

NG2-400

2V400Ah / 20hr rate



Introduction

Genergy NG (2 Volt) series is designed for solar and other renewable energy system applications with a 15 years design life. The series battery is a genuine Gelled electrolyte valve regulated product. Featured of its performance is an enhanced cycle life in comparison to traditional AGM products.

Battery Features

- Completed maintenance free
- Electrolyte will not stratify, no equalization charge required.
- Enhanced cycle life
- Genuine Gelled thixotropic electrolyte (Silicon Gel)
- Increase durability and deep cycle ability for heavy demand applications
- Low self-discharge
- Fully tank formed plates
- Low impurity electrolyte
- Spill proof / leak proof
- Multi-position usage
- ABS case and cover VO upon request

Electrical Specification

| | |
|--|---|
| Design floating Life @ 25°C (77°F) | 15 years |
| Nominal Capacity @ 25°C /77°F | |
| 20 hour rate 20.06A to 1.75Vpc | 401.2Ah |
| 10 hour rate 39.13A to 1.75Vpc | 391.3Ah |
| Internal Resistance | |
| (Fully charged battery @ 25°C /77°F) | 1.0 mΩ |
| Max. Discharge Current @ 25°C /77°F | 2000 A (5S) |
| Charge Methods: Constant voltage charge @ 25°C /77°F | |
| Cycle Use | 2.45 ~ 2.49V |
| Max. Current | 100 A |
| Standby Use | 2.25 ~ 2.30V |
| Operating Temperature Range | -30 ~ 50°C |
| <i>Notes: battery voltage must be adjusted according to temperature. Please refer to our recommendation.</i> | |
| Self-Discharge | <3% of capacity declined per month @ 25°C (77°F). |

Battery Picture & Terminal Layout



Dimension & Weight

| Length | Dimension (± 2mm) | | | Total Height | Weight (± 2%) |
|----------|-------------------|-----------|--------------|--------------|---------------|
| | Width | Height | Total Height | | |
| 196 mm | 171 mm | 312 mm | 342 mm | 27.5 kg | |
| 7.7 inch | 6.7 inch | 12.3 inch | 13.5 inch | 60.6 lbs | |

Typical Applications

- Solar Energy System
- Wind Energy System
- Power Utility
- UPS/EPS
- BTS system
- Data Center

Constant Current Discharge (Amperes @ 25°C /77°F)

| V/cell | 10min | 15min | 20min | 25min | 30min | 35min | 40min | 45min | 50min | 55min | 1hr | 2hr | 3hr | 4hr | 5hr | 10hr | 20hr |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|
| 1.60 | 712.1 | 583.6 | 528.9 | 466.4 | 420.0 | 377.4 | 354.9 | 331.9 | 312.2 | 294.4 | 286.3 | 155.87 | 110.42 | 91.79 | 75.05 | 40.10 | 20.25 |
| 1.65 | 676.2 | 554.2 | 504.9 | 448.5 | 408.9 | 367.4 | 346.0 | 324.3 | 305.9 | 289.3 | 282.4 | 152.87 | 108.30 | 89.86 | 73.31 | 39.91 | 20.25 |
| 1.70 | 648.2 | 531.3 | 485.0 | 431.9 | 396.0 | 355.2 | 334.7 | 313.9 | 296.3 | 280.8 | 274.6 | 147.73 | 105.80 | 87.75 | 71.58 | 39.52 | 20.25 |
| 1.75 | 618.3 | 506.8 | 463.4 | 413.6 | 381.3 | 341.8 | 322.8 | 303.4 | 287.4 | 273.5 | 268.8 | 143.65 | 103.49 | 85.82 | 70.04 | 39.13 | 20.06 |
| 1.80 | 586.4 | 480.6 | 440.6 | 394.6 | 366.5 | 328.1 | 310.2 | 292.0 | 277.2 | 264.6 | 261.0 | 138.51 | 100.99 | 83.71 | 68.31 | 38.11 | 19.87 |

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

| V/cell | 10min | 15min | 20min | 25min | 30min | 35min | 40min | 45min | 50min | 55min | 1hr | 2hr | 3hr | 4hr | 5hr | 10hr | 20hr |
|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|-------|-------|
| 1.60 | 1236.6 | 1013.6 | 935.7 | 845.9 | 771.7 | 706.7 | 662.0 | 616.5 | 574.7 | 537.9 | 516.4 | 279.40 | 203.97 | 173.38 | 142.78 | 80.00 | 42.21 |
| 1.65 | 1192.8 | 977.6 | 904.4 | 819.8 | 751.4 | 688.0 | 645.0 | 601.3 | 561.3 | 526.5 | 506.7 | 273.57 | 202.05 | 171.45 | 140.86 | 79.23 | 42.21 |
| 1.70 | 1146.9 | 940.0 | 870.8 | 790.8 | 727.5 | 666.2 | 625.6 | 584.2 | 546.6 | 514.4 | 496.9 | 266.79 | 198.20 | 168.47 | 138.74 | 77.69 | 41.64 |
| 1.75 | 1097.0 | 899.1 | 834.3 | 759.4 | 701.7 | 642.5 | 604.2 | 565.2 | 530.1 | 500.5 | 485.3 | 258.06 | 192.43 | 164.33 | 136.24 | 77.11 | 40.88 |
| 1.80 | 1043.2 | 855.0 | 795.0 | 725.6 | 674.0 | 616.9 | 580.9 | 544.3 | 511.6 | 484.6 | 471.6 | 248.66 | 187.23 | 160.20 | 133.16 | 76.34 | 40.50 |

Subject to revision without notice. Please contact our sales representatives for latest version.

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Graphs

