

UP-OPzS Series

20 OPzS 2500

O P z S C E L L



Main Features

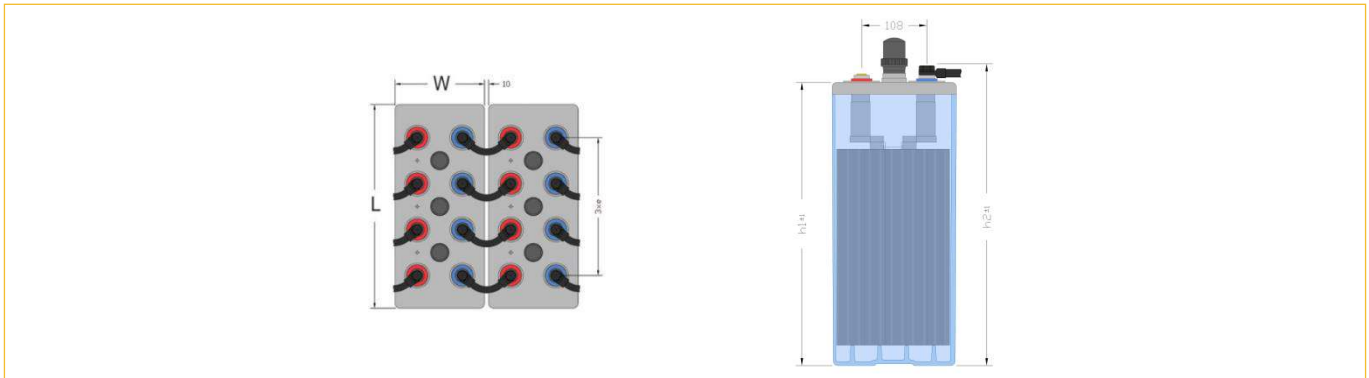
- **Design Life**
20 years at 20°C.
- **Water Refilling**
More than 2 years at 20°C.
- **IIEC 896-1**
2300 cycles.
- **Self Discharge**
Approx. 2% per month at 20°C.
- **Operating Temperature Range**
-20°C to 55°C, recommended 10°C to 30°C.
- **Full Conformity with**
DIN 40737-1, IIEC 896-11 and EN 50272-2.

Technical Specifications

Capacity (Ah), C100 (1,85 V/cell, 20°C)	4590
Capacity (Ah), C10 (1,80 V/cell, 20°C)	3060
Number of Plates (+) per Cell	20
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)	16550
Internal Resistance (mOhm)	0.122
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	487 x 212 x 772 x 800
Weight (kg)	Wet: 194.1 / Dry: 139.6
Type and Number of Poles	M10 / 8
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)

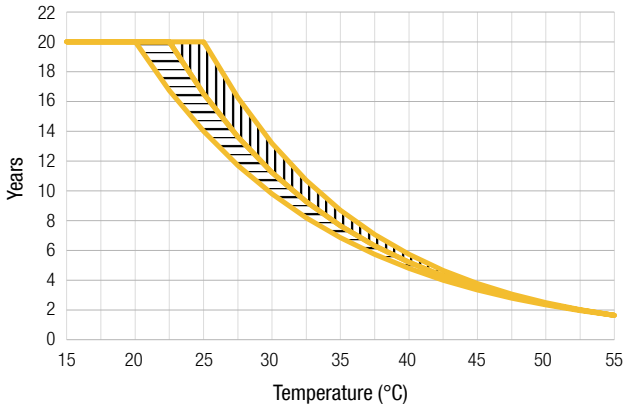
End Voltage (V/cell)	Discharge Time														
	10min	15min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	10h	12h	20h
1.60 V	2831.1	2693.3	2327.0	2016.7	1763.2	1148.4	856.6	689.5	580.6	503.5	445.6	400.4	334.2	287.7	187.4
1.65 V	2522.4	2409.9	2110.8	1859.9	1650.1	1115.5	841.1	679.6	573.5	497.8	440.9	396.4	331.1	285.1	185.9
1.70 V	2205.1	2119.6	1879.2	1679.2	1510.1	1061.1	815.2	664.0	562.4	489.3	434.0	390.6	326.7	281.6	183.9
1.75 V	1872.5	1821.6	1633.9	1476.6	1344.1	979.6	769.8	635.8	542.9	474.7	422.4	381.0	319.6	276.0	180.8
1.80 V	1518.2	1506.9	1378.3	1257.7	1156.1	871.9	700.3	587.1	506.8	446.7	399.9	362.4	306.0	265.4	175.4
1.83 V	1295.3	1281.7	1221.8	1119.5	1034.4	794.8	647.0	547.2	475.3	421.0	378.5	344.1	292.0	254.3	169.6
1.85 V	1164.3	1158.3	1113.4	1025.6	950.3	738.2	606.3	516.0	450.2	400.1	360.6	328.6	279.8	244.3	164.0
1.87 V	1022.4	1010.7	991.2	929.4	863.8	678.1	561.5	480.8	421.5	375.9	339.8	310.3	265.2	232.1	156.9
1.90 V	811.7	808.0	794.7	774.7	730.6	581.9	487.2	420.8	371.4	333.1	302.4	277.3	238.3	209.6	143.4

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

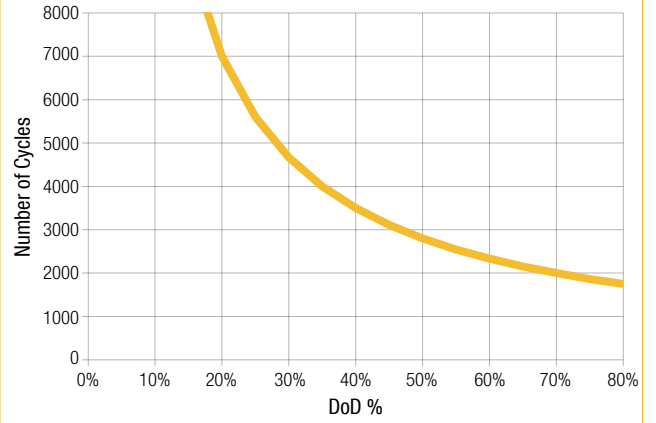
End Voltage (V/cell)	Discharge Time														
	10min	15min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	10h	12h	20h
1.60 V	4477.0	4273.7	3742.5	3300.4	2936.9	2014.1	1540.5	1258.0	1069.5	933.7	830.6	749.5	629.4	544.3	358.3
1.65 V	4122.0	3941.4	3483.8	3103.9	2788.0	1963.7	1516.2	1242.5	1058.2	924.7	823.3	743.2	624.5	540.2	355.9
1.70 V	3710.0	3575.2	3184.1	2864.2	2597.5	1880.6	1474.5	1217.0	1040.2	910.9	812.0	733.7	617.3	534.4	352.6
1.75 V	3233.6	3170.3	2844.9	2581.9	2361.7	1756.3	1401.4	1170.1	1007.3	886.1	792.3	717.4	605.2	524.9	347.4
1.80 V	2705.5	2679.0	2466.3	2254.8	2079.0	1587.6	1288.8	1089.3	946.2	838.1	753.5	685.2	581.5	506.4	337.8
1.83 V	2392.7	2380.9	2221.4	2038.6	1887.4	1462.9	1200.7	1022.3	892.7	794.1	716.3	653.2	556.9	486.7	327.4
1.85 V	2157.7	2147.4	2049.8	1887.0	1750.5	1369.6	1132.3	969.1	849.5	757.8	685.1	626.0	535.3	468.8	317.4
1.87 V	1916.8	1907.9	1866.1	1727.9	1607.4	1268.4	1055.9	908.5	799.5	715.4	648.3	593.6	509.2	447.1	304.5
1.90 V	1537.5	1526.7	1508.6	1472.3	1379.9	1102.3	926.4	802.9	710.8	639.1	581.5	534.1	460.6	406.1	279.6

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

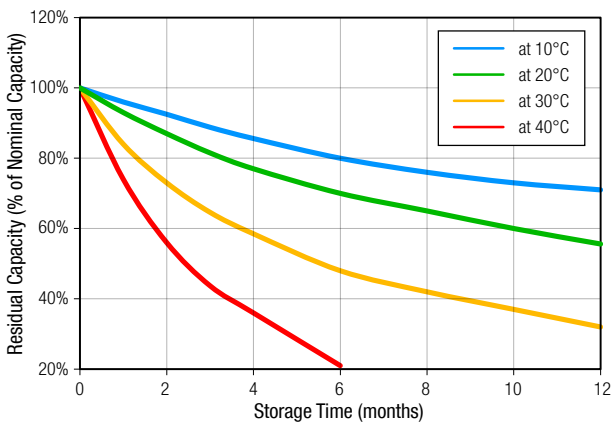
Expected Service Life vs. Operating Temperature



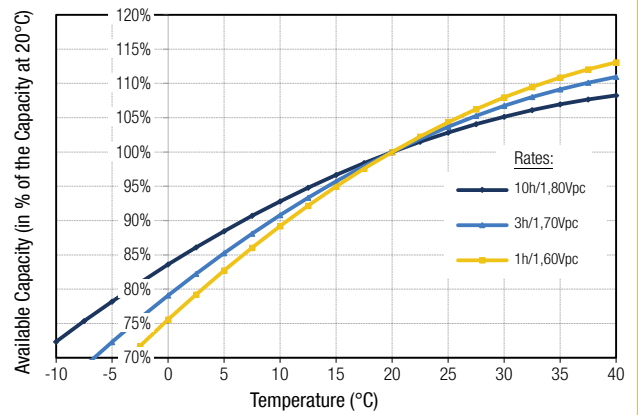
Number of Cycles vs. DOD



Self-Discharge Characteristics



Capacity vs. Temperature



Float Voltage Setting vs. Operating Temperature

