

SOLAR BATTERY

OPzV TUBULAR GEL 2V SERIES

CSPOWER OPzV series Tubular GEL SOLAR battery is with 25 years floating design life, it is a Valve Regulated Tubular Gel battery that adopts immobilized GEL and Tubular Plate technology to offer high reliability and performance. The Battery is designed and manufactured according to DIN standards and with die-casting positive grid and patent formula of active material. OPzV series exceeds DIN standard values with more than 25 years floating design life at 25°C and is even more suitable for cyclic use under extreme operating conditions.



Features

- **Capacity range:** 200 ~ 3000Ah
- **Voltage:** 2V
- **Low self-discharge rate:** ≤3% per month
- **High oxygen recombination efficiency:** ≥98%
- **Life time:** 25 years design lifetime in standby application at 25 °C
- **Wide operation temperature range:** -40 °C ~ +60 °C
- **Deep cycle performance:** up to 3300 cycles@50% DOD
- **High charging receptivity**
- **Excellent deep discharge recovery capability**
- **Adopts quality silicon nano gel electrolyte**

Applications



Solar lighting systems



Solar/wind energy storage systems



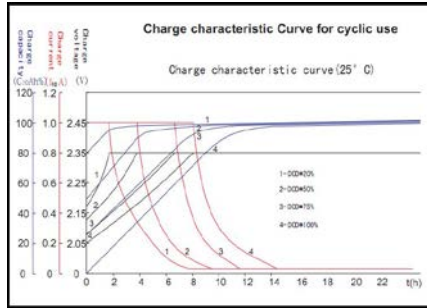
Specifications

| CSPOWER MODEL | Voltage | Capacity | Dimension (mm) | | | | Weight (kg) | Terminal |
|---------------|---------|-----------|----------------|-----|-----|-----|-------------|----------|
| | (V) | (Ah) | L | W | H | TH | (±3%) | |
| OPzV2-200 | 2 | 200/10HR | 103 | 206 | 356 | 389 | 18 | M10 |
| OPzV2-250 | 2 | 250/10HR | 124 | 206 | 356 | 389 | 22.5 | M10 |
| OPzV2-300 | 2 | 300/10HR | 145 | 206 | 356 | 389 | 25 | M10 |
| OPzV2-350 | 2 | 350/10HR | 124 | 206 | 473 | 505 | 28 | M10 |
| OPzV2-420 | 2 | 420/10HR | 145 | 206 | 473 | 505 | 32 | M10 |
| OPzV2-500 | 2 | 500/10HR | 166 | 206 | 473 | 505 | 38 | M10 |
| OPzV2-600 | 2 | 600/10HR | 145 | 206 | 646 | 678 | 46 | M10 |
| OPzV2-800 | 2 | 800/10HR | 191 | 210 | 646 | 678 | 65 | M10 |
| OPzV2-1000 | 2 | 1000/10HR | 233 | 210 | 646 | 678 | 74 | M10 |
| OPzV2-1200 | 2 | 1200/10HR | 275 | 210 | 646 | 678 | 91 | M10 |
| OPzV2-1500 | 2 | 1500/10HR | 275 | 210 | 795 | 827 | 112 | M10 |
| OPzV2-2000 | 2 | 2000/10HR | 399 | 212 | 770 | 802 | 153 | M10 |
| OPzV2-2500 | 2 | 2500/10HR | 487 | 212 | 770 | 802 | 187 | M10 |
| OPzV2-3000 | 2 | 3000/10HR | 576 | 212 | 770 | 802 | 225 | M10 |

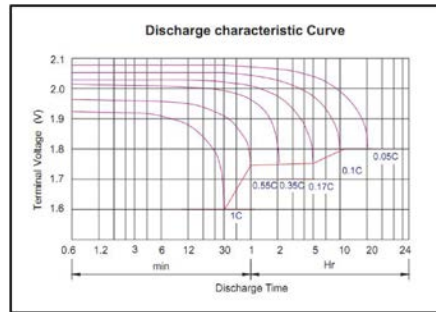
Products will be improved without notice, please contact sales for specification in kind prevail.

CHARACTERISTICS

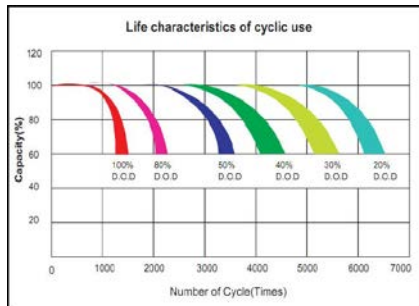
◆ Charging Characteristics



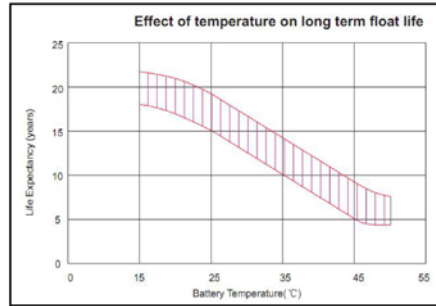
◆ Discharging Characteristics(25°C)



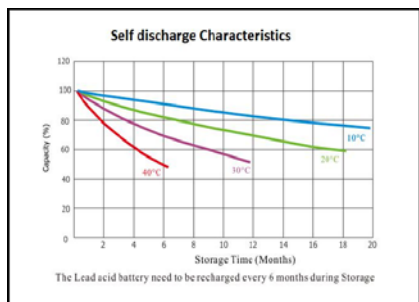
◆ Life Characteristics of Cyclic Use(25°C)



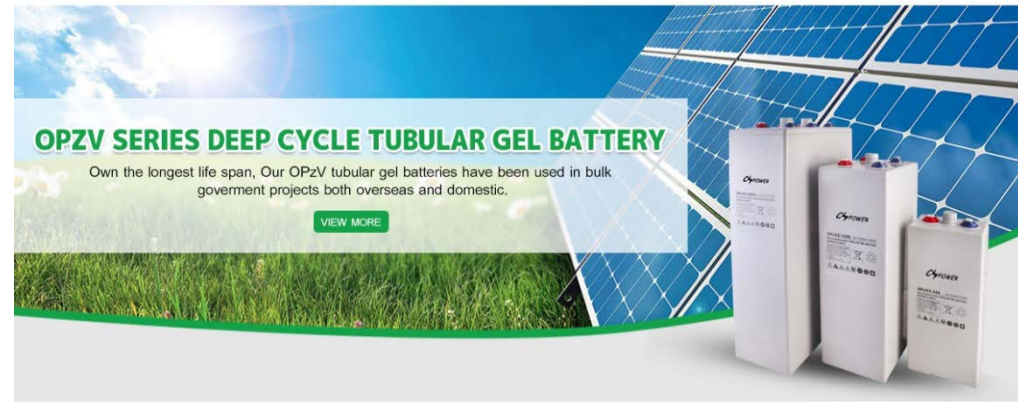
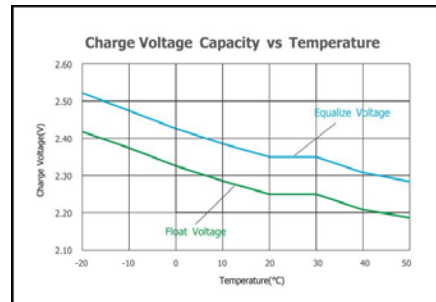
◆ Effect of Temperature on Long Term Float Life



◆ Self Discharge Characteristics



◆ Charge Voltage Capacity vs Temperature



Charging voltage and settings for stationary battery

- Constant voltage charging is recommended
- Standby Use charge voltage: 2.25 to 2.30 V/cell @25°C
- Cyclic application charge voltage : 2.37 to 2.4 V/cell @25°C
- Max. charge current allowable : 0.25C

Construction for OPzV Tubular SOLAR Gel Battery

- Positive Plates: Robust tubular plates consisting of Pb-Ca-Sn alloy, optimized for high corrosion resistance, offer an extreme high cycling expectancy.
- Negative Plates: Grid plate construction consisting of lead calcium alloy.
- Separator: Microporous and robust PVC-SiO₂ separator, for positive and negative plates and optimized for low internal resistance.
- Container: ABS (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.

