

RT 1272 is a general purpose battery with 5 years floating design life, meet with IEC, JIS standard. With heavy duty grid, thickness plates, special additives, RT series battery have long and reliable standby service life.



Specification

| | |
|--|---|
| Cells Per Unit | 6 |
| Voltage Per Unit | 12 |
| Capacity | 7.2Ah@20hr-rate to 1.75V per cell @25°C |
| Weight | Approx. 2.15 Kg |
| Max. Discharge Current | 72 A (5 sec) |
| Internal Resistance | Approx. 25 mΩ |
| Operating Temperature Range | Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C |
| Normal Operating Temperature Range | 25°C± 5°C |
| Float charging Voltage | 13.7 to 13.9 VDC/unit Average at 25°C |
| Recommended Maximum Charging Current Limit | 2.16 A |
| Equalization and Cycle Service | 14.6 to 14.8 VDC/unit Average at 25°C |
| Self Discharge | RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using. |
| Terminal | Faston Tab 187(F1)/Faston tab 250(F2) |
| Constainer Material | A.B.S. (UL94-HB), Flammability resistance of UL94-V2 can be available upon request. |



MH28539

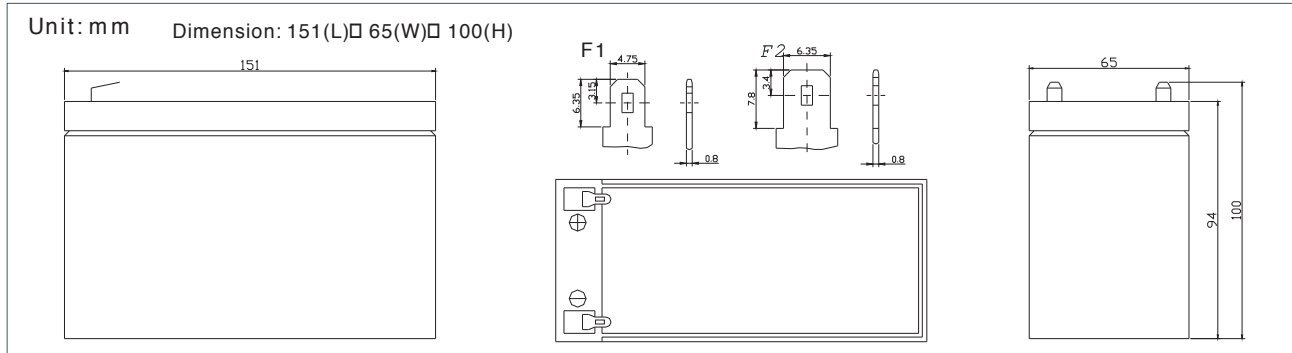


G4M20206-0910-E-16



ISO9001:2000 Certificate

Dimensions



Constant Current Discharge Characteristics : A(25°C)

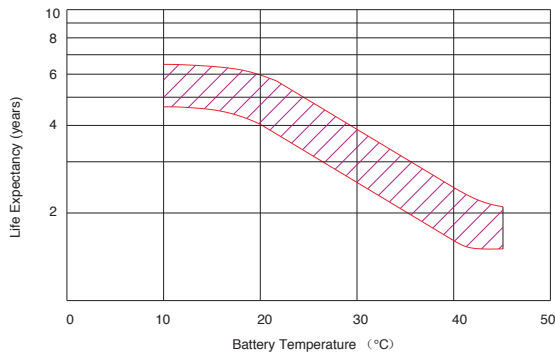
| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 2HR | 3HR | 4HR | 5HR | 8HR | 10HR | 20HR |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 9.60V | 29.28 | 19.19 | 15.05 | 8.446 | 5.018 | 2.890 | 1.964 | 1.572 | 1.305 | 0.831 | 0.720 | 0.404 |
| 10.0V | 28.22 | 18.72 | 14.56 | 8.338 | 4.882 | 2.832 | 1.928 | 1.550 | 1.283 | 0.828 | 0.712 | 0.389 |
| 10.2V | 26.56 | 17.79 | 14.16 | 8.210 | 4.836 | 2.802 | 1.911 | 1.535 | 1.269 | 0.821 | 0.702 | 0.382 |
| 10.5V | 23.88 | 16.63 | 13.35 | 7.984 | 4.740 | 2.765 | 1.894 | 1.520 | 1.254 | 0.813 | 0.698 | 0.371 |
| 10.8V | 21.39 | 15.51 | 12.60 | 7.720 | 4.655 | 2.743 | 1.872 | 1.513 | 1.241 | 0.810 | 0.686 | 0.349 |
| 11.1V | 18.72 | 14.22 | 11.62 | 7.427 | 4.530 | 2.632 | 1.835 | 1.499 | 1.228 | 0.803 | 0.676 | 0.343 |

Constant Power Discharge Characteristics : W(25°C)

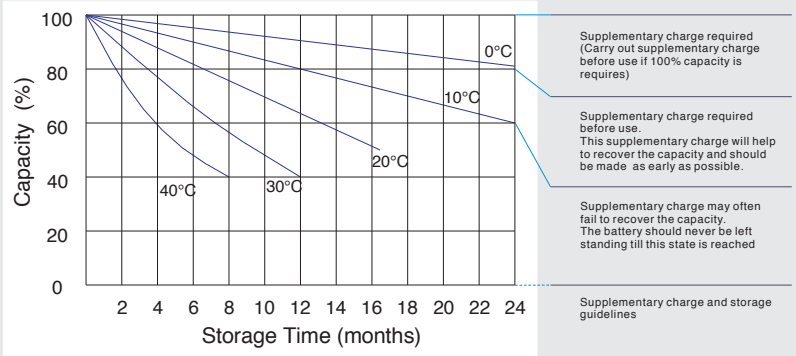
| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 2HR | 3HR | 4HR | 5HR | 8HR | 10HR | 20HR |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| 9.60V | 308.0 | 204.2 | 161.1 | 96.7 | 58.27 | 33.72 | 22.96 | 18.60 | 15.45 | 9.95 | 8.622 | 4.841 |
| 10.0V | 300.0 | 199.9 | 158.8 | 95.67 | 57.42 | 33.43 | 22.91 | 18.55 | 15.37 | 9.92 | 8.541 | 4.669 |
| 10.2V | 285.3 | 192.0 | 156.7 | 94.85 | 56.99 | 33.22 | 22.83 | 18.40 | 15.22 | 9.84 | 8.460 | 4.583 |
| 10.5V | 260.4 | 184.1 | 148.5 | 92.91 | 56.22 | 32.95 | 22.73 | 18.23 | 15.04 | 9.76 | 8.372 | 4.453 |
| 10.8V | 234.9 | 172.2 | 140.3 | 90.71 | 55.30 | 32.68 | 22.47 | 18.17 | 14.89 | 9.72 | 8.245 | 4.194 |
| 11.1V | 207.2 | 160.3 | 132.1 | 88.22 | 54.27 | 31.55 | 22.03 | 17.98 | 14.74 | 9.65 | 8.122 | 4.128 |

All mentioned values are average values.

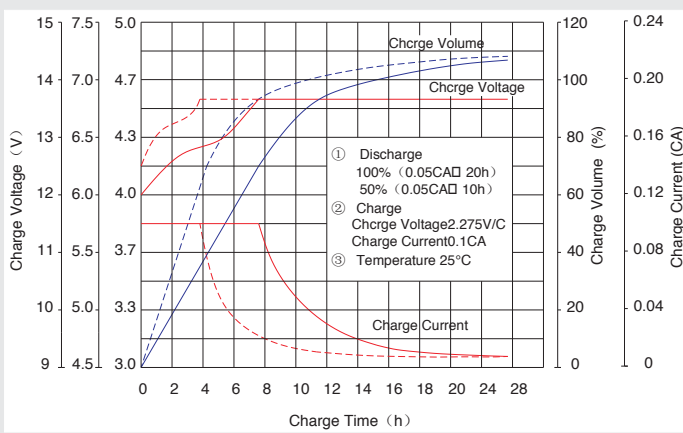
Effect of temperature on long term float life



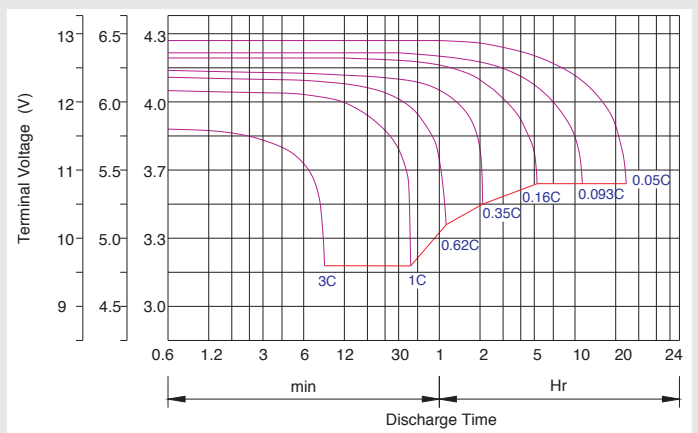
Storage characteristic



Charge characteristic Curve for standby use



Discharge characteristic Curve



Capacity Factors With Different Temperature

| Battery Type | | -20°C | -10°C | 0°C | 5°C | 10°C | 20°C | 25°C | 30°C | 40°C | 45°C |
|--------------|---------|-------|-------|-----|-----|------|------|------|------|------|------|
| GEL Battery | 6V& 12V | 50% | 70% | 83% | 85% | 90% | 98% | 100% | 102% | 104% | 105% |
| | 2V | 60% | 75% | 85% | 88% | 92% | 99% | 100% | 103% | 105% | 106% |
| AGM Battery | 6V& 12V | 46% | 66% | 76% | 83% | 90% | 98% | 100% | 103% | 107% | 109% |
| | 2V | 55% | 70% | 80% | 85% | 92% | 99% | 100% | 104% | 108% | 110% |

Discharge Current VS. Discharge Voltage

| Final Discharge Voltage V/cell | 1.75V | 1.70V | 1.60V |
|--------------------------------|------------|-------------------|------------|
| Discharge Current (A) | (A) ≤ 0.2C | 0.2C < (A) < 1.0C | (A) ≥ 1.0C |

Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method:

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|------------------|---|
| Constant Voltage | -0.2Cx2h+2.4~2.45V/Cellx24h, Max. Current 0.3CA |
| Constant Current | -0.2Cx2h+0.1CAx12h |
| Fast | -0.2Cx2h+0.3CAx4.0h |

Maintenance & Cautions

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| Float Service: |
| * Every month, recommend inspection every battery voltage. |
| * Every three months, recommend equalization charge for one time. |
| Equalization charge method: |
| Discharge: 100% rate capacity discharge. |
| Charge: Max. current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h. |
| * Effect of temperature on float charge voltage: -3mV/°C/Cell. |
| * Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage. |