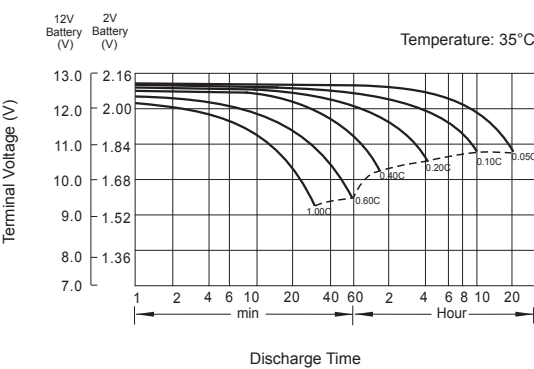
Constant Current Discharge (Amperes) at 35°C

| F.V/Time   | 5min   | 10min  | 15min  | 20min  | 30min | 45min | 1h    | 2h    | 3h    | 4h    | 5h    | 6h    | 8h    | 10h   | 20h  |
|------------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 1.85V/cell | 1166.7 | 990.0  | 903.6  | 813.0  | 684.0 | 560.0 | 471.0 | 312.0 | 240.6 | 194.3 | 163.8 | 142.8 | 114.0 | 95.6  | 50.6 |
| 1.80V/cell | 1420.0 | 1158.0 | 1029.7 | 915.0  | 754.0 | 608.0 | 510.6 | 333.0 | 252.6 | 202.5 | 170.6 | 148.0 | 118.8 | 100.0 | 53.0 |
| 1.75V/cell | 1659.7 | 1332.0 | 1165.0 | 1026.0 | 826.0 | 662.7 | 557.6 | 352.0 | 265.0 | 212.5 | 177.6 | 153.5 | 122.0 | 102.0 | 54.1 |
| 1.70V/cell | 1899.3 | 1494.0 | 1287.6 | 1116.0 | 888.0 | 702.7 | 589.9 | 369.5 | 276.7 | 220.0 | 182.9 | 158.3 | 125.6 | 104.5 | 55.4 |
| 1.67V/cell | 2039.1 | 1608.0 | 1388.0 | 1200.0 | 940.0 | 733.3 | 615.0 | 384.0 | 285.5 | 226.3 | 187.9 | 162.0 | 127.3 | 106.2 | 56.3 |
| 1.60V/cell | 2220.0 | 1722.0 | 1472.0 | 1260.0 | 982.0 | 765.3 | 641.1 | 398.5 | 292.2 | 231.3 | 191.8 | 165.0 | 129.5 | 107.2 | 56.7 |

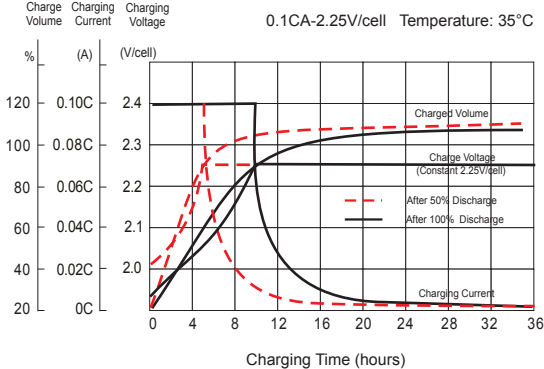
Constant Power Discharge (Watts/cell) at 35°C

| F.V/Time   | 5min   | 10min  | 15min  | 20min  | 30min  | 45min  | 1h     | 2h    | 3h    | 4h    | 5h    | 6h    | 8h    | 10h   | 20h   |
|------------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.85V/cell | 2179.0 | 1862.5 | 1710.9 | 1546.3 | 1307.2 | 1076.7 | 911.1  | 606.9 | 470.2 | 381.0 | 322.7 | 282.2 | 226.2 | 190.1 | 100.8 |
| 1.80V/cell | 2608.6 | 2146.9 | 1924.5 | 1722.0 | 1429.4 | 1161.3 | 982.1  | 644.6 | 491.4 | 395.8 | 334.6 | 291.3 | 234.9 | 198.6 | 105.4 |
| 1.75V/cell | 2995.7 | 2430.2 | 2146.6 | 1908.9 | 1554.0 | 1258.3 | 1067.8 | 678.7 | 514.1 | 414.0 | 347.1 | 301.2 | 240.8 | 202.3 | 107.3 |
| 1.70V/cell | 3371.3 | 2687.7 | 2348.3 | 2058.6 | 1656.6 | 1324.9 | 1123.8 | 709.4 | 534.7 | 426.8 | 356.4 | 310.2 | 247.7 | 207.1 | 109.9 |
| 1.67V/cell | 3554.2 | 2849.7 | 2499.8 | 2189.8 | 1740.5 | 1375.0 | 1164.9 | 734.2 | 549.3 | 437.5 | 364.9 | 316.4 | 250.3 | 210.2 | 111.6 |
| 1.60V/cell | 3789.5 | 2992.0 | 2607.2 | 2273.0 | 1800.0 | 1421.6 | 1205.9 | 757.2 | 559.3 | 445.2 | 371.1 | 321.3 | 254.2 | 211.8 | 112.2 |

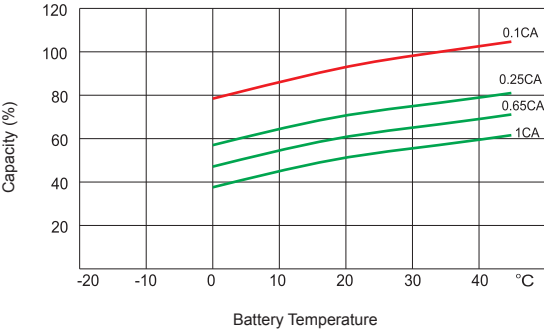
Discharge Characteristics



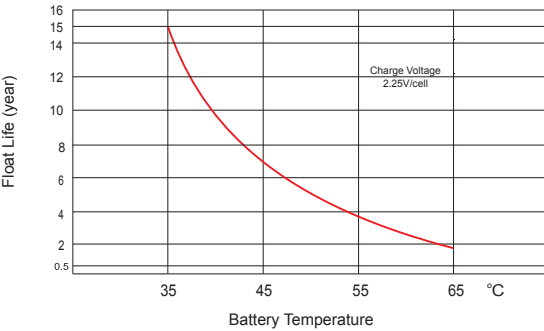
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Cycle Service Life in Relation to Depth of Discharge

