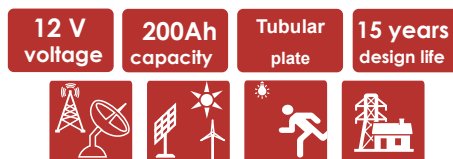


OPzV 12-200 12V 200Ah



With the robust die cast positive tubular plate design and fumed gelled electrolyte, OPzV 12V series offers excellent deep cycling life and high level reliability with 15 years design life. OPzV 12V series is ideal for use in renewable energy system, telecom and other cyclic/standby harsh environment applications.



FEATURES AND BENEFITS

- Tubular positive plate and Fumed Silica gel electrolyte with prolonged cycle life
- low density electrolyte with fast charging
- Lead Calcium die cast grid with improved corrosion resistance capability
- Excellent deep discharge recovery capability
- Reliable maintenance-free and leakage-free construction
- Wide operating temperature range from -40°C to 60°C
- Low self-discharge rate and long shelf life (1 year at 25°C)
- 15 years design life at floating condition



Complied standards

- IEC 60896-21/22
- IEC 61427
- YD/T 799
- JIS C8704
- BS6290 part 4

Construction

| Component | Raw material |
|----------------|---------------|
| Positive plate | Tubular plate |
| Negative plate | Lead |
| Container | ABS |
| Cover | ABS |
| Separator | PE/PVC |
| Electrolyte | GEL |
| Safety valve | Rubber |
| Terminal | Copper |

TECHNICAL SPECIFICATIONS

| | |
|---------------------------------------|--|
| Nominal Voltage (V) | 12 (6 cells per unit) |
| Designed Floating Life (25°C) | 15 Years |
| Nominal Capacity (25°C) | 200 Ah @ 10HR-rate (to 1.80Vpc) |
| Dimension (mm) | 499 x 259 x 219 x 220 (L x W x H x TH) |
| Approx. Weight | 74 kg (163 lbs) |
| Terminal Type | Female Copper Insert M8 (torque:10~12N.m) |
| Internal Resistance | Approx. 0.0005 Ohm (fully charged) |
| Max. Charge Current | 50A |
| Max. Discharge Current (5S) | 1200 A |
| Short Circuit Current | 3400 A |
| Self Discharge | Approx. 2.5% per month @ 20°C |
| Ambient Temperature | Discharge: -20~60°C Charge: -20~55°C Storage: -20~45°C |
| Float Charge Voltage | 13.3 to 13.5V/block @25°C (-3mV/ cell/°C) |
| Equalize and Cycle Use Charge Voltage | 14.1 to 14.4V/block @25°C |
| Container Material | ABS (UL94-V0 optional) |

BATTERY DISCHARGE TABLE

Constant Current Discharge Characteristics: Amps(25 °C)

| F.V/Time | 30MIN | 60MIN | 2HR | 3HR | 4HR | 5HR | 6HR | 8HR | 10HR | 20HR |
|----------|-------|-------|------|------|------|------|------|------|------|------|
| 1.90V | 150 | 107 | 64.7 | 48.6 | 39.0 | 32.9 | 28.1 | 21.3 | 18.8 | 9.6 |
| 1.85V | 172 | 120 | 71.2 | 51.1 | 40.3 | 35 | 30.4 | 22.6 | 19.7 | 10.3 |
| 1.80V | 190 | 127 | 75.9 | 54.2 | 42.6 | 35.6 | 30.8 | 24.0 | 20.0 | 10.8 |
| 1.75V | 200 | 130 | 78.0 | 55 | 43.6 | 36.2 | 31.4 | 24.6 | 20.4 | 11.0 |

| F.V/Time | 30MIN | 60MIN | 2HR | 3HR | 4HR | 5HR | 6HR | 8HR | 10HR | 20HR |
|----------|-------|-------|-----|------|------|------|------|------|------|------|
| 1.90V | 282 | 206 | 126 | 95.8 | 76.4 | 64.8 | 55.4 | 41.8 | 37.0 | 19.1 |
| 1.85V | 332 | 230 | 137 | 99.2 | 78.6 | 68.2 | 59.6 | 44.0 | 38.6 | 20.4 |
| 1.80V | 362 | 246 | 147 | 105 | 82.4 | 69.2 | 59.8 | 46.6 | 38.8 | 21.3 |
| 1.75V | 380 | 250 | 152 | 106 | 83.6 | 70.0 | 60.4 | 47.4 | 39.9 | 22.1 |

PARAMETERS FOR SOLAR & WIND APPLICATIONS

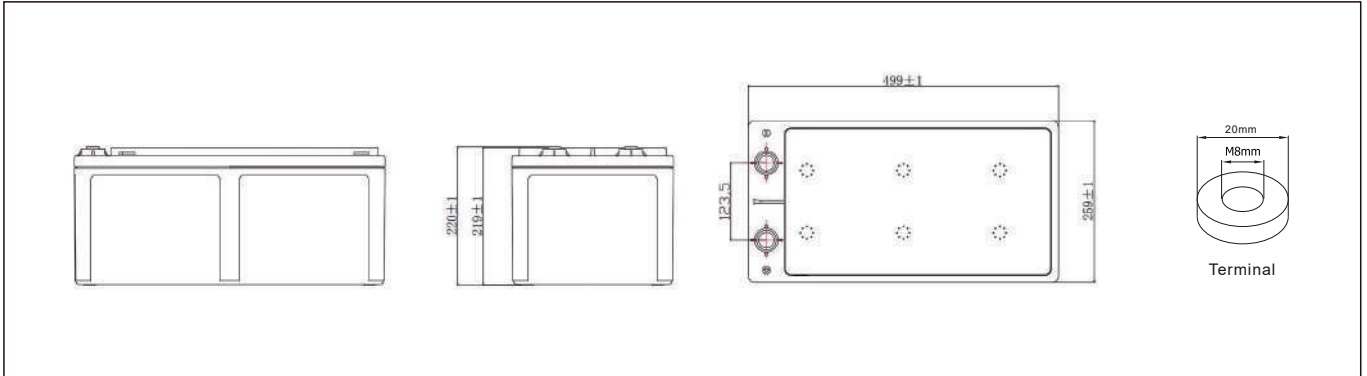
Long time discharge capacity for Solar & Wind applications

| Capacity | C ₂₄ (Ah) | C ₄₈ (Ah) | C ₇₂ (Ah) | C ₁₀₀ (Ah) | C ₁₂₀ (Ah) |
|---------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|
| OPZV12-200 | 218 | 240 | 255 | 272 | 278 |
| Final Voltage | 1.85V | | | | |

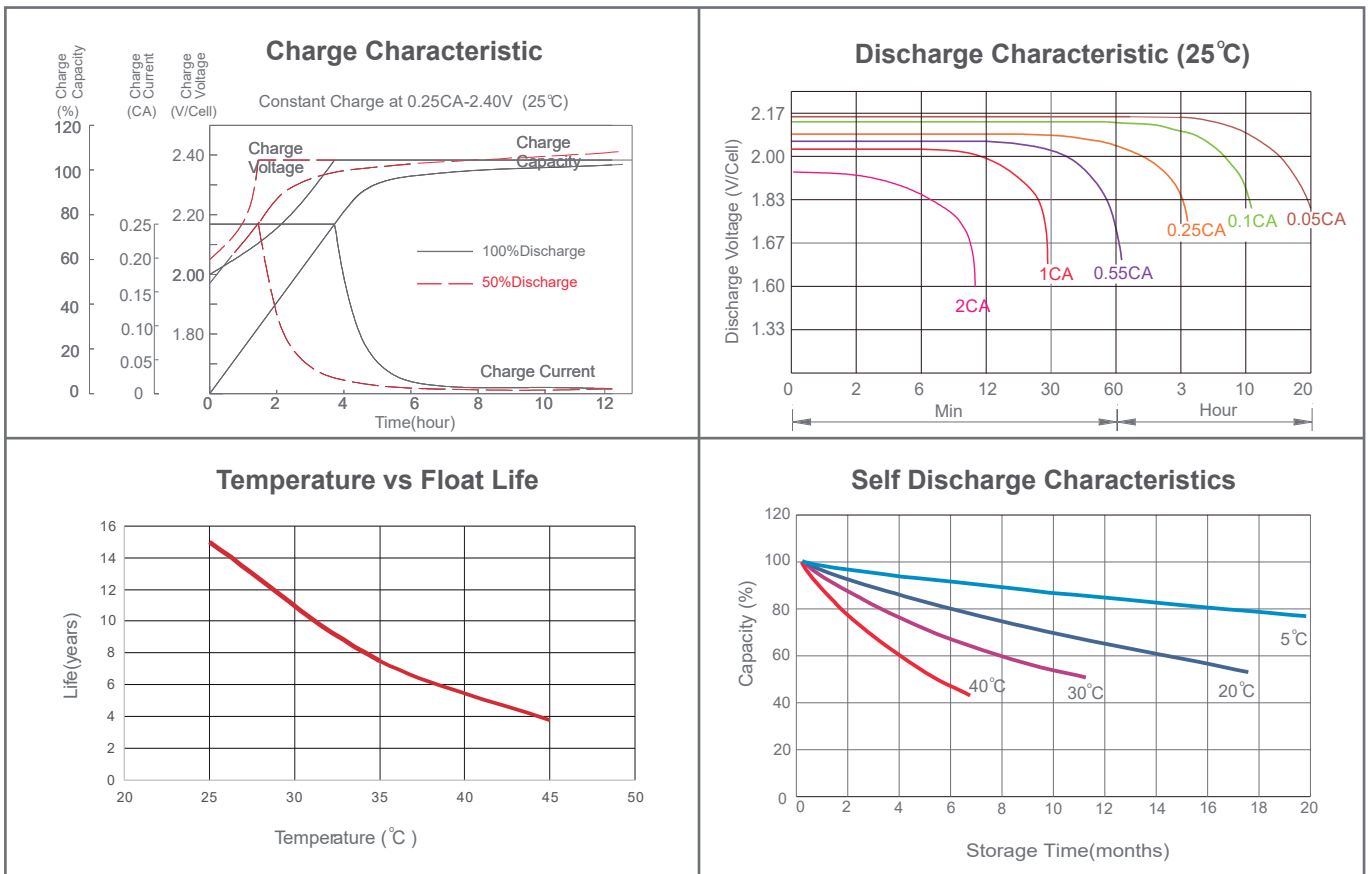
Solar & Wind applications parameters settings

| | |
|-------------------------------|--------------------------|
| Over voltage disconnect: | 2.45±0.01V/cell @ 25° C |
| Regulation/equalize voltage: | 2.40±0.01V/cell @ 25° C |
| Array reconnection voltage: | 2.25±0.005V/cell @ 25° C |
| Float voltage setting: | 2.23±0.005V/cell @ 25° C |
| Low voltage alarm voltage: | 1.92±0.005V/cell @ 25° C |
| Low voltage disconnect: | 1.88±0.005V/cell @ 25° C |
| Load reconnect voltage: | 2.09±0.01V/cell @ 25° C |
| Temp. compensate coefficient: | -5mV/cell/° C |

BATTERY DIMENSIONS



CHARACTERISTICS



FINAL VOLTAGE SETTINGS RECOMMENDED ACCORDING TO THE DISCHARGE CURRENT

| Discharge Current I (A) | $I \leq 0.08C$ | $0.08C \leq I < 0.2C$ | $0.2C \leq I < 0.6C$ | $0.6C \leq I < 1.0C$ | $I \geq 1.0C$ |
|-------------------------|-------------------|-----------------------|----------------------|----------------------|-------------------|
| Final of Voltage | $\geq 1.85V_{pc}$ | $\geq 1.80V_{pc}$ | $\geq 1.75V_{pc}$ | $\geq 1.70V_{pc}$ | $\geq 1.60V_{pc}$ |

