

XL series VRLA batteries are recognized as the most reliable and high quality battery system in the industry. By combining the service life reliability of a flooded battery with the performance energy density of a valve-regulated battery, XL series batteries designed with advanced AGM (Absorbent Glass Mat) technology, Long service life designed with 10 years. it is highly suited to telecom, UPS, renewable energy system, power stations and similar applications.

| | | | |
|----------------------|---------------------------|-------------------------|--------------------------------|
| 2V Voltage | 1200Ah Capacity | AGM Technolog | 20 years Design life |
|----------------------|---------------------------|-------------------------|--------------------------------|



Complied standards

- IEC 60896-21/22
- JIS C8704
- GB/T19639

Features and Benefits

- Thick plate with high Tin low Calcium alloy
- High Reliability and Good Quality
- High gas recombination efficiency
- High Power Density
- Long Service Life, in Float or Cyclic

Construction

- Positive plate - Thick high Sn low Ca grid to resist corrosion and prolong life
- Negative plate - Balanced Pb-Ca grid for improved recombination efficiency
- Separator - Advanced AGM separator for ultra low float current
- Electrolyte - Dilute high purity sulphuric acid
- Battery container and cover - ABS
- Pillar seal - 100% factory tested, proven two layers epoxy resin seal
- Relief valve - Complete with integrated flame arrestor

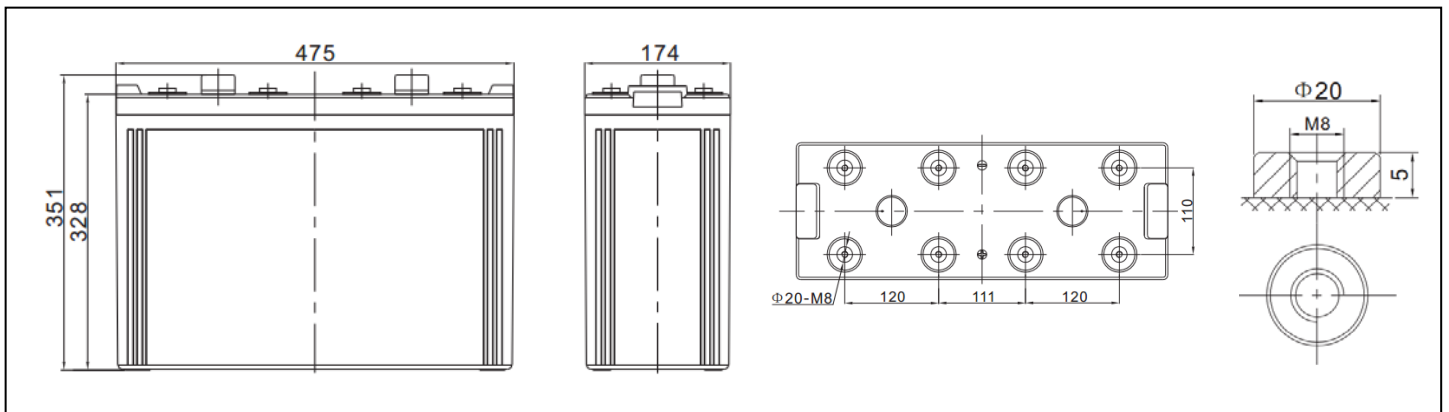
Applications

- Telecom
- Electric Utilities
- UPS systems
- Control Equipments
- Security Systems
- Medica Equipments
- Railroad Utilities
- Photovoltaic Systems
- Renewable Energy Systems

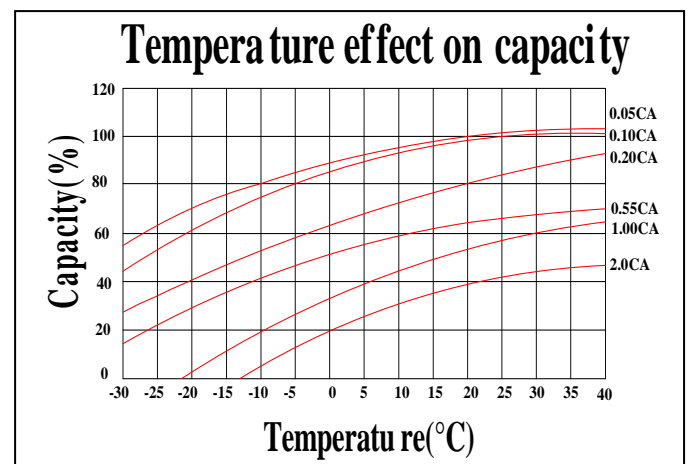
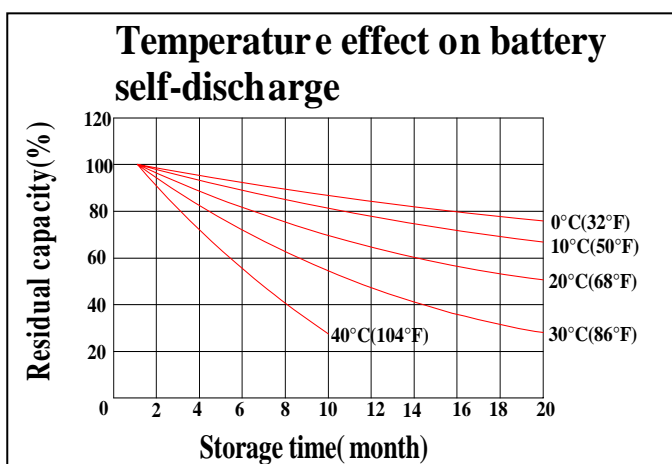
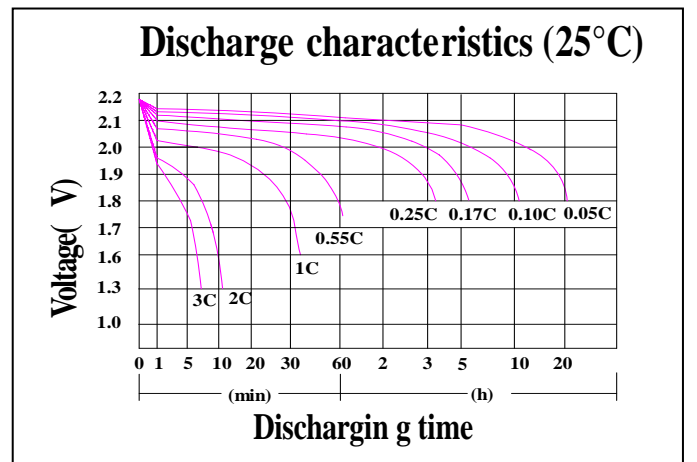
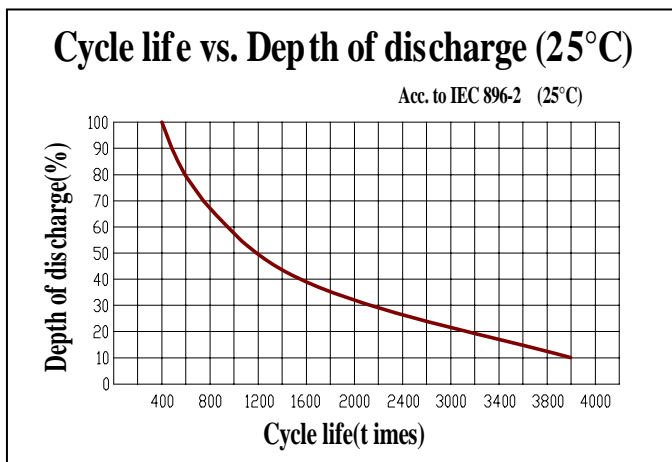
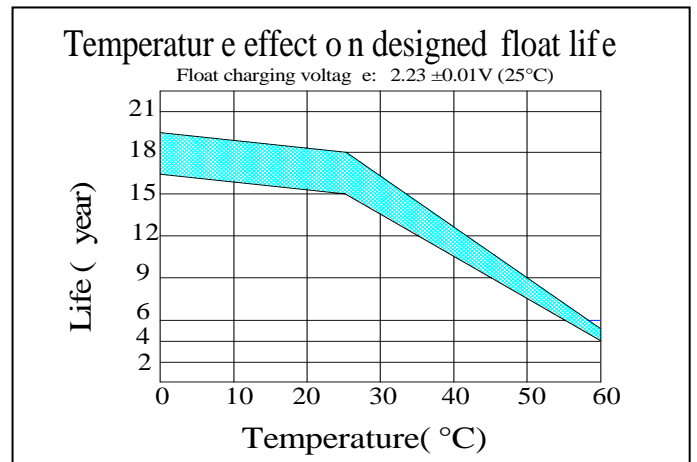
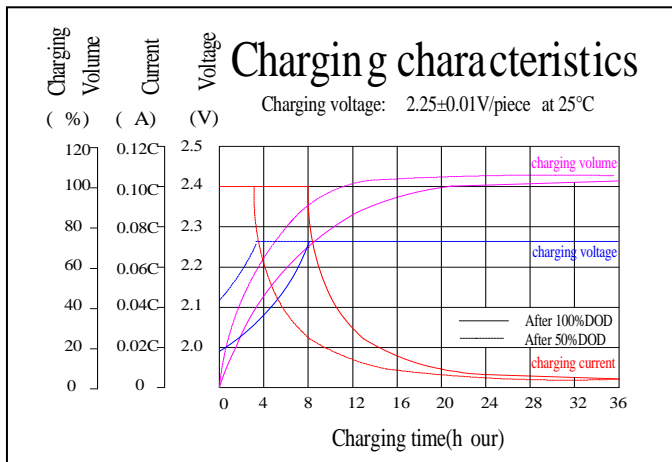
Technical Specifications

| | |
|--|---|
| Nominal Voltage..... | 2V (1 cells per unit) |
| Nominal Capacity(20°C) | |
| 20hour rate(63.6A, 1.8V)..... | 1272Ah |
| 10hour rate(120.0A, 1.8V)..... | 1200Ah |
| 5hour rate(212A, 1.75V)..... | 1060Ah |
| 1hour rate(726A, 1.6V)..... | 726Ah |
| Dimension(mm)..... | L475 x W174 x H328 x TH351mm |
| Approx. Weight | .66kg |
| Terminal Type..... | Female Copper Insert M8 (torque:10~12N.m) |
| Internal Resistance..... | 0.24mΩ(fully Charged @20°C) |
| Max.Charge Current..... | 180A |
| Max.Discharge Current (5s)..... | 5000A |
| Ambient Temperature | |
| Discharge..... | -15-45°C |
| Charge..... | -15-45°C |
| Storage..... | -15-45°C |
| Capacity Affected by Temp.(10 hr capacity) | |
| 105% @40°C | |
| 100% @25°C | |
| 85% @0°C | |
| 65% @-15°C | |
| Self-Discharge @20°C..... | Approx. 3% per month |
| Charge Voltage @20~25°C | |
| Float charge voltage..... | 2.23V-2.27V |
| Equalize Charge Voltage..... | 2.33V-2.37V |

Dimensions



Performance Characteristics



Battery Discharge

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

| F.V/Time | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|----------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 1.60V | 1156.8 | 873.6 | 715.2 | 429.1 | 324.0 | 261.1 | 220.1 | 190.6 | 151.0 | 125.5 | 65.8 |
| 1.65V | 1105.2 | 847.2 | 696.0 | 419.0 | 317.3 | 257.5 | 217.0 | 187.9 | 149.0 | 124.1 | 64.8 |
| 1.70V | 1061.0 | 816.0 | 674.4 | 406.8 | 310.3 | 252.0 | 212.4 | 184.8 | 147.1 | 122.4 | 64.6 |
| 1.75V | 1016.6 | 792.0 | 655.2 | 395.3 | 302.4 | 246.7 | 208.8 | 181.7 | 144.7 | 121.2 | 63.8 |
| 1.80V | 963.4 | 756.0 | 628.8 | 379.4 | 291.6 | 238.6 | 202.6 | 177.4 | 142.1 | 120.0 | 63.6 |

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

| F.V/Time | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|----------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V | 2120.5 | 1622.7 | 1345.3 | 815.0 | 620.2 | 502.3 | 425.8 | 371.0 | 296.4 | 247.7 | 130.3 |
| 1.65V | 2046.3 | 1588.3 | 1318.3 | 801.1 | 610.3 | 497.8 | 421.4 | 367.2 | 293.3 | 245.3 | 128.9 |
| 1.70V | 1979.3 | 1538.5 | 1284.7 | 781.2 | 600.0 | 488.9 | 414.0 | 361.9 | 289.9 | 242.6 | 127.4 |
| 1.75V | 1912.9 | 1503.9 | 1254.7 | 762.0 | 586.6 | 480.5 | 408.2 | 356.4 | 285.8 | 240.5 | 126.2 |
| 1.80V | 1826.3 | 1444.2 | 1209.4 | 734.6 | 567.1 | 466.1 | 397.2 | 349.2 | 281.0 | 238.3 | 125.3 |

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

| 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 | ABS (UL94-V0 optional) | Flame Si-Rubber and aging resistance | Female Copper Insert | Advanced AGM separator for high pressure cell design | Dilute high purity sulphuric acid | Two layers epoxy resin seal |