



ENERGY ALTERNATIVES

Powered By Nature

EA-POWER-TS12-20 Lead-acid Solution

By combining the newly developed Nanometer Gel electrolyte, high tin content cathode plate, and AGM separator, TS series battery enjoys excellent discharging performance, long cycle life, and stable performance at high and low-temperature surroundings. TS series is suited for all kinds of ranges for energy storage, especially for renewable solar energy systems, etc.



AGM BATTERY

Application

| NO. | DETAIL |
|-----|---|
| 1 | UPS /EPS |
| 2 | Power systems |
| 3 | Telecommunications system |
| 4 | Emergency lighting, Auto control system |
| 5 | Solar / Wind generating storage cyclic |
| 6 | Other general purpose |

General Features

| NO. | DETAIL |
|-----|---|
| 1 | High corrosion resistant performance: Pb-Camulti-alloy grid |
| 2 | High energydensity and power density |
| 3 | Optimized capability of instant high-current discharging |
| 4 | Excellent charge acceptance ability |
| 5 | Excellent deep cycle dischargecapability |
| 6 | Stronghigh and low temperature performance |
| 7 | Precision sealing technology |

Specification

| ITEM | | DETAIL |
|---------------------------|---------|--|
| Nominal Voltage | V | 12 V |
| Nominal Capacity | AH | 20 AH |
| Design Life | Years | 5 Years |
| Terminal | | L1 |
| Approx. Weight | Kg | Approx. 5.50 kg (12.1 lbs) |
| Container Material | | ABS |
| Rated Capacity | AH | 20.0 AH (20 Hour Rate : 1.0 A to 10.5 V) |
| | | 15.8 AH (3 Hour Rate : 5.26 A to 10.2 V) |
| | | 13.2 AH (1 Hour Rate : 13.2 A to 9.6 V) |
| Internal Resistance | | Full charged at 25 °C: 16.3 mΩ |
| Maximum Discharge Current | A | 300 A (5S) |
| Operating Temperature | °C / °F | Discharge: -20 ~ 50 °C (-4 ~ 122 °F) |
| | | Charge: -20 ~ 50 °C (-4 ~ 122 °F) |
| | | Storage: -20 ~ 50 °C (-4 ~ 122 °F) |
| Charge Method (25 °C) | | Charge Current: Maximum 5 A / Recommended 2 A) |
| | | Float Charge: 13.5 ~ 13.8 V / Recommended 13.8 V (-18mV / °C) |
| | | Equalize Charge: 13.8 ~ 14.1 V / Recommended 14.1 V (-24mV / °C) |
| Self Discharge | | Cycle Charge: 14.4 ~ 15.0 V / Recommended 14.7 V (-30mV / °C) |
| | | 3% of capacity declined per month at 25 °C |

Constant Current Discharge Characteristics - UNIT A (25°C, 77°F)

| FV / TIME | 5M | 10M | 15M | 30M | 45M | 1H | 1.5H | 2H | 3H | 4H | 5H | 6H | 8H | 10H | 20H |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1.60 V | 79.2 | 51.8 | 38.6 | 25.3 | 16.2 | 13.2 | 8.95 | 7.56 | 5.52 | 4.42 | 3.76 | 2.85 | 2.48 | 1.98 | 1.06 |
| 1.65 V | 78.6 | 49.6 | 35.4 | 24.0 | 15.2 | 12.4 | 7.97 | 7.26 | 5.36 | 4.28 | 3.68 | 2.83 | 2.44 | 1.96 | 1.04 |
| 1.70 V | 64.4 | 46.6 | 33.0 | 23.3 | 14.7 | 12.0 | 7.81 | 7.12 | 5.26 | 4.06 | 3.64 | 2.77 | 2.40 | 1.92 | 1.02 |
| 1.75 V | 59.8 | 44.4 | 30.8 | 22.7 | 14.2 | 11.6 | 7.65 | 6.94 | 5.18 | 4.00 | 3.48 | 2.71 | 2.34 | 1.88 | 1.00 |
| 1.80 V | 55.0 | 41.8 | 28.6 | 22.0 | 13.7 | 11.2 | 7.48 | 6.76 | 4.90 | 3.92 | 3.34 | 2.65 | 2.28 | 1.84 | 0.96 |
| 1.85 V | 49.1 | 38.7 | 25.4 | 20.2 | 12.7 | 10.4 | 7.26 | 6.43 | 4.61 | 3.80 | 3.19 | 2.57 | 2.19 | 1.78 | 0.94 |

Constant Power Discharge Characteristics - UNIT W/CELL (25°C, 77°F)

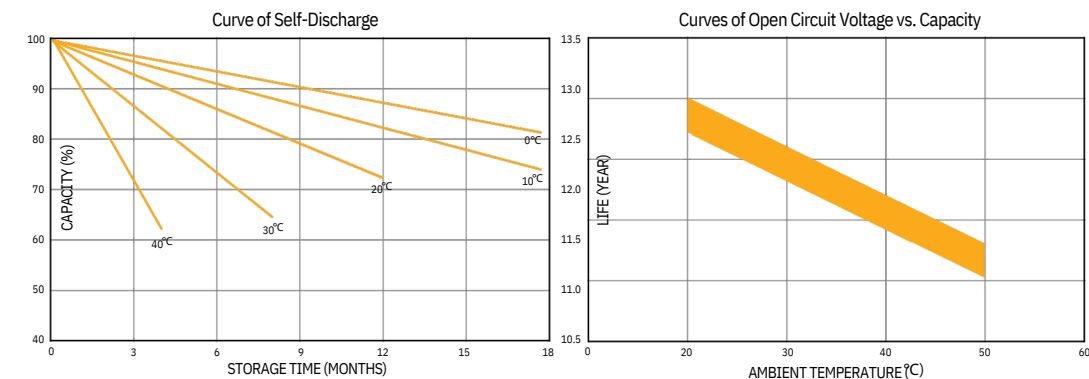
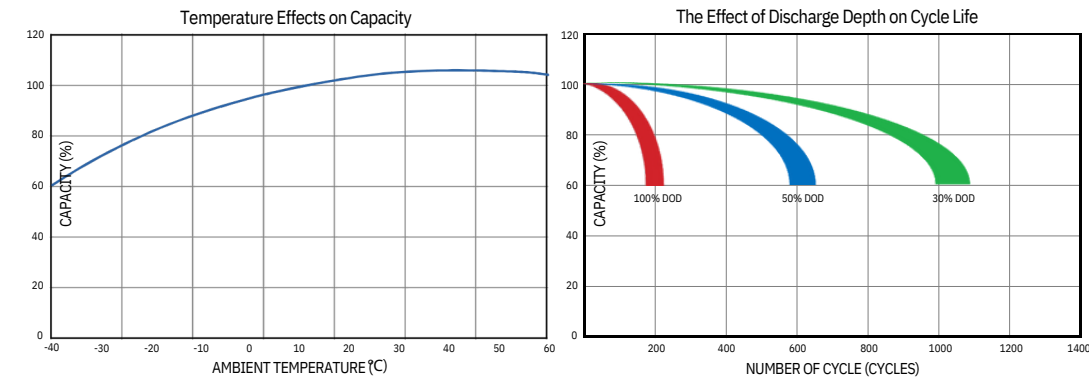
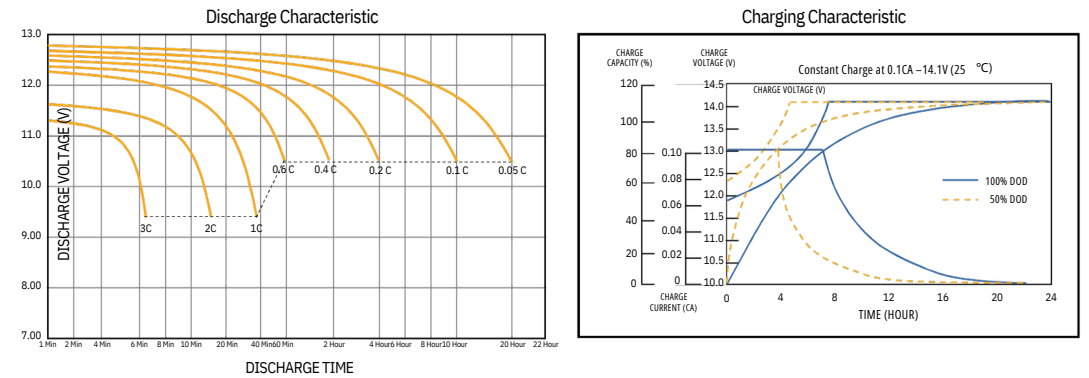
| FV / TIME | 5M | 10M | 15M | 30M | 45M | 1H | 1.5H | 2H | 3H | 4H | 5H | 6H | 8H | 10H | 20H |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1.60 V | 149 | 93.3 | 70.7 | 42.7 | 29.0 | 24.2 | 16.2 | 14.2 | 10.4 | 8.37 | 7.10 | 5.63 | 4.68 | 3.84 | 2.10 |
| 1.65 V | 137 | 88.3 | 66.3 | 42.4 | 27.4 | 22.8 | 15.9 | 13.6 | 10.1 | 8.10 | 6.97 | 5.51 | 4.61 | 3.76 | 2.04 |
| 1.70 V | 125 | 85.7 | 63.3 | 42.3 | 26.5 | 22.1 | 15.7 | 13.4 | 10.0 | 7.70 | 6.77 | 5.47 | 4.56 | 3.73 | 2.03 |
| 1.75 V | 114 | 83.0 | 61.0 | 41.9 | 25.7 | 21.4 | 15.4 | 13.1 | 9.83 | 7.60 | 6.63 | 5.35 | 4.38 | 3.65 | 1.98 |
| 1.80 V | 102 | 80.3 | 58.3 | 41.6 | 25.3 | 21.1 | 15.1 | 13.0 | 9.57 | 7.53 | 6.47 | 5.24 | 4.23 | 3.57 | 1.97 |
| 1.85 V | 91.0 | 75.1 | 52.2 | 38.1 | 23.7 | 19.7 | 14.8 | 12.4 | 9.11 | 7.41 | 6.17 | 5.15 | 4.05 | 3.51 | 1.95 |

Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.

Dimension: (L) 181 x (W) 76 x (H) 167 x (TH) 167 mm



PERFORMANCE CHARACTERISTICS



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