

VRLA AGM SEALED LEAD ACID Battery VTA12-35

The Valiant VTA series AGM batteries are designed for float and cycling applications. The VTA series offers a 30% higher cycle life than standard AGM and a 10-year float life that is achieved through a slightly different active paste material and a slightly stronger electrolyte. They are perfectly suited for UPS/ Telecom, remote site, and emergency power systems.

12V
Voltage

35Ah
Capacity

AGM
Technology

VRLA
Battery



GENERAL FEATURES

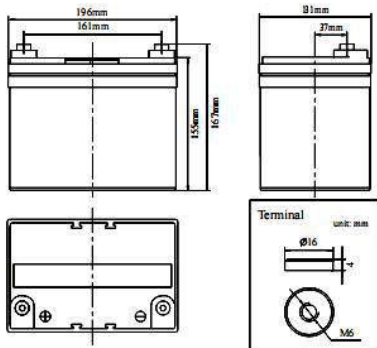
- 30% more cycle life
- Deep discharge recovery, 700 cycles @ 50% DOD
- Thick plate design with high tin/low calcium alloy
- 10-year service life in float applications
- High power density

APPLICATIONS

- Telecom, controls, remote site
- UPS and inverter systems
- Solar and wind systems
- Emergency backup power systems
- RV and marine

DIMENSIONS & WEIGHT

| | |
|-----------------------|----------|
| Length(mm/inch) | 196/7.72 |
| Width(mm/inch) | 130/5.12 |
| Height(mm/inch) | 155/6.11 |
| Total Height(mm/inch) | 167/6.58 |
| Weight(kg/lbs)(±3%) | 10/22.1 |



TECHNICAL SPECIFICATIONS

| | | |
|--|---------------------------|--|
| Nominal Voltage | | 12V(6 cells per unit) |
| Design Floating Life @25°C | | 8 Years |
| Nominal Capacity @25°C(10 hour rate@3.30A,10.8V) | | 33Ah |
| Capacity @25°C | 20hour rate (1.75A,10.8V) | 35.0Ah |
| | 5 hour rate (6.00A,10.5V) | 30.0Ah |
| | 1 hour rate (20.0A,9.6V) | 20.0Ah |
| Internal Resistance | Full Charged Battery@25°C | ≤11.0mΩ |
| Ambient Temperature | Discharge | -15°C~45°C |
| | Charge | -15°C~45°C |
| | Storage | -15°C~45°C |
| Max.Discharge Current@25°C | | 198A (5s) |
| Capacity affected by Temperature (10 hour) | 40°C | 105% |
| | 25°C | 100% |
| | 0°C | 85% |
| | -15°C | 65% |
| Self-Discharge@25°C per Month | | 3% |
| Charge (Constant Voltage) @25°C | Standby Use | Initial Charging Current Less than 8.25A Voltage 13.6-13.8V |
| | Cycle Use | Initial Charging Current Less than 8.25A Voltage 14.4-14.9V |



BATTERY DISCHARGE TABLE

Discharge Constant Current per Cell (Amperes at 25°C)

| F.V/Time | 15min | 30min | 45min | 1h | 2h | 3h | 5h | 8h | 10h | 20h |
|----------|-------|-------|-------|------|------|-----|-----|-----|-----|------|
| 1.60V | 55.7 | 31.5 | 22.6 | 20.0 | 13.4 | 9.8 | 6.3 | 4.1 | 3.7 | 1.82 |
| 1.65V | 53.4 | 30.6 | 22.0 | 19.4 | 13.1 | 9.6 | 6.2 | 4.0 | 3.6 | 1.80 |
| 1.70V | 51.1 | 29.8 | 21.4 | 18.9 | 12.9 | 9.4 | 6.1 | 3.9 | 3.5 | 1.78 |
| 1.75V | 48.8 | 29.0 | 20.8 | 18.4 | 12.6 | 9.2 | 6.0 | 3.8 | 3.4 | 1.77 |
| 1.80V | 46.4 | 28.1 | 20.2 | 17.8 | 12.3 | 9.0 | 5.9 | 3.7 | 3.3 | 1.75 |

Discharge Constant Power per Cell (Watts at 25°C)

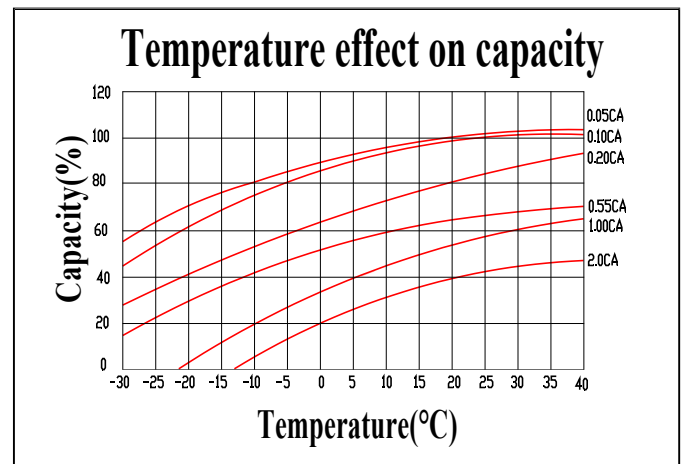
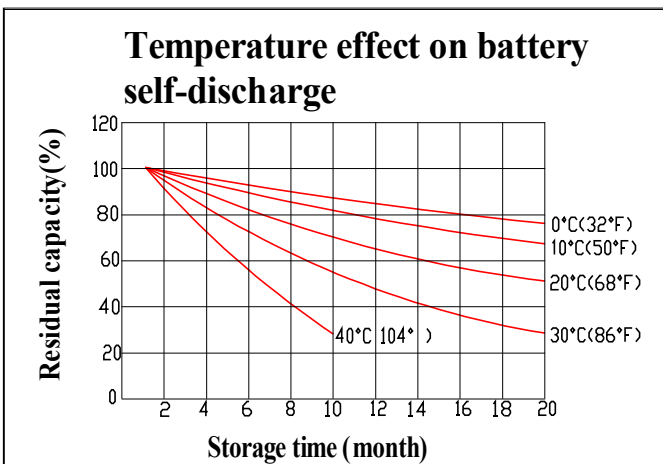
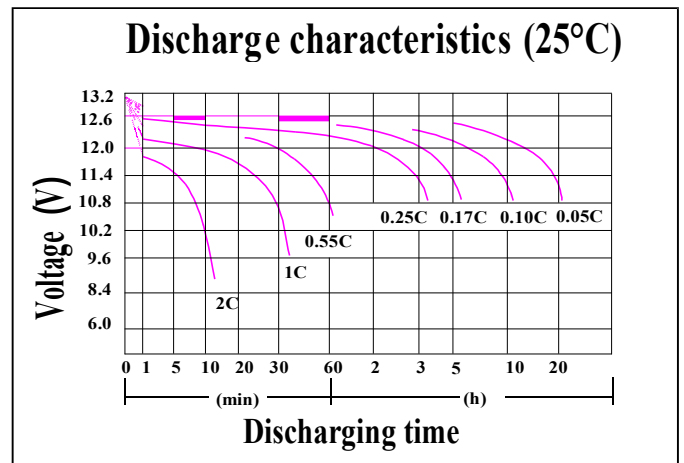
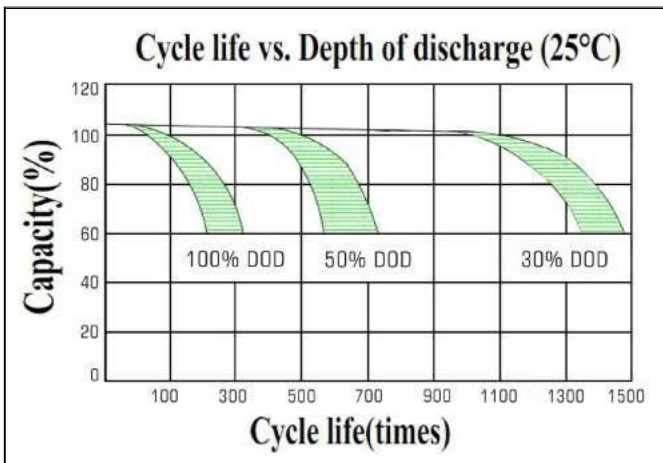
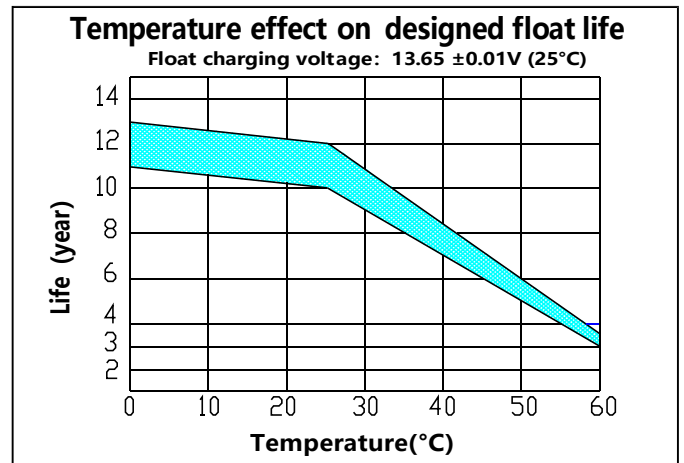
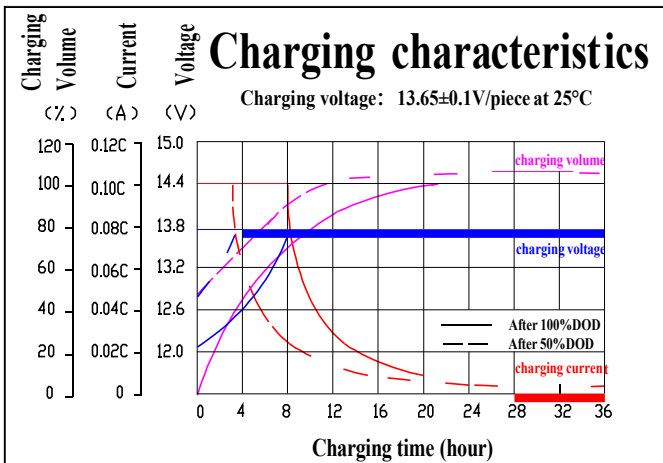
| F.V/Time | 15min | 30min | 45min | 1h | 2h | 3h | 5h | 8h | 10h | 20h |
|----------|-------|-------|-------|------|------|------|------|-----|-----|-----|
| 1.60V | 103.9 | 58.7 | 42.1 | 37.2 | 25.0 | 18.2 | 11.7 | 7.3 | 6.6 | 3.7 |
| 1.65V | 99.6 | 57.2 | 41.0 | 36.2 | 24.5 | 17.9 | 11.6 | 7.2 | 6.5 | 3.6 |
| 1.70V | 95.3 | 55.6 | 39.9 | 35.2 | 24.0 | 17.6 | 11.4 | 7.1 | 6.4 | 3.5 |
| 1.75V | 90.9 | 54.0 | 38.7 | 34.2 | 23.5 | 17.2 | 11.2 | 7.0 | 6.3 | 3.4 |
| 1.80V | 86.6 | 52.4 | 37.6 | 33.2 | 22.9 | 16.7 | 11.1 | 6.9 | 6.2 | 3.3 |

Note: The above data is based on average values and can typically be achieved within 3 charge/discharge cycles. Battery designs and specifications are subject to change without notice. Contact Valiant for the latest information.

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VTA12-35

PERFORMANCE CHARACTERISTICS



BATTERY CONSTRUCTION

| Component | Positive plate | Negative plate | Container & Cover | Safety valve | Terminal | Separator | Electrolyte | Pillar seal |
|-----------|--|---|-------------------------------|--------------------------------------|-------------------------|--|----------------------------------|-----------------------------|
| Features | Thick high Sn low Ca grid with special paste | Balanced Pb-Ca grid for improved recombination efficiency | Fire resistance ABS (UL94-V0) | Flame Si-Rubber and aging resistance | Female Copper Insert M6 | Advanced AGM separator for high pressure cell design | Dilute high purity sulfuric acid | Two layers epoxy resin seal |