STATIONARY Valve Regulated Tubular Plate

Upower
Unlimited power

UP-OPzS Series

10 OPzS 1000

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)	1671
Capacity (Ah), C10 (1,80 V/cell, 20°C)	1114
Number of Plates (+) per Cell	10
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)	8100
Internal Resistance (mOhm)	0.250
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	233 x 210 x 646 x 674
Weight (kg)	Wet: 77.6 / Dry: 56.7
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.*

MASTER BATTERY

Paseo de Extremadura, 39 - 28935 Móstoles - Madrid (Spain)
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info@masterbattery.es - www.masterbattery.es/en

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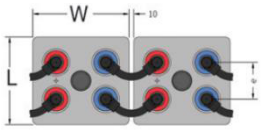
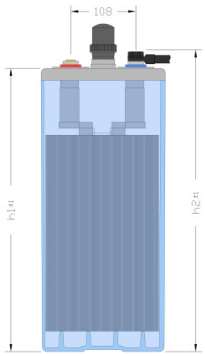
Dimensions





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	1313.8	1211.0	964.8	793.2	672.4	428.2	322.2	261.4	221.1	192.4	170.8	153.9	129.0	111.5	73.4
1.65 V	1183.0	1100.7	901.0	756.5	650.7	421.7	318.4	258.7	219.0	190.7	169.4	152.6	128.0	110.7	72.9
1.70 V	1045.2	980.2	822.4	704.3	615.1	410.7	312.6	254.7	216.0	188.3	167.3	150.9	126.6	109.5	72.2
1.75 V	903.9	853.0	730.0	637.1	564.7	390.7	302.0	247.8	210.9	184.3	164.0	148.1	124.5	107.8	71.2
1.80 V	756.7	720.4	626.5	555.5	499.4	358.2	282.3	234.2	201.0	176.5	157.7	142.8	120.5	104.6	69.4
1.83 V	652.2	637.0	559.8	500.5	453.4	332.5	265.0	221.5	191.1	168.6	151.1	137.2	116.2	101.2	67.5
1.85 V	580.8	569.4	513.8	461.7	420.2	312.5	251.1	211.0	182.7	161.6	145.2	132.1	112.2	97.9	65.7
1.87 V	512.6	508.9	467.0	421.5	385.2	290.3	235.1	198.7	172.8	153.3	138.0	125.8	107.2	93.7	63.3
1.90 V	406.9	402.5	394.5	358.8	329.8	252.9	207.3	176.8	154.7	137.9	124.7	114.0	97.6	85.7	58.4

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	2083.9	1937.1	1588.3	1341.4	1161.1	770.9	590.7	484.2	412.6	360.9	321.7	290.8	245.0	212.5	141.1
1.65 V	1933.3	1806.5	1507.6	1290.6	1128.8	760.7	584.8	480.0	409.3	358.3	319.4	288.8	243.4	211.2	140.3
1.70 V	1760.7	1654.6	1404.1	1218.1	1076.6	743.0	575.3	473.5	404.4	354.3	316.1	285.9	241.1	209.3	139.1
1.75 V	1568.7	1481.2	1275.3	1121.7	1002.1	710.6	557.6	461.8	395.8	347.5	310.5	281.2	237.5	206.3	137.4
1.80 V	1353.3	1286.4	1121.7	999.1	902.5	658.1	524.5	438.7	378.6	334.0	299.5	271.9	230.5	200.7	134.3
1.83 V	1182.1	1159.3	1018.1	912.7	829.5	615.8	495.4	416.9	361.5	320.1	287.9	262.0	222.9	194.6	131.0
1.85 V	1066.4	1061.5	944.4	850.2	775.5	582.5	471.7	398.7	346.8	307.9	277.4	252.9	215.7	188.7	127.6
1.87 V	956.6	943.4	867.2	783.6	717.5	544.8	444.2	377.3	329.4	293.1	264.7	241.7	206.7	181.2	123.2
1.90 V	777.6	772.6	743.8	677.0	622.8	480.0	395.4	338.4	297.1	265.5	240.6	220.4	189.3	166.5	114.2

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

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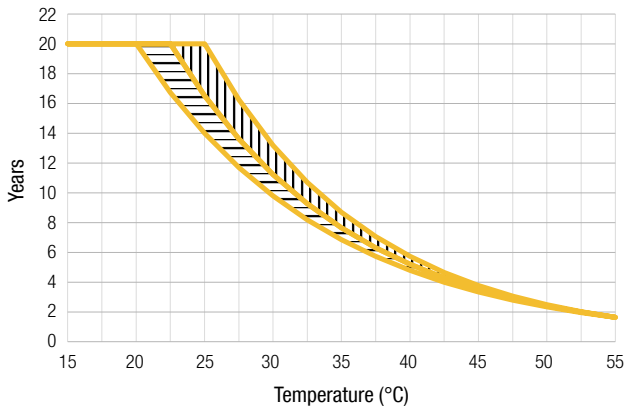
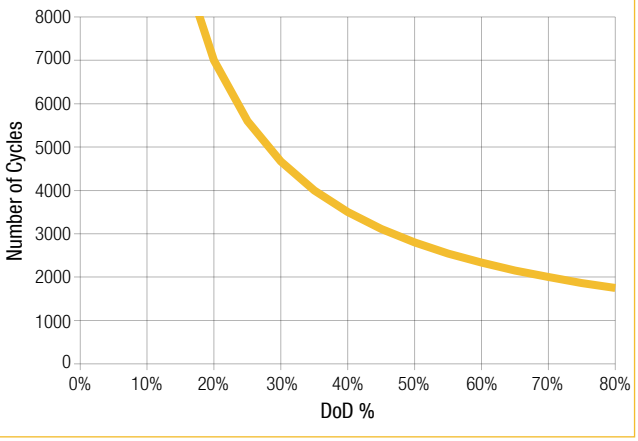
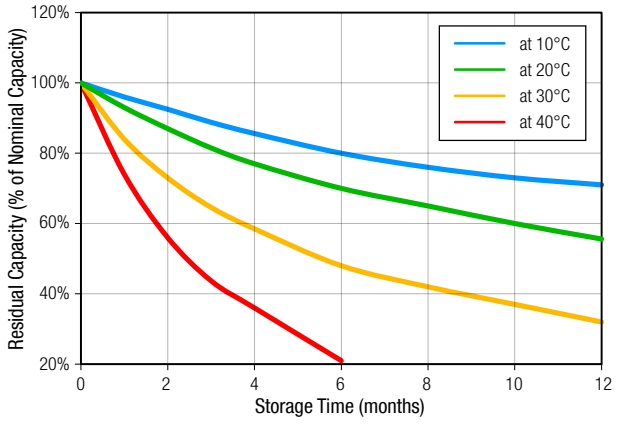
Expected Service Life vs. Operating Temperature



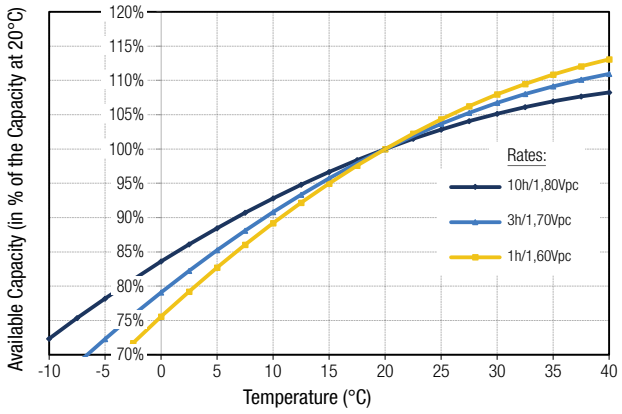
Number of Cycles vs. DOD



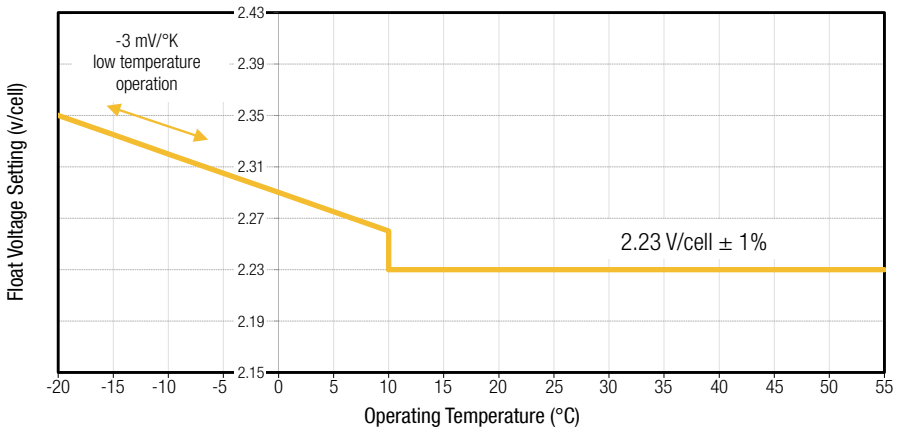
Self-Discharge Characteristics



Capacity vs. Temperature



Float Voltage Setting vs. Operating Temperature



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