

UP-OPzS Series

3 OPzS 150

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.

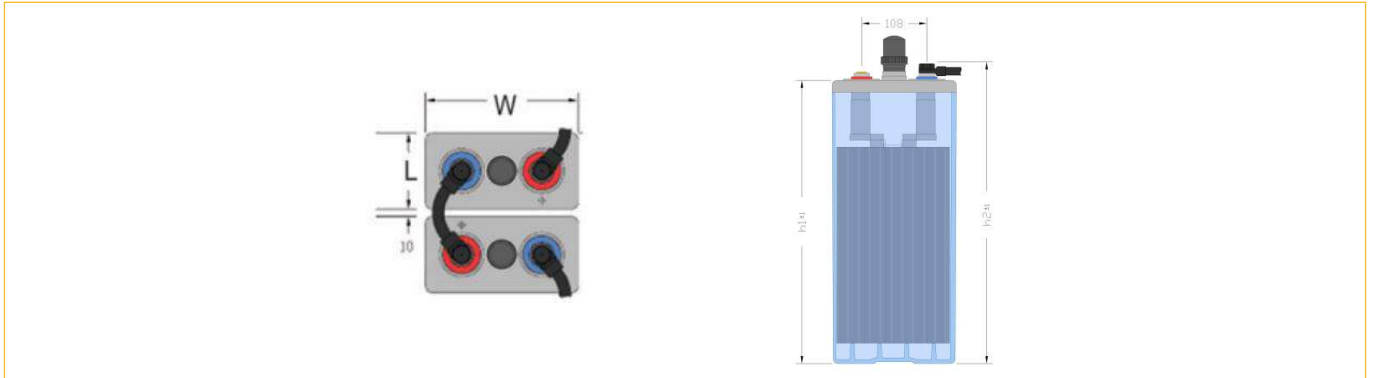
Technical Specifications

Capacity (Ah), C100 (1,85 V/cell, 20°C)	231
Capacity (Ah), C10 (1,80 V/cell, 20°C)	187
Number of Plates (+) per Cell	3
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)	2120
Internal Resistance (mOhm)	0.950
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	103 x 206 x 355 x 383
Weight (kg)	Wet: 15.6 / Dry: 10.6
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)

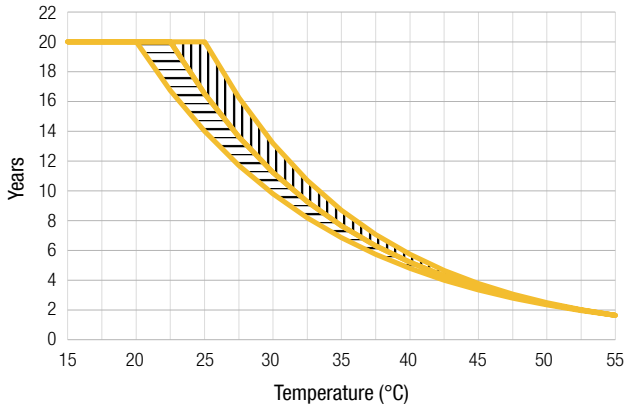
End Voltage (V/cell)	Discharge Time														
	10min	15min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	10h	12h	20h
1.60 V	253.8	218.2	152.7	119.9	100.1	63.6	48.1	39.1	33.2	29.0	25.8	23.3	19.6	17.0	11.3
1.65 V	235.9	206.7	149.7	118.4	99.1	63.1	47.8	38.9	33.0	28.8	25.7	23.2	19.5	16.9	11.2
1.70 V	214.1	191.1	143.8	115.7	97.5	62.5	47.3	38.6	32.8	28.6	25.4	23.0	19.3	16.8	11.2
1.75 V	189.6	171.7	133.9	110.2	94.1	61.3	46.6	38.0	32.3	28.2	25.1	22.7	19.1	16.6	11.0
1.80 V	162.7	149.0	120.0	101.0	87.6	58.9	45.2	37.1	31.6	27.6	24.6	22.2	18.7	16.3	10.9
1.83 V	145.7	134.2	109.8	93.7	82.1	56.3	43.6	36.0	30.8	27.0	24.1	21.8	18.4	16.0	10.7
1.85 V	134.1	123.9	102.4	88.1	77.7	54.0	42.2	34.9	29.9	26.3	23.5	21.3	18.0	15.7	10.5
1.87 V	122.2	113.4	94.5	81.9	72.7	51.3	40.3	33.5	28.8	25.4	22.7	20.6	17.5	15.2	10.2
1.90 V	101.4	97.1	81.9	71.7	64.1	46.2	36.8	30.8	26.6	23.5	21.1	19.2	16.3	14.3	9.7

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

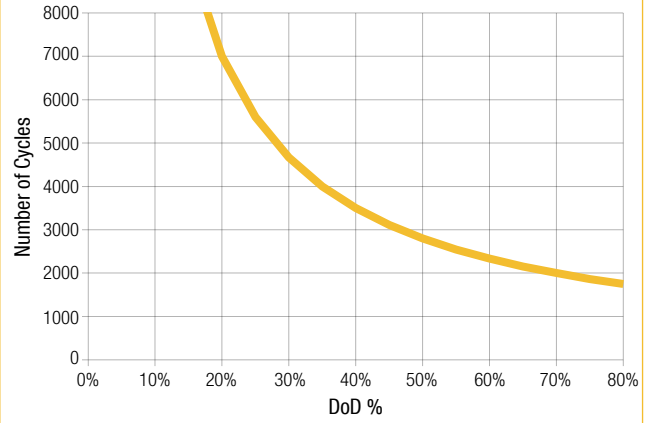
End Voltage (V/cell)	Discharge Time														
	10min	15min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	10h	12h	20h
1.60 V	411.2	361.6	265.9	213.8	181.2	118.2	90.5	74.1	63.3	55.4	49.4	44.7	37.7	32.8	22.0
1.65 V	389.8	346.8	261.3	211.5	179.6	117.5	90.0	73.7	62.9	55.1	49.2	44.5	37.6	32.6	21.9
1.70 V	362.5	326.3	252.3	207.1	176.9	116.4	89.2	73.2	62.5	54.7	48.8	44.2	37.3	32.4	21.7
1.75 V	329.2	299.5	237.6	198.4	171.4	114.4	88.0	72.3	61.8	54.1	48.3	43.7	36.9	32.1	21.5
1.80 V	290.4	266.4	216.5	184.0	160.9	110.3	85.6	70.6	60.4	53.0	47.4	42.9	36.3	31.6	21.2
1.83 V	264.4	243.8	200.6	172.3	151.9	105.8	82.8	68.7	59.0	51.9	46.4	42.1	35.6	31.0	20.9
1.85 V	246.1	227.5	188.7	163.1	144.6	102.0	80.2	66.8	57.5	50.6	45.4	41.2	35.0	30.5	20.6
1.87 V	226.8	210.3	175.7	152.9	136.2	97.2	76.9	64.3	55.5	49.0	44.0	40.0	34.0	29.7	20.1
1.90 V	191.2	183.0	154.5	135.5	121.5	88.3	70.6	59.4	51.5	45.6	41.0	37.4	31.9	27.9	19.0

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

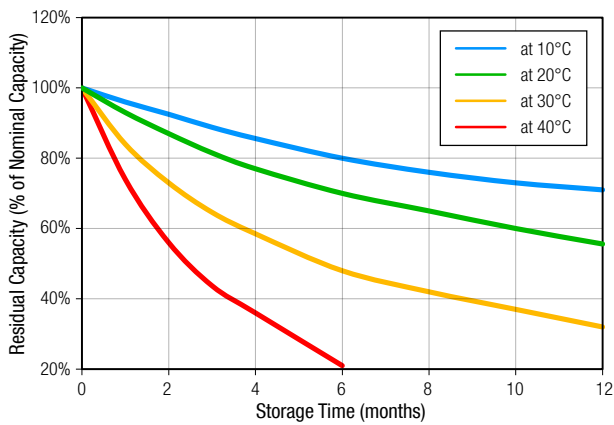
Expected Service Life vs. Operating Temperature



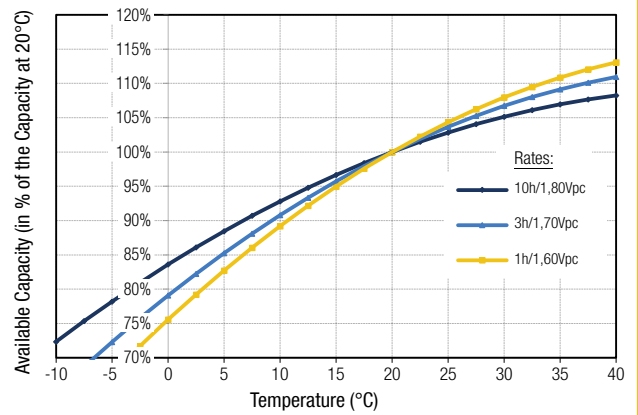
Number of Cycles vs. DOD



Self-Discharge Characteristics



Capacity vs. Temperature



Float Voltage Setting vs. Operating Temperature

