

# UP-OPzS Series

## 5 OPzS 500

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.

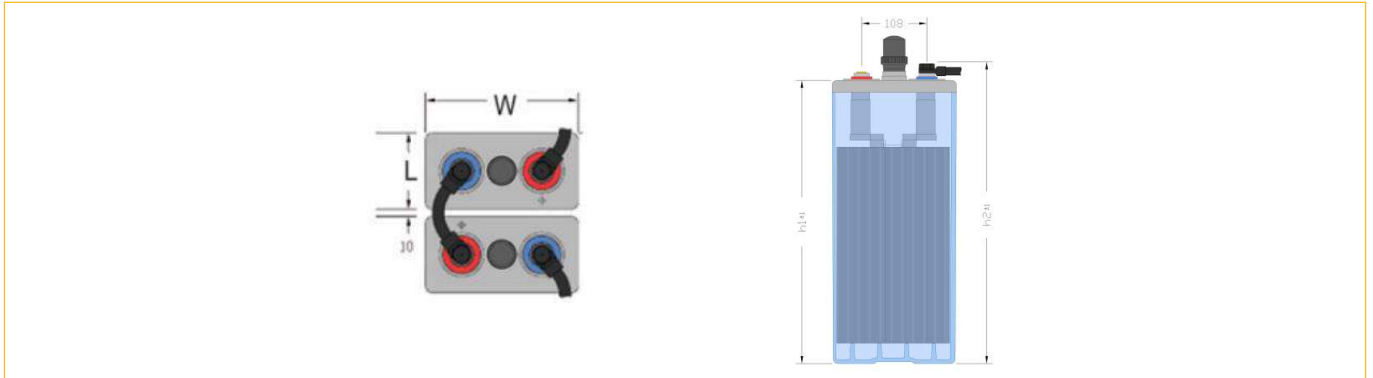
### Technical Specifications

Capacity (Ah), C100 (1,85 V/cell, 20°C)	988
Capacity (Ah), C10 (1,80 V/cell, 20°C)	659
Number of Plates (+) per Cell	5
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)	3950
Internal Resistance (mOhm)	0.510
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: 42.3 / Dry: 29.3
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)

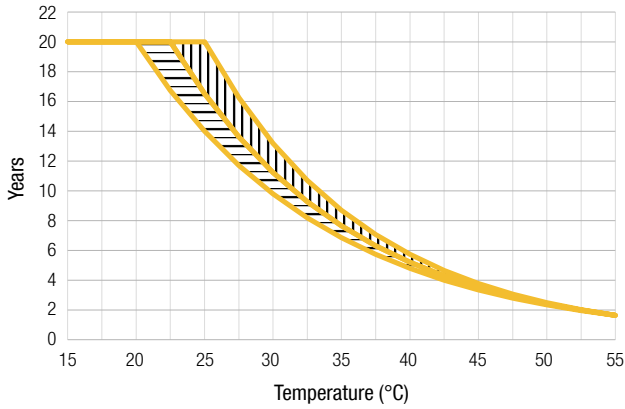
End Voltage (V/cell)	Discharge Time														
	10min	15min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	10h	12h	20h
1.60 V	646.5	600.4	487.0	405.7	347.1	225.1	171.0	139.7	118.8	103.8	92.5	83.5	70.3	61.0	40.5
1.65 V	581.6	544.9	453.9	386.1	335.2	221.7	169.1	138.4	117.8	102.9	91.7	82.9	69.8	60.5	40.2
1.70 V	514.4	484.9	413.5	358.6	316.2	215.8	166.0	136.3	116.2	101.7	90.6	81.9	69.1	59.9	39.8
1.75 V	444.6	421.5	366.3	323.7	289.7	205.1	160.4	132.7	113.6	99.6	88.9	80.5	68.0	59.0	39.3
1.80 V	366.5	355.5	313.9	281.7	255.6	187.9	150.0	125.6	108.4	95.6	85.7	77.8	65.9	57.4	38.4
1.83 V	315.4	312.6	280.3	253.5	231.8	174.2	140.9	118.8	103.2	91.5	82.3	74.9	63.8	55.7	37.5
1.85 V	281.4	276.4	257.0	233.6	214.6	163.7	133.5	113.3	98.7	87.8	79.2	72.2	61.7	54.0	36.6
1.87 V	247.4	245.7	233.4	213.1	196.6	151.9	125.0	106.7	93.5	83.4	75.4	68.9	59.1	51.8	35.3
1.90 V	195.1	193.7	191.2	181.1	168.0	132.2	110.2	95.0	83.8	75.1	68.2	62.6	54.0	47.5	32.7

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

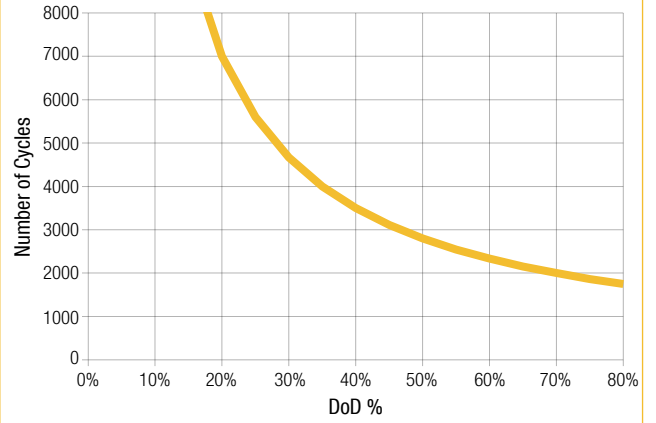
End Voltage (V/cell)	Discharge Time														
	10min	15min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	10h	12h	20h
1.60 V	1025.0	958.6	798.2	682.3	595.9	403.6	312.6	258.3	221.3	194.4	173.9	157.7	133.4	116.1	77.8
1.65 V	950.2	893.4	756.9	655.6	578.5	398.3	309.5	256.1	219.6	193.0	172.7	156.6	132.6	115.4	77.3
1.70 V	865.5	817.9	704.1	618.1	551.2	388.9	304.6	252.7	217.1	191.0	171.0	155.1	131.4	114.4	76.7
1.75 V	770.7	731.6	639.0	568.4	512.5	371.7	295.2	246.6	212.6	187.5	168.1	152.7	129.5	112.9	75.8
1.80 V	660.8	635.1	561.5	505.6	460.9	344.1	277.9	234.5	203.7	180.6	162.5	148.0	126.0	110.1	74.3
1.83 V	572.7	565.9	509.3	461.6	423.4	321.9	262.6	223.1	194.7	173.3	156.5	142.9	122.1	107.0	72.6
1.85 V	521.8	518.3	472.2	429.7	395.6	304.4	250.2	213.5	187.0	166.9	151.0	138.1	118.4	104.0	71.0
1.87 V	460.6	456.3	433.4	396.0	365.7	284.6	235.6	202.2	177.8	159.1	144.3	132.2	113.7	100.1	68.7
1.90 V	374.1	372.0	362.0	341.6	317.1	250.6	209.7	181.4	160.5	144.4	131.4	120.8	104.4	92.3	63.9

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

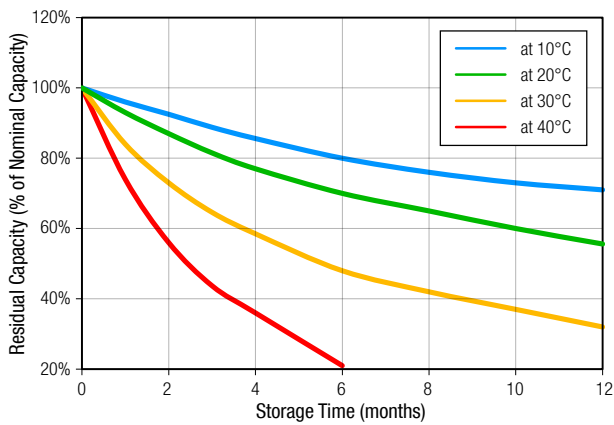
Expected Service Life vs. Operating Temperature



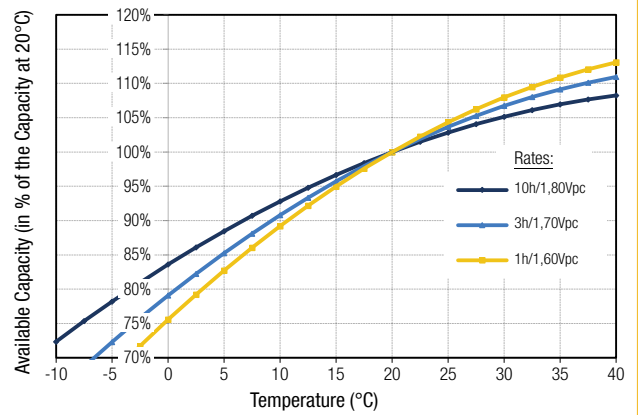
Number of Cycles vs. DOD



Self-Discharge Characteristics



Capacity vs. Temperature



Float Voltage Setting vs. Operating Temperature

