

UP-OPzS Series

6 OPzS 600

O P z S C E L L



Main Features

- **Design Life**
20 years at 20°C.
- **Water Refilling**
More than 2 years at 20°C.
- **IIEC 896-1**
2300 cycles.
- **Self Discharge**
Approx. 2% per month at 20°C.
- **Operating Temperature Range**
-20°C to 55°C, recommended 10°C to 30°C.
- **Full Conformity with**
DIN 40737-1, IIEC 896-11 and EN 50272-2.

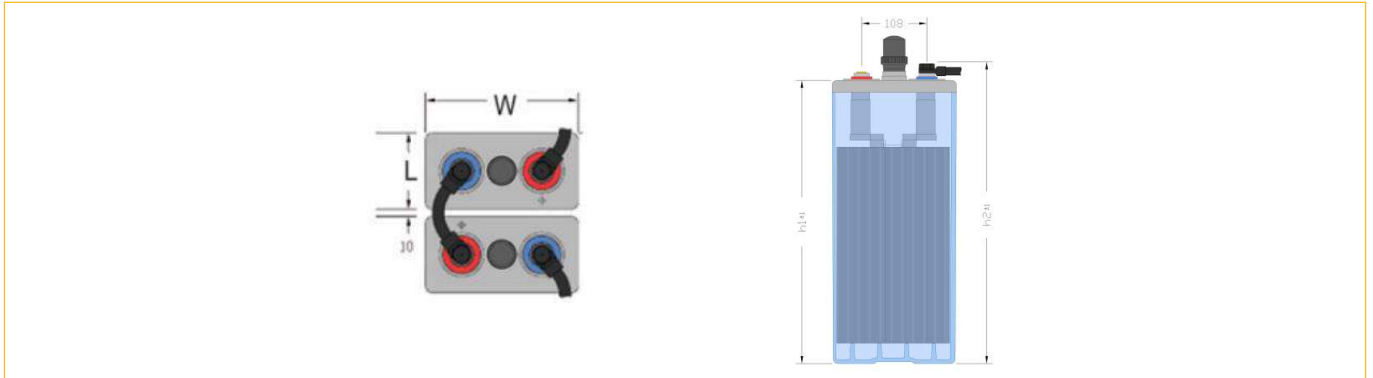
Technical Specifications

| | |
|--|------------------------|
| Capacity (Ah), C100 (1,85 V/cell, 20°C) | 1095 |
| Capacity (Ah), C10 (1,80 V/cell, 20°C) | 730 |
| Number of Plates (+) per Cell | 6 |
| Floating Voltage Set Point (V/cell) | 2.23 |
| Maximum Initial Charge Current (A) | 0.3 C10 |
| Recommended Boost Charge Voltage (V/cell) | 2.40 |
| Recommended End of Discharge Voltage (10-hr rate) (V/cell) | 1.80 |
| Short Circuit Current (A) | 4700 |
| Internal Resistance (mOhm) | 0.430 |
| Number of Cycles at 60% Depth of Discharge (20°C) | 2300 |
| Self-Discharge Rate per Month at 20°C | Approx. 2.5% |
| Dimensions in mm (L x W x H1 / H2) H1 = Height to the lid H2 = Height including connectors & bolts | 145 x 206 x 646 x 674 |
| Weight (kg) | Wet: 46.5 / Dry: 33.7 |
| Type and Number of Poles | M10 / 2 |
| Operating Temperature / Recommended Temperature | -20°C-55°C / 10°C-30°C |

* All dimensions and weights shown are subject to manufacturing tolerances.



Dimensions



Constant Current Discharge in A (at 20°C)

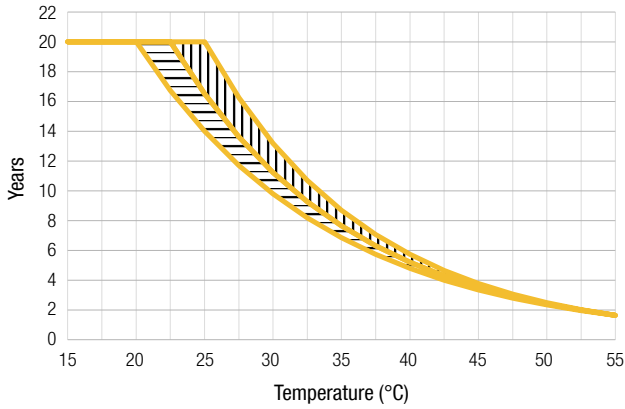
| End Voltage (V/cell) | Discharge Time | | | | | | | | | | | | | | |
|----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 7h | 8h | 10h | 12h | 20h |
| 1.60 V | 765.5 | 710.5 | 574.1 | 476.0 | 405.3 | 259.3 | 195.3 | 158.5 | 134.2 | 116.8 | 103.7 | 93.4 | 78.3 | 67.7 | 44.6 |
| 1.65 V | 687.8 | 643.2 | 533.7 | 451.8 | 390.7 | 255.0 | 192.9 | 156.8 | 132.9 | 115.7 | 102.8 | 92.6 | 77.7 | 67.2 | 44.2 |
| 1.70 V | 606.8 | 571.6 | 484.8 | 418.6 | 367.5 | 247.8 | 189.1 | 154.3 | 130.9 | 114.2 | 101.5 | 91.5 | 76.8 | 66.5 | 43.8 |
| 1.75 V | 523.6 | 496.1 | 428.5 | 376.7 | 335.6 | 234.7 | 182.2 | 149.8 | 127.7 | 111.6 | 99.4 | 89.8 | 75.5 | 65.4 | 43.2 |
| 1.80 V | 433.6 | 417.8 | 366.2 | 326.8 | 295.3 | 214.2 | 169.6 | 141.1 | 121.3 | 106.7 | 95.4 | 86.4 | 73.0 | 63.4 | 42.1 |
| 1.83 V | 369.0 | 364.1 | 326.6 | 293.6 | 267.2 | 198.1 | 158.7 | 133.1 | 115.0 | 101.6 | 91.2 | 82.8 | 70.2 | 61.2 | 40.9 |
| 1.85 V | 332.7 | 330.3 | 299.2 | 270.3 | 247.1 | 185.7 | 150.1 | 126.5 | 109.8 | 97.2 | 87.5 | 79.6 | 67.7 | 59.1 | 39.7 |
| 1.87 V | 291.2 | 287.4 | 271.5 | 246.3 | 226.0 | 172.1 | 140.2 | 118.9 | 103.6 | 92.0 | 83.0 | 75.7 | 64.6 | 56.5 | 38.2 |
| 1.90 V | 232.0 | 230.6 | 223.5 | 208.9 | 192.8 | 149.2 | 123.0 | 105.3 | 92.4 | 82.5 | 74.7 | 68.4 | 58.6 | 51.5 | 35.2 |

Constant Power Discharge in W/cell (at 20°C)

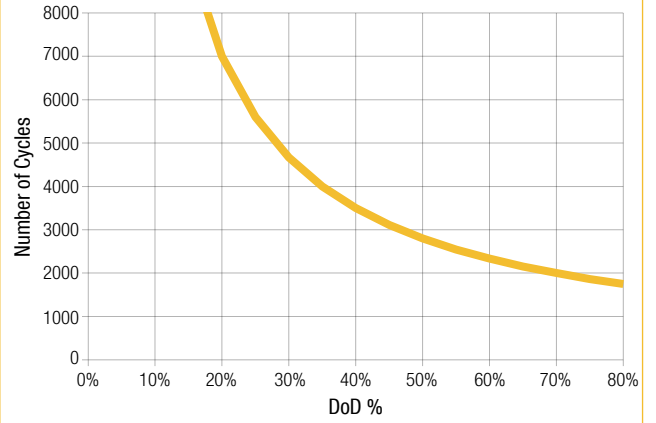
| End Voltage (V/cell) | Discharge Time | | | | | | | | | | | | | | |
|----------------------|----------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 7h | 8h | 10h | 12h | 20h |
| 1.60 V | 1213.9 | 1133.5 | 940.6 | 800.2 | 695.8 | 464.8 | 356.8 | 292.9 | 249.7 | 218.5 | 194.8 | 176.2 | 148.5 | 128.8 | 85.6 |
| 1.65 V | 1123.6 | 1055.3 | 890.1 | 767.4 | 674.4 | 458.3 | 353.1 | 290.2 | 247.7 | 216.8 | 193.4 | 174.9 | 147.5 | 128.0 | 85.0 |
| 1.70 V | 1022.2 | 964.3 | 825.9 | 721.7 | 640.9 | 446.6 | 347.0 | 286.1 | 244.5 | 214.3 | 191.3 | 173.1 | 146.0 | 126.8 | 84.3 |
| 1.75 V | 909.0 | 861.5 | 747.7 | 661.9 | 594.3 | 425.6 | 335.5 | 278.5 | 239.0 | 210.0 | 187.8 | 170.1 | 143.7 | 124.9 | 83.2 |
| 1.80 V | 770.0 | 746.0 | 655.6 | 587.1 | 532.7 | 392.6 | 314.4 | 263.7 | 228.0 | 201.4 | 180.8 | 164.2 | 139.3 | 121.4 | 81.3 |
| 1.83 V | 684.0 | 671.3 | 593.8 | 535.0 | 488.4 | 366.3 | 296.2 | 250.0 | 217.2 | 192.6 | 173.4 | 157.9 | 134.5 | 117.5 | 79.2 |
| 1.85 V | 616.9 | 609.2 | 549.9 | 497.4 | 455.7 | 345.7 | 281.5 | 238.7 | 208.1 | 185.0 | 166.8 | 152.2 | 130.0 | 113.8 | 77.1 |
| 1.87 V | 548.0 | 544.5 | 504.2 | 457.8 | 420.6 | 322.6 | 264.4 | 225.4 | 197.2 | 175.8 | 158.9 | 145.2 | 124.4 | 109.1 | 74.3 |
| 1.90 V | 439.4 | 435.8 | 428.9 | 394.2 | 364.0 | 283.1 | 234.4 | 201.3 | 177.2 | 158.7 | 144.0 | 132.0 | 113.6 | 100.0 | 68.7 |

* Upower reserves the right to change or revise without notice any information or detail given in this publication.

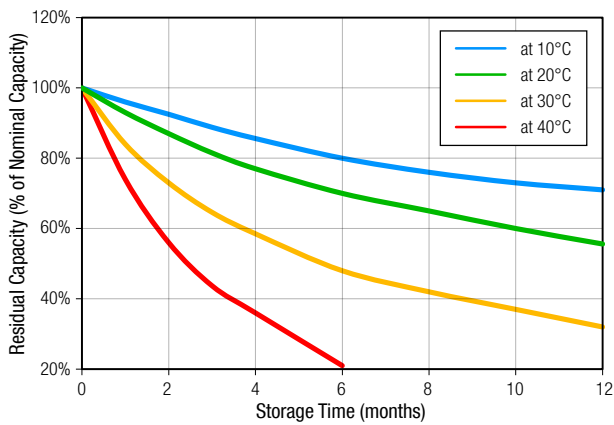
Expected Service Life vs. Operating Temperature



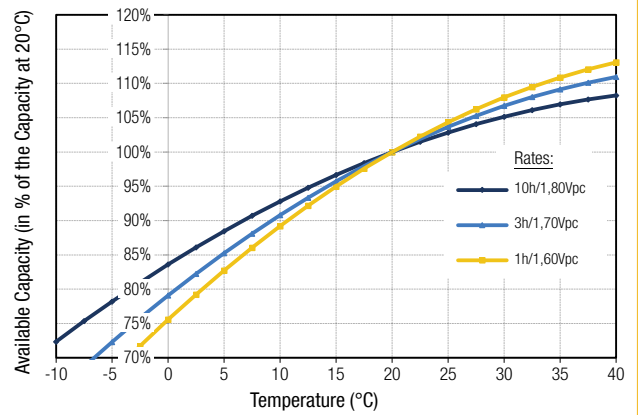
Number of Cycles vs. DOD



Self-Discharge Characteristics



Capacity vs. Temperature



Float Voltage Setting vs. Operating Temperature

