

UP-OPzS Series

12 OPzS 1500

O P z S C E L L



Main Features

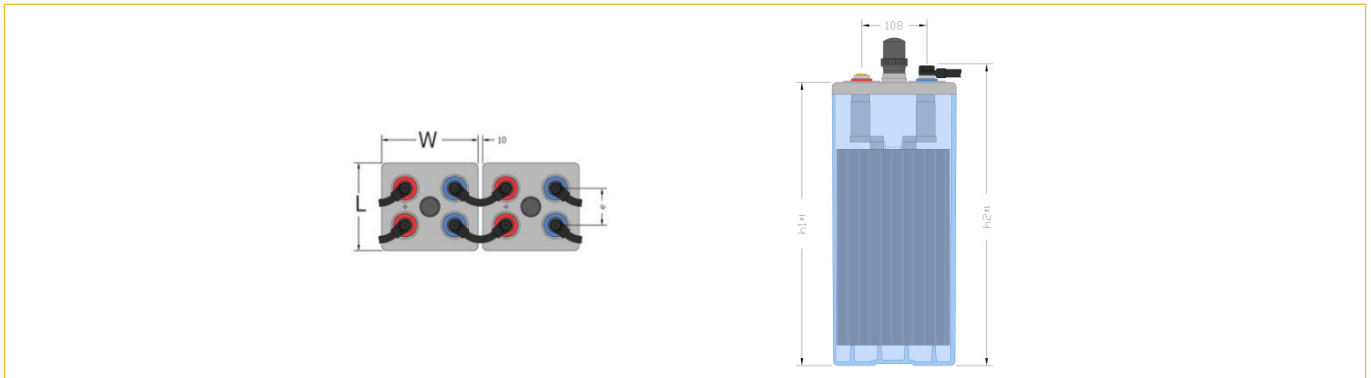
- **Design Life**
20 years at 20°C.
- **Water Refilling**
More than 2 years at 20°C.
- **IIEC 896-1**
2300 cycles.
- **Self Discharge**
Approx. 2% per month at 20°C.
- **Operating Temperature Range**
-20°C to 55°C, recommended 10°C to 30°C.
- **Full Conformity with**
DIN 40737-1, IIEC 896-11 and EN 50272-2.

Technical Specifications

Capacity (Ah), C100 (1,85 V/cell, 20°C)	2350
Capacity (Ah), C10 (1,80 V/cell, 20°C)	1747
Number of Plates (+) per Cell	12
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)	9200
Internal Resistance (mOhm)	0.220
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	275 x 210 x 797 x 825
Weight (kg)	Wet: 114.1 / Dry: 82.5
Type and Number of Poles	M10 / 4
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)

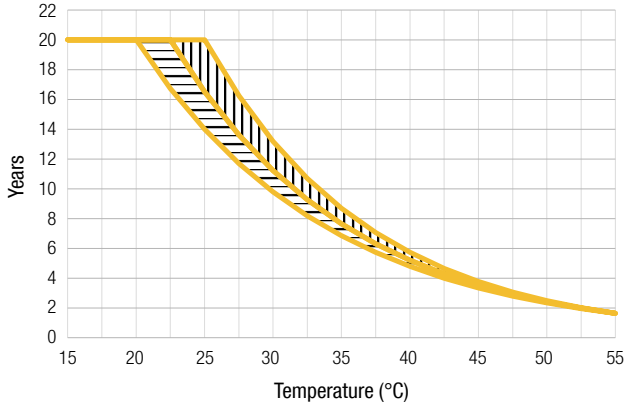
End Voltage (V/cell)	Discharge Time														
	10min	15min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	10h	12h	20h
1.60 V	1574.9	1505.6	1318.5	1156.3	1019.2	671.2	499.9	401.5	337.4	292.1	258.1	231.6	192.9	165.8	107.6
1.65 V	1389.8	1343.9	1190.0	1058.4	946.3	648.4	489.6	395.1	332.8	288.5	255.2	229.1	191.0	164.2	106.7
1.70 V	1222.9	1178.5	1054.0	949.0	859.0	611.7	471.9	384.6	325.6	283.0	250.8	225.5	188.2	162.0	105.4
1.75 V	1027.5	1012.9	912.4	829.4	759.1	559.9	442.0	365.8	312.5	273.3	243.1	219.2	183.6	158.4	103.5
1.80 V	830.7	826.5	766.0	702.1	647.9	493.7	398.4	334.7	289.2	255.0	228.4	207.0	174.7	151.5	100.0
1.83 V	712.8	709.4	676.5	622.6	577.1	447.3	365.8	310.1	269.6	239.0	214.9	195.4	165.8	144.4	96.2
1.85 V	630.6	624.6	614.4	568.7	528.5	413.8	341.2	291.0	254.3	226.1	203.9	185.8	158.2	138.1	92.7
1.87 V	555.9	553.4	538.7	514.2	479.0	378.4	314.5	269.9	236.9	211.4	191.2	174.6	149.3	130.7	88.4
1.90 V	438.6	436.8	431.4	420.5	403.0	322.5	270.7	234.2	207.0	185.7	168.7	154.7	133.1	117.1	80.2

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

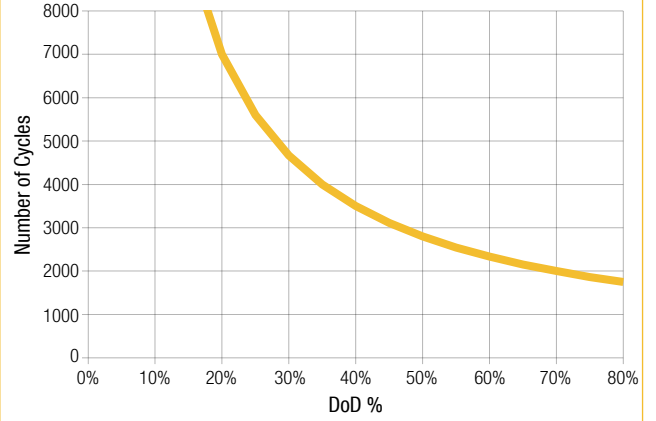
End Voltage (V/cell)	Discharge Time														
	10min	15min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	10h	12h	20h
1.60 V	2490.8	2387.3	2115.0	1882.0	1685.6	1168.4	893.8	728.8	618.7	539.3	479.2	432.0	362.1	312.7	205.1
1.65 V	2289.5	2196.9	1959.8	1760.4	1591.2	1133.9	877.5	718.7	611.4	533.7	474.6	428.0	359.0	310.2	203.6
1.70 V	2066.3	1987.8	1784.7	1616.3	1473.6	1078.8	849.2	701.7	599.6	524.7	467.4	422.0	354.5	306.5	201.6
1.75 V	1796.7	1757.0	1588.0	1448.8	1331.2	1000.5	801.5	670.5	577.7	508.2	454.4	411.3	346.7	300.4	198.3
1.80 V	1496.2	1489.3	1370.6	1258.5	1164.2	897.2	731.5	619.4	538.5	477.2	429.1	390.2	331.1	288.3	192.1
1.83 V	1293.8	1283.9	1231.1	1133.7	1052.7	822.2	677.6	578.1	505.4	449.7	405.7	370.1	315.5	275.7	185.4
1.85 V	1175.2	1170.0	1132.9	1046.5	973.4	766.8	636.4	545.8	478.9	427.5	386.6	353.2	302.1	264.6	179.1
1.87 V	1041.4	1036.9	1023.8	955.8	891.1	707.5	590.8	509.2	448.6	401.7	364.2	333.5	286.1	251.2	171.2
1.90 V	832.3	826.1	815.6	807.3	761.0	610.8	514.5	446.6	395.7	356.0	324.0	297.7	256.9	226.5	156.1

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

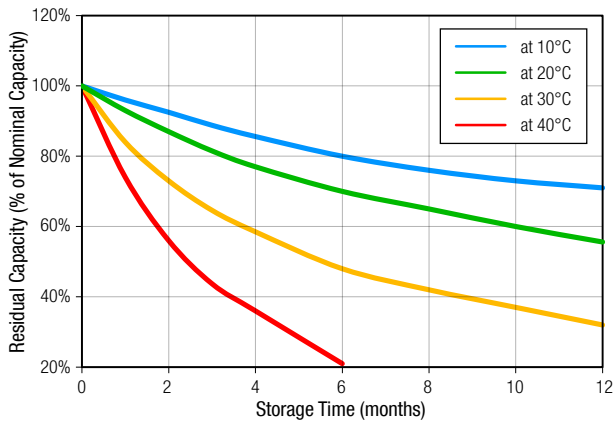
Expected Service Life vs. Operating Temperature



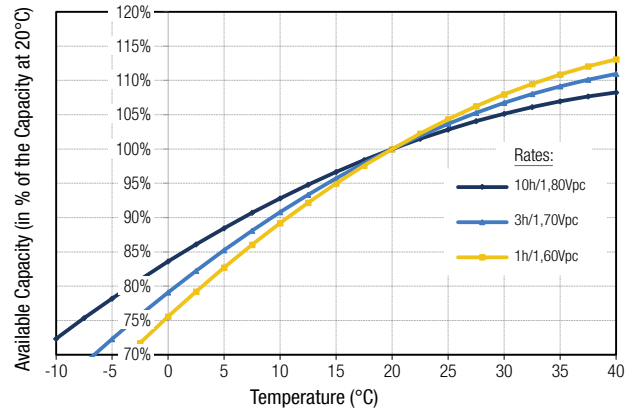
Number of Cycles vs. DOD



Self-Discharge Characteristics



Capacity vs. Temperature



Float Voltage Setting vs. Operating Temperature

