

# UP-OPzS Series

## 6 OPzS 420

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.

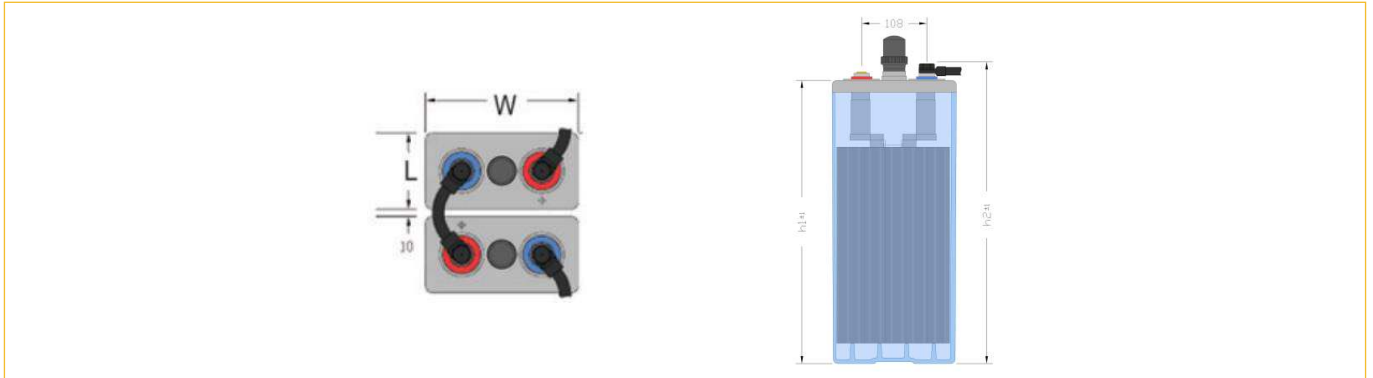
### Technical Specifications

Capacity (Ah), C100 (1,85 V/cell, 20°C)	750
Capacity (Ah), C10 (1,80 V/cell, 20°C)	500
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)	4400
Internal Resistance (mOhm)	0.460
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 471 x 499
Weight (kg)	Wet: 33.5 / Dry: 24.2
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)

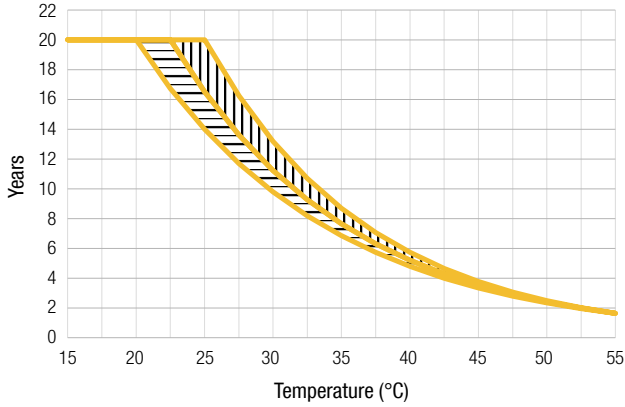
End Voltage (V/cell)	Discharge Time														
	10min	15min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	10h	12h	20h
1.60 V	628.3	572.9	442.9	356.7	298.7	186.0	138.1	111.0	93.3	80.9	71.5	64.3	53.6	46.1	30.1
1.65 V	566.0	521.2	416.0	342.9	290.9	183.5	136.6	109.9	92.5	80.2	70.9	63.7	53.2	45.8	29.8
1.70 V	500.7	464.9	381.1	321.0	276.9	179.3	134.3	108.3	91.3	79.2	70.1	63.0	52.6	45.3	29.5
1.75 V	433.0	404.7	339.2	291.5	255.2	171.4	130.1	105.5	89.2	77.5	68.7	61.8	51.7	44.5	29.1
1.80 V	362.0	341.4	291.1	254.5	226.1	157.4	121.8	99.9	85.1	74.3	66.1	59.6	50.0	43.2	28.3
1.83 V	317.8	302.4	260.0	229.1	205.3	145.9	114.2	94.4	80.8	70.9	63.2	57.2	48.1	41.7	27.5
1.85 V	283.4	274.9	238.4	211.2	190.0	137.0	108.1	89.8	77.2	67.8	60.6	54.9	46.3	40.2	26.7
1.87 V	248.8	246.5	216.3	192.4	173.8	127.0	101.0	84.4	72.8	64.1	57.5	52.1	44.1	38.4	25.6
1.90 V	195.6	193.6	182.3	163.1	148.2	110.1	88.6	74.7	64.8	57.3	51.6	46.9	39.9	34.8	23.4

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

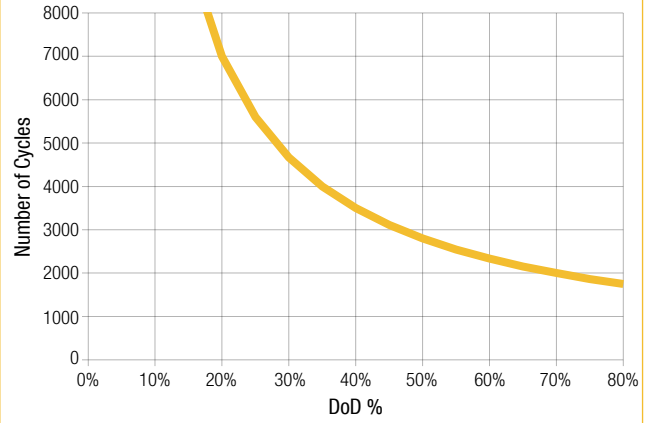
End Voltage (V/cell)	Discharge Time														
	10min	15min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	10h	12h	20h
1.60 V	999.3	919.2	734.9	609.2	520.7	336.9	254.2	206.2	174.6	151.9	134.9	121.5	101.8	87.9	57.7
1.65 V	926.4	858.0	699.8	589.1	508.6	332.9	251.8	204.5	173.2	150.8	133.9	120.7	101.1	87.3	57.3
1.70 V	843.8	786.0	652.9	557.9	487.4	326.1	248.0	201.9	171.2	149.2	132.5	119.4	100.1	86.5	56.8
1.75 V	751.3	703.3	593.7	514.8	454.7	313.0	240.9	197.2	167.7	146.4	130.2	117.5	98.6	85.2	56.1
1.80 V	648.8	610.1	522.0	458.5	409.7	290.1	226.9	187.5	160.5	140.7	125.6	113.5	95.6	82.8	54.7
1.83 V	581.0	549.3	473.2	418.5	376.2	271.0	214.1	178.1	153.1	134.7	120.5	109.2	92.3	80.1	53.2
1.85 V	519.9	506.6	438.6	389.3	351.2	256.0	203.5	170.1	146.7	129.4	115.9	105.2	89.1	77.5	51.7
1.87 V	466.7	456.2	402.0	358.2	324.3	238.8	191.2	160.5	138.9	122.8	110.3	100.2	85.1	74.2	49.7
1.90 V	375.2	372.4	344.0	308.1	280.2	209.3	169.3	143.1	124.5	110.5	99.6	90.7	77.3	67.6	45.7

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

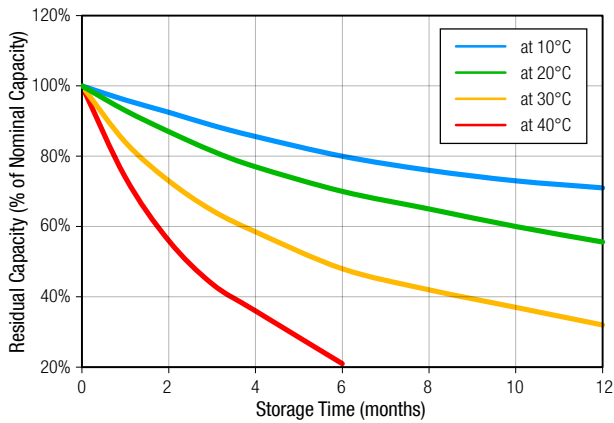
Expected Service Life vs. Operating Temperature



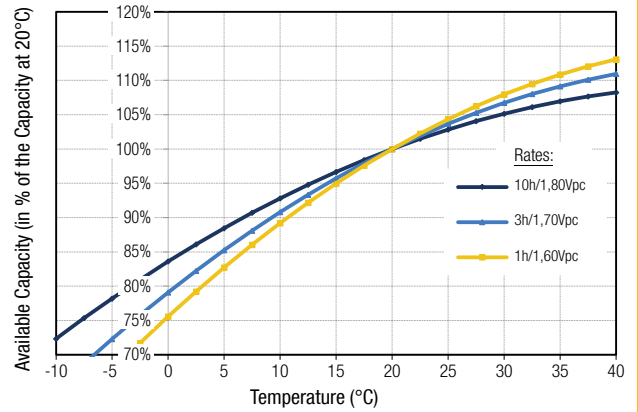
Number of Cycles vs. DOD



Self-Discharge Characteristics



Capacity vs. Temperature



Float Voltage Setting vs. Operating Temperature

