

12-100AG

12 Volt 100Ah AG Battery



General Features

- Nanosilica colloidal electrolyte and high tin positive plate alloy design to enhance battery performance
- Relatively rich electrolyte, high temperature and low temperature performance is superior
- Long cycle life, excellent deep cycle discharge ability
- Excellent charge acceptance ability
- Precision Sealing Technology
- Long Life



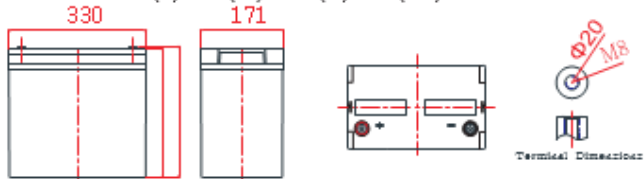
ISO 9001
Quality Management

Cert: 2010070201

ISO 14001
Environment Management

Cert: 2019062601

Dimension: 330(L) × 171(W) × 216(H) × 219(TH) Unit: mm



Applications

- Solar / wind energy and other new energy storage
- UPS/EPS
- Power Systems
- Telecommunications system
- Emergency lighting, Auto Control System
- Other General Purpose

Specifications

| | |
|------------------------|---|
| Nominal Voltage | 12V |
| Nominal Capacity | 100Ah |
| Design Life | 10 years |
| Terminal | M8 |
| Approx. Weight | Approx. 29.5 kg |
| Container Material | ABS |
| Rated Capacity | 100Ah 20 Hour Rate (10.0A to 10.8V) |
| | 78.9Ah 3 Hour Rate (26.3A to 10.8V) |
| | 64.2Ah 1 Hour Rate (64.2A to 10.5V) |
| Internal Resistance | Full Charged at 25°C 3.2mΩ |
| Max. Discharge Current | 1200A(5S) |
| Operating Temperature | Discharge: -40 ~60°C |
| | Charge: -20 ~50°C |
| | Storage: -20 ~50°C |
| Charge Current: | Max. 25A Recom. 10A |
| Charge Method (25 °C): | Charge current: Max. 25.0A ; Recom. 10.0A |
| | Float Charge: 13.5-13.8V, recom. 13.5V(-18mV/°C) |
| | Equalize charge: 13.8-14.1V, recom. 14.1V(-24mV/°C) |
| | Cycle charge: 14.4-15.0V, recom. 14.4V(-30mV/°C) |
| Self discharge: | 3% of capacity declined per month at 25°C |

Constant Current Discharge Characteristics

Unit: A (25°C, 77°F)

| FV/Time | 15min | 30min | 1h | 2h | 3h | 5h | 8h | 10h | 20h |
|---------|-------|-------|------|------|------|------|------|------|------|
| 1.60V | 184 | 112 | 66.0 | 37.8 | 27.5 | 18.4 | 12.1 | 10.3 | 5.43 |
| 1.65V | 178 | 110 | 65.6 | 37.6 | 27.2 | 18.2 | 12.0 | 10.2 | 5.40 |
| 1.70V | 174 | 108 | 65.1 | 37.4 | 26.8 | 18.1 | 11.9 | 10.1 | 5.37 |
| 1.75V | 169 | 107 | 64.2 | 36.8 | 26.5 | 17.9 | 11.8 | 10.0 | 5.35 |
| 1.80V | 157 | 102 | 62.5 | 36.1 | 26.3 | 17.4 | 11.7 | 10.0 | 5.32 |
| 1.85V | 140 | 93.3 | 57.9 | 34.3 | 24.8 | 16.5 | 11.2 | 9.65 | 5.23 |

Constant Power Discharge Characteristics

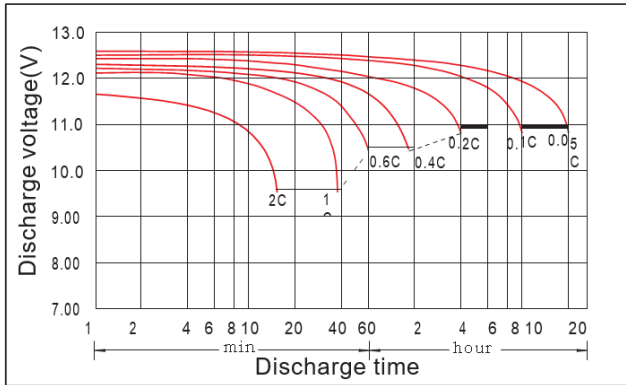
Unit: W/cell (25°C, 77°F)

| FV/Time | 15min | 30min | 1h | 2h | 3h | 5h | 8h | 10h | 20h |
|---------|-------|-------|-----|------|------|------|------|------|------|
| 1.60V | 323 | 202 | 125 | 71.5 | 52.2 | 35.0 | 23.5 | 19.9 | 10.7 |
| 1.65V | 318 | 200 | 124 | 71.4 | 51.6 | 34.8 | 23.3 | 19.7 | 10.7 |
| 1.70V | 314 | 200 | 123 | 71.1 | 51.3 | 34.5 | 23.2 | 19.5 | 10.6 |
| 1.75V | 312 | 199 | 122 | 70.7 | 51.0 | 34.3 | 23.0 | 19.3 | 10.6 |
| 1.80V | 295 | 194 | 121 | 70.5 | 50.8 | 33.9 | 22.9 | 19.1 | 10.5 |
| 1.85V | 264 | 178 | 112 | 67.3 | 48.3 | 32.4 | 22.1 | 18.8 | 10.4 |

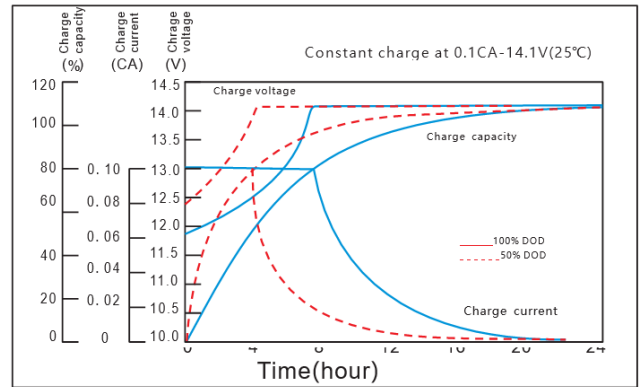
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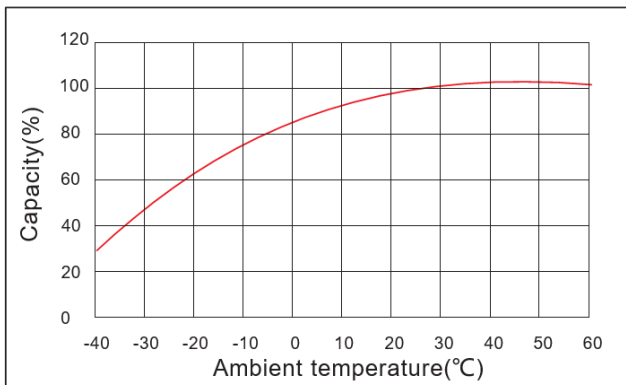
Discharge characteristic



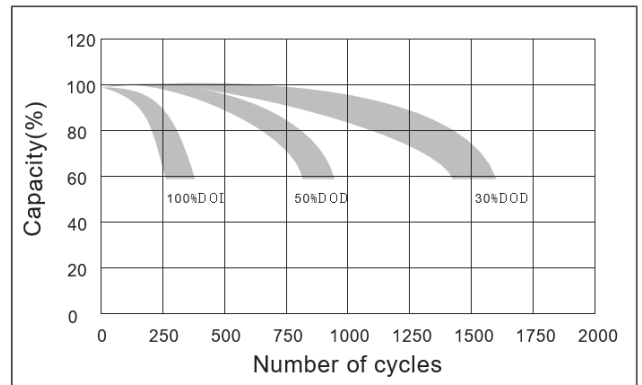
Charging characteristic



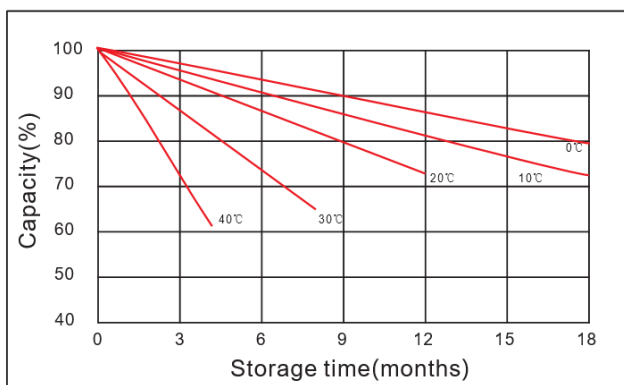
The effect of temperature on capacity



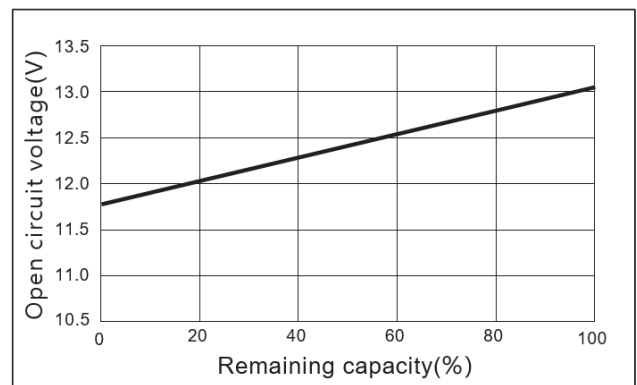
The effect of discharge depth on cycle life




Curves of self-discharge



Curves of open circuit voltage vs. capacity





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