

OPS2-300(OPzS2V300AH)

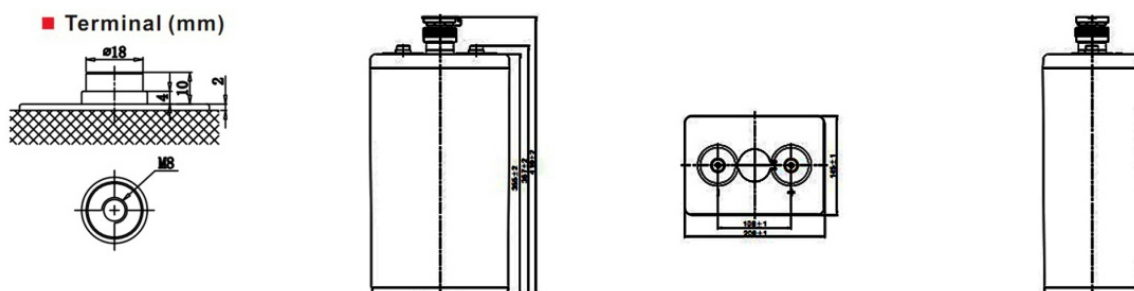
SunStone OPS series is flooded battery with Tubular Plate technology to offer high reliability and performance. The battery is designed and manufactured according to DIN standards and with die-casting positive grid and patent formula of active material. OPS series exceeds DIN standard values with more than 25 years floating design life at 25 °C and is even more suitable for cyclic use under extreme operating conditions.



Specification

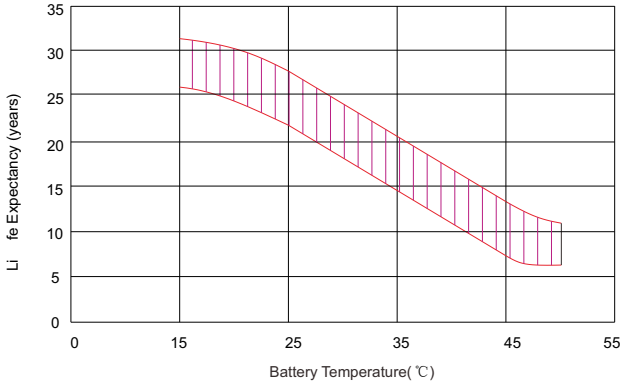
| | | |
|--------------------------------|---|-----------------------------|
| Nominal Voltage | 2V | |
| Capacity(10HR) | 312.0AH (1.8V/cell,20°C) | |
| Dimension | Length | 145±2mm(5.71 inches) |
| | Width | 206±3mm(8.11 inches) |
| | Container Height | 355±3mm(13.98 inches) |
| | Total Height(with Terminal) | 410±3mm(16.14 inches) |
| Approx Weight | Without Electrolyte 17.5kg (38.6lbs) | |
| | With Electrolyte 24.0kg (52.9lbs) | |
| Container Material | SAN transparent container | |
| Rated Capacity | 312.0AH/31.2A | (10hr,1.80V/cell,25°C/77°F) |
| | 284.0AH/56.8A | (5hr,1.75V/cell,25°C/77°F) |
| | 249.3AH/83.1A | (3hr,1.75V/cell,25°C/77°F) |
| | 205.5AH/205.5A | (1hr,1.60V/cell,25°C/77°F) |
| Max.Discharge Current | 2400A(5s) | |
| Internal Resistance | Approx 0.7mΩ | |
| Operating Temp.Range | Discharge : -15~55°C (5~131°F) | |
| | Charge : 0~45°C (32~131°F) | |
| | Storage : -15~45°C (5~131°F) | |
| Type and number of poles | M8/2 | |
| Charging | Floating voltage:2.23V~2.25V at 20°C(68°F)Temp | |
| | Boost charge:2.30V~2.40V at 20°C(68°F)Temp | |
| | Charging Current(max.):0.1CA Temp.Coef cient -3mV/c | |
| Capacity affect by Temperature | 40 °C (104 °F) | 103% |
| | 25 °C (77 °F) | 100% |
| | 0 °C (32 °F) | 88% |
| Self Discharge (4% per month) | Sunstone OPzS batteries may be stored for up to 6 months at 20°C(68°F) and then a freshening charge is required . For higher temperatures the time interval will be shorter. | |
| Alloy for positieplate | Low Antimony alloy Antimon <1.6% | |

Dimensions

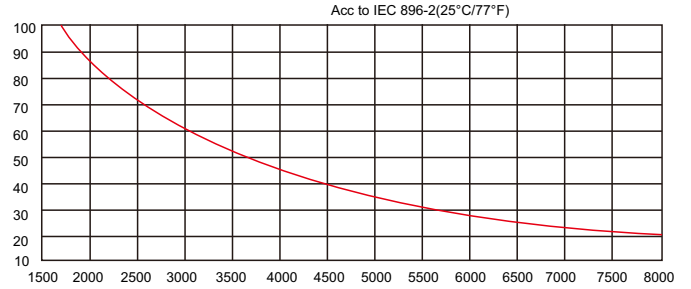


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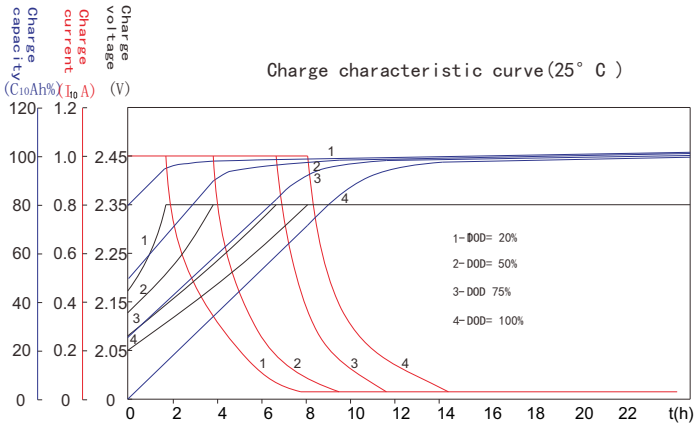
Effect of temperature on long term float life



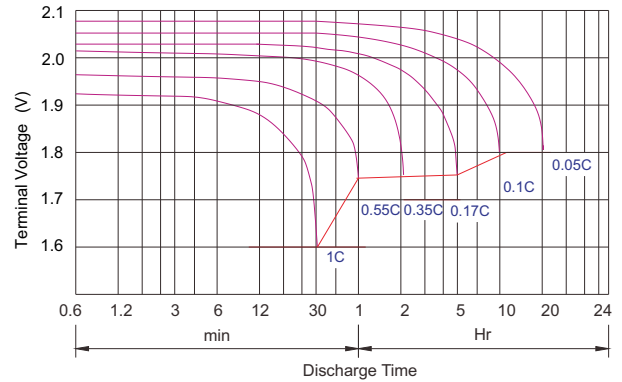
Cycle Life in Relation to Depth Discharge



Charge characteristic Curve for standby use



Discharge characteristic Curve



Constant Current Discharge Characteristics : A(25°C)

| F.V/ Time | 30min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|-----------|-------|-------|-------|-------|------|------|------|------|------|------|
| 1.85 | 197.1 | 151.0 | 105.2 | 82.6 | 68.9 | 59.6 | 52.6 | 42.4 | 35.1 | 19.6 |
| 1.80 | 246.4 | 180.8 | 122.2 | 91.5 | 74.7 | 63.6 | 55.9 | 44.9 | 36.5 | 20.3 |
| 1.75 | 270.9 | 195.3 | 129.2 | 97.3 | 78.6 | 65.8 | 57.2 | 45.8 | 37.4 | 20.6 |
| 1.70 | 291.2 | 208.6 | 134.2 | 100.1 | 80.7 | 67.5 | 58.6 | 46.7 | 38.3 | 20.9 |
| 1.65 | 322.0 | 223.0 | 138.6 | 102.3 | 82.1 | 68.6 | 59.5 | 47.4 | 39.1 | 21.1 |
| 1.60 | 350.0 | 235.2 | 142.1 | 103.7 | 83.1 | 69.5 | 60.5 | 48.3 | 39.8 | 21.5 |

Constant Power Discharge Characteristics : W(25°C)

| F.V/ Time | 30min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|-----------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 1.85 | 365.2 | 282.5 | 198.4 | 156.6 | 131.1 | 114.0 | 101.1 | 81.8 | 68.0 | 38.3 |
| 1.80 | 449.0 | 333.4 | 228.0 | 171.6 | 140.7 | 120.5 | 106.5 | 85.9 | 70.2 | 39.2 |
| 1.75 | 487.0 | 355.6 | 238.8 | 181.0 | 147.1 | 124.1 | 108.3 | 87.2 | 71.6 | 39.6 |
| 1.70 | 514.8 | 376.3 | 246.4 | 185.2 | 150.3 | 126.7 | 110.7 | 88.7 | 73.0 | 39.9 |
| 1.65 | 561.6 | 399.1 | 253.3 | 188.2 | 152.5 | 128.3 | 112.0 | 89.6 | 74.1 | 40.3 |
| 1.60 | 597.5 | 417.6 | 258.4 | 190.0 | 153.6 | 129.2 | 113.3 | 90.8 | 75.1 | 40.7 |

All mentioned values are average values.