

# UP-OPzS Series

## 11 OPzS 1100

O P z S C E L L



### Main Features

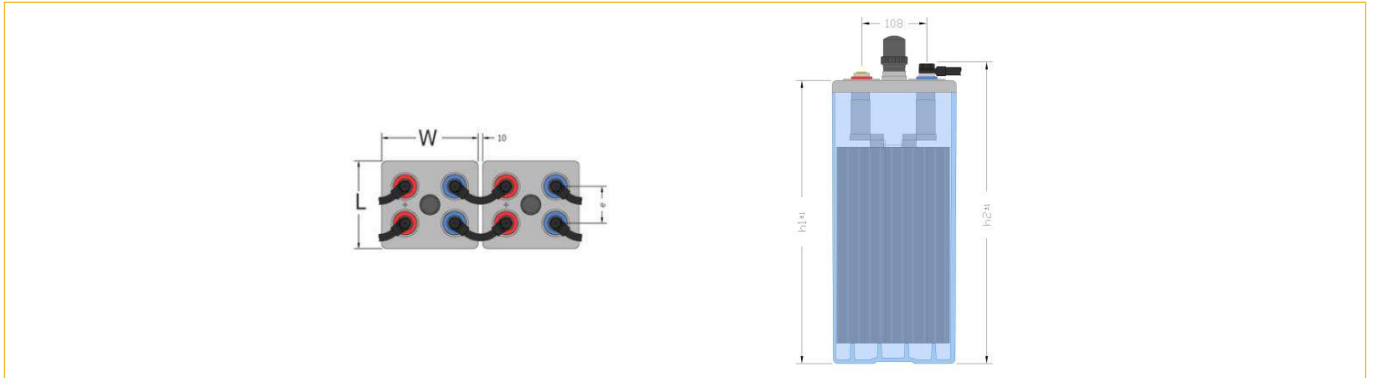
- **Design Life**  
20 years at 20°C.
- **Water Refilling**  
More than 2 years at 20°C.
- **IIEC 896-1**  
2300 cycles.
- **Self Discharge**  
Approx. 2% per month at 20°C.
- **Operating Temperature Range**  
-20°C to 55°C, recommended 10°C to 30°C.
- **Full Conformity with**  
DIN 40737-1, IIEC 896-11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

### Technical Specifications

Capacity (Ah), C100 (1,85 V/cell, 20°C)	1978
Capacity (Ah), C10 (1,80 V/cell, 20°C)	1402
Number of Plates (+) per Cell	11
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)	8450
Internal Resistance (mOhm)	0.240
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 646 x 674
Weight (kg)	Wet: 87.7 / Dry: 62.4
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)

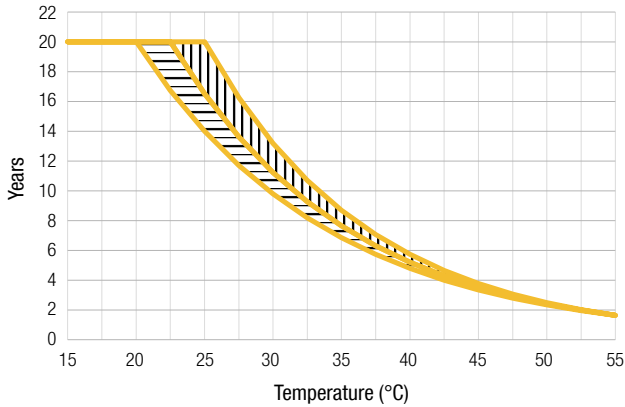
End Voltage (V/cell)	Discharge Time														
	10min	15min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	10h	12h	20h
1.60 V	1404.2	1306.4	1063.1	886.6	758.0	489.1	370.1	301.4	255.7	223.0	198.3	178.9	150.3	130.1	86.0
1.65 V	1261.5	1182.5	987.7	840.7	730.0	481.1	365.6	298.3	253.3	221.0	196.6	177.4	149.1	129.1	85.4
1.70 V	1112.8	1051.0	896.8	778.3	686.2	467.4	358.5	293.5	249.7	218.1	194.2	175.3	147.5	127.8	84.6
1.75 V	956.0	912.2	792.6	700.0	626.3	442.5	345.4	285.1	243.6	213.3	190.3	172.0	144.9	125.7	83.4
1.80 V	785.2	766.6	676.8	607.0	550.6	403.6	321.5	268.6	231.5	204.0	182.7	165.7	140.2	122.0	81.3
1.83 V	671.0	666.4	603.5	545.2	498.1	373.3	301.0	253.4	219.7	194.5	174.8	159.0	135.2	117.9	79.2
1.85 V	606.7	602.5	553.2	502.0	460.5	350.0	284.6	241.0	209.8	186.2	167.8	153.0	130.4	114.1	77.0
1.87 V	527.7	523.8	501.9	457.2	421.2	324.2	265.9	226.5	198.0	176.4	159.3	145.5	124.5	109.1	74.1
1.90 V	422.6	420.2	408.7	387.9	359.2	281.1	233.4	200.7	176.6	158.2	143.5	131.6	113.2	99.6	68.4

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

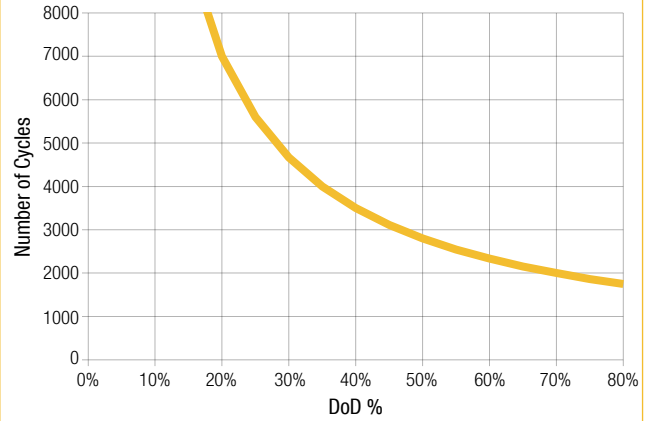
End Voltage (V/cell)	Discharge Time														
	10min	15min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	10h	12h	20h
1.60 V	2225.8	2083.2	1739.2	1487.4	1298.3	875.4	675.3	556.3	475.6	417.0	372.4	337.2	284.8	247.5	165.1
1.65 V	2060.4	1939.4	1645.2	1425.5	1257.6	862.9	668.3	551.3	471.7	413.9	369.7	334.8	282.9	245.9	164.1
1.70 V	1874.6	1772.3	1526.7	1340.3	1195.0	840.9	656.7	543.5	465.9	409.2	365.8	331.4	280.2	243.7	162.8
1.75 V	1667.0	1583.1	1381.7	1229.1	1107.5	801.2	635.0	529.3	455.5	401.1	359.2	325.8	275.9	240.2	160.7
1.80 V	1405.8	1371.0	1211.2	1090.1	992.8	739.1	595.3	501.4	434.8	384.9	346.0	314.8	267.7	233.6	157.1
1.83 V	1247.6	1232.3	1097.1	993.3	909.8	689.5	561.1	475.6	414.5	368.3	332.2	303.0	258.7	226.4	153.3
1.85 V	1123.7	1104.5	1016.2	923.5	848.9	650.8	533.3	454.2	397.2	353.9	319.8	292.3	250.2	219.5	149.4
1.87 V	999.0	992.8	931.7	849.6	783.7	607.3	501.1	429.0	376.5	336.5	304.8	279.0	239.6	210.6	144.1
1.90 V	804.9	800.3	782.9	731.6	678.0	533.0	444.3	383.4	338.6	304.0	276.5	253.9	219.1	193.3	133.5

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

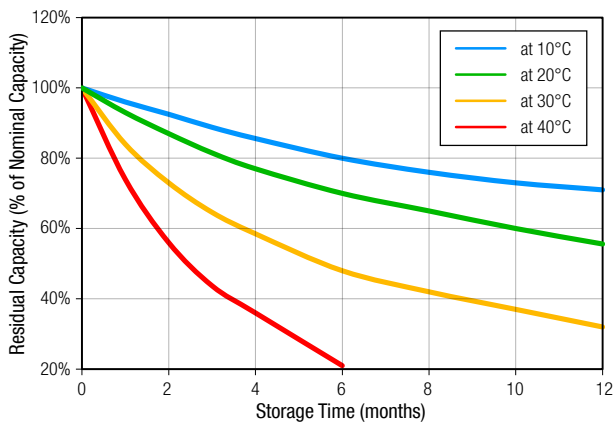
Expected Service Life vs. Operating Temperature



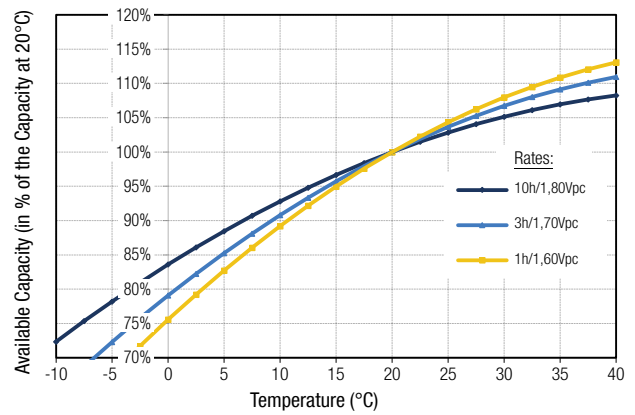
Number of Cycles vs. DOD



Self-Discharge Characteristics



Capacity vs. Temperature



Float Voltage Setting vs. Operating Temperature

