STATIONARY Valve Regulated Tubular Plate

Upower
Unlimited power

UP-OPzS Series

2 OPzS 100

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)	190
Capacity (Ah), C10 (1,80 V/cell, 20°C)	131
Number of Plates (+) per Cell	2
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)	1420
Internal Resistance (mOhm)	1.430
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: 13.4 / Dry: 8.2
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.*

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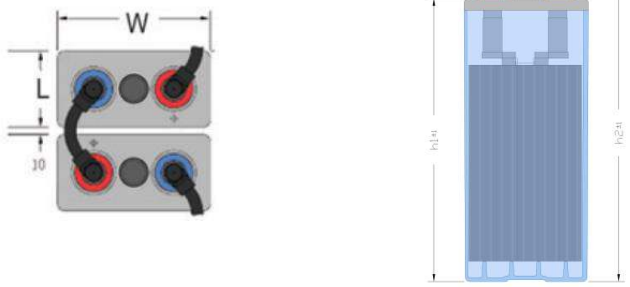
2 OPzS 100

Dimensions



Constant Current Discharge in A (at 20°C)

Discharge Time															
End Voltage (V/cell)	10min	15min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	10h	12h	20h
1.60 V	172.9	149.9	106.1	83.4	69.8	44.4	33.6	27.4	23.3	20.3	18.1	16.3	13.7	11.9	7.9
1.65 V	160.1	141.5	103.8	82.3	69.0	44.1	33.4	27.2	23.1	20.2	18.0	16.2	13.6	11.8	7.9
1.70 V	145.0	130.3	99.3	80.3	67.8	43.6	33.1	27.0	22.9	20.0	17.8	16.1	13.5	11.7	7.8
1.75 V	128.1	116.6	92.1	76.2	65.3	42.8	32.6	26.6	22.6	19.8	17.6	15.9	13.4	11.6	7.7
1.80 V	109.8	101.0	82.2	69.7	60.7	41.0	31.6	25.9	22.1	19.3	17.2	15.6	13.1	11.4	7.6
1.83 V	98.2	90.9	75.1	64.5	56.8	39.2	30.5	25.2	21.5	18.9	16.9	15.3	12.9	11.2	7.5
1.85 V	90.3	83.9	70.0	60.6	53.6	37.6	29.5	24.4	21.0	18.4	16.5	14.9	12.6	11.0	7.4
1.87 V	82.3	76.7	64.5	56.3	50.1	35.7	28.1	23.4	20.2	17.8	15.9	14.5	12.3	10.7	7.2
1.90 V	67.4	65.2	55.8	49.1	44.2	32.1	25.7	21.5	18.6	16.5	14.8	13.5	11.5	10.0	6.8

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

Discharge Time															
End Voltage (V/cell)	10min	15min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	10h	12h	20h
1.60 V	279.3	247.2	183.8	148.3	125.9	82.4	63.2	51.8	44.2	38.8	34.6	31.3	26.4	23.0	15.4
1.65 V	264.2	236.6	180.3	146.6	124.7	81.9	62.8	51.5	44.0	38.6	34.4	31.2	26.3	22.9	15.3
1.70 V	245.2	222.1	173.6	143.3	122.7	81.1	62.3	51.1	43.7	38.3	34.2	30.9	26.1	22.7	15.2
1.75 V	222.5	203.4	163.1	136.9	118.7	79.7	61.4	50.5	43.2	37.9	33.8	30.6	25.9	22.5	15.1
1.80 V	196.0	180.6	148.2	126.7	111.2	76.7	59.7	49.3	42.3	37.1	33.2	30.1	25.4	22.1	14.9
1.83 V	178.3	165.0	137.1	118.5	104.8	73.6	57.8	48.0	41.3	36.3	32.5	29.5	25.0	21.8	14.6
1.85 V	165.8	153.9	128.8	112.0	99.7	70.9	56.0	46.7	40.2	35.5	31.8	28.9	24.5	21.4	14.4
1.87 V	152.8	142.2	119.9	104.9	93.8	67.6	53.7	45.0	38.9	34.4	30.9	28.1	23.9	20.9	14.1
1.90 V	127.1	123.5	105.3	92.8	83.6	61.4	49.3	41.5	36.1	32.0	28.8	26.3	22.4	19.7	13.4

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

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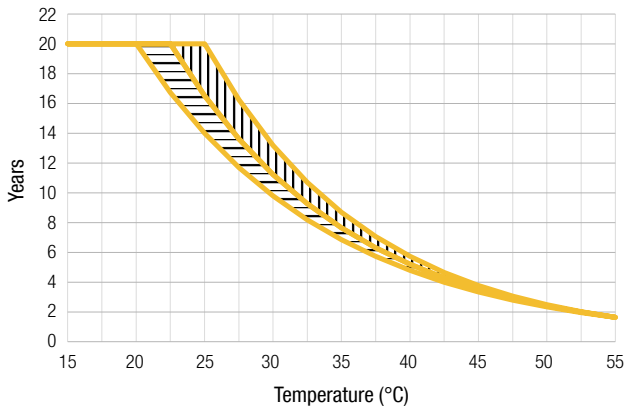
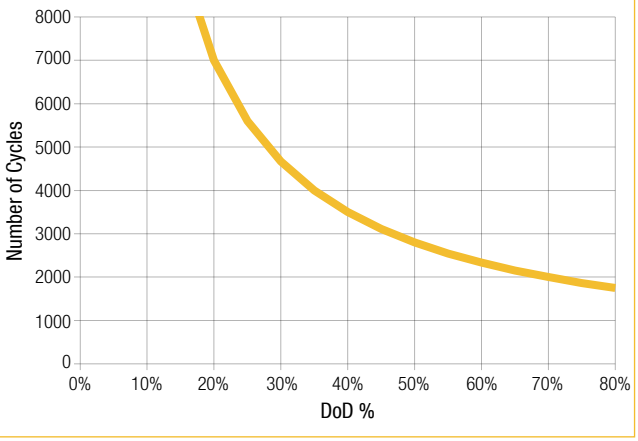
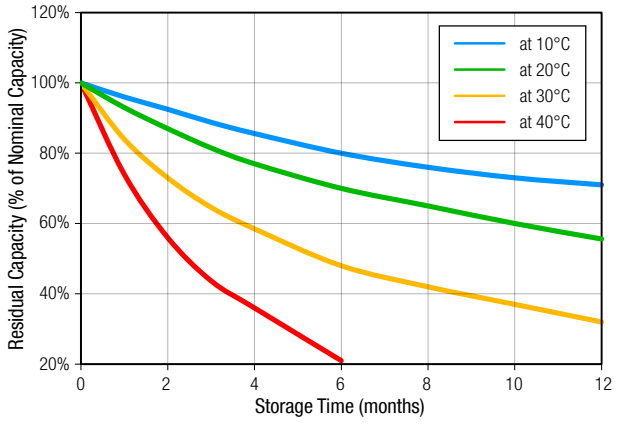
Expected Service Life vs. Operating Temperature



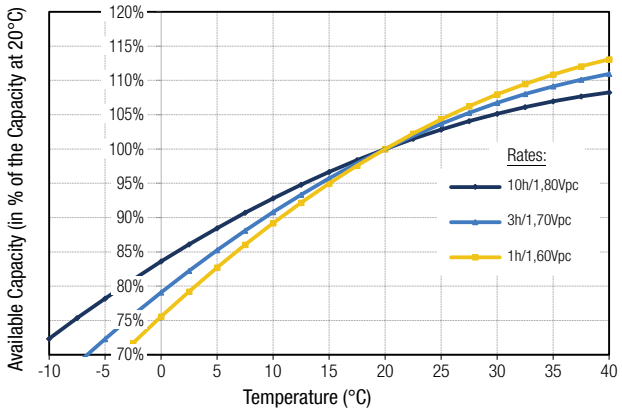
Number of Cycles vs. DOD



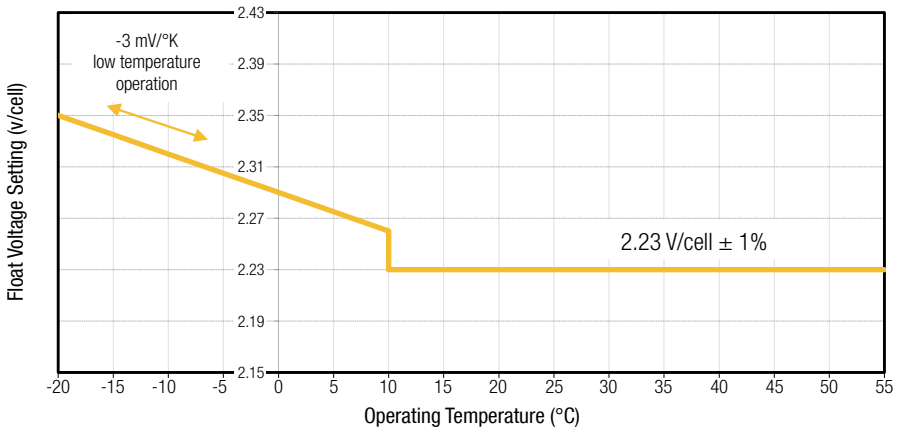
Self-Discharge Characteristics



Capacity vs. Temperature



Float Voltage Setting vs. Operating Temperature



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