STATIONARY Valve Regulated Tubular Plate

Upower
Unlimited power

UP-OPzS Series

16 OPzS 2000

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)	3279
Capacity (Ah), C10 (1,80 V/cell, 20°C)	2186
Number of Plates (+) per Cell	16
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)	12950
Internal Resistance (mOhm)	0.156
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	399 x 214 x 772 x 800
Weight (kg)	Wet: 156.2 / Dry: 111.5
Type and Number of Poles	M10 / 6
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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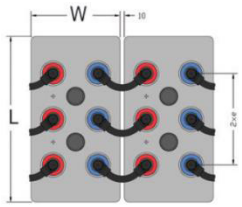
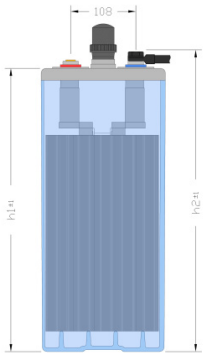
Dimensions





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	2213.5	2106.7	1821.7	1579.5	1380.6	895.1	664.6	533.2	447.9	387.6	342.4	307.3	255.8	219.9	142.6
1.65 V	1971.9	1882.3	1650.2	1453.5	1289.2	868.2	652.0	525.3	442.1	383.0	338.7	304.1	253.4	217.9	141.4
1.70 V	1728.7	1655.4	1465.9	1309.2	1176.7	823.9	630.9	512.6	433.2	376.2	333.2	299.5	249.9	215.0	139.8
1.75 V	1459.9	1422.8	1272.6	1149.1	1045.2	758.7	594.4	489.7	417.4	364.3	323.7	291.7	244.1	210.5	137.4
1.80 V	1182.9	1176.2	1071.9	977.0	896.6	673.3	539.1	450.8	388.3	341.7	305.6	276.6	233.1	201.9	133.0
1.83 V	1016.9	1008.9	948.7	868.3	801.0	612.5	497.0	419.3	363.5	321.4	288.5	262.0	221.9	193.0	128.3
1.85 V	898.7	890.7	864.9	794.5	735.2	568.2	465.1	394.7	343.6	304.9	274.4	249.7	212.3	185.0	123.8
1.87 V	795.8	792.0	768.1	719.4	667.5	521.2	430.0	367.1	321.1	285.9	258.0	235.4	200.8	175.5	118.2
1.90 V	630.6	627.7	619.3	599.9	563.6	446.2	372.0	320.4	282.1	252.5	228.9	209.6	179.8	157.9	107.7

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	3498.9	3342.9	2929.8	2582.7	2297.0	1568.2	1194.3	972.1	824.4	718.2	637.8	574.7	481.5	415.6	272.4
1.65 V	3217.7	3080.1	2721.7	2424.5	2176.9	1527.1	1174.6	959.7	815.3	711.1	632.0	569.7	477.6	412.4	270.5
1.70 V	2908.7	2790.0	2484.2	2233.7	2023.9	1459.6	1140.6	938.9	800.7	699.9	622.9	562.1	471.8	407.8	267.9
1.75 V	2553.3	2472.5	2216.0	2009.3	1836.1	1360.2	1081.7	901.0	774.0	679.7	606.9	548.9	462.1	400.1	263.7
1.80 V	2130.7	2103.3	1918.4	1751.6	1612.7	1226.2	992.1	836.4	725.0	641.1	575.5	522.7	442.8	385.0	256.0
1.83 V	1840.8	1829.4	1725.5	1581.5	1461.8	1127.8	922.5	783.4	682.6	606.1	545.9	497.3	423.1	369.2	247.6
1.85 V	1679.2	1671.2	1591.4	1462.2	1354.6	1054.5	868.7	741.4	648.5	577.5	521.3	475.7	406.0	355.1	239.5
1.87 V	1472.4	1466.1	1450.8	1337.7	1242.4	975.2	808.8	693.9	609.2	544.1	492.4	450.3	385.5	337.9	229.4
1.90 V	1200.6	1192.9	1169.3	1139.6	1064.5	845.6	707.8	611.6	540.0	484.6	440.2	403.8	347.5	305.9	210.0

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

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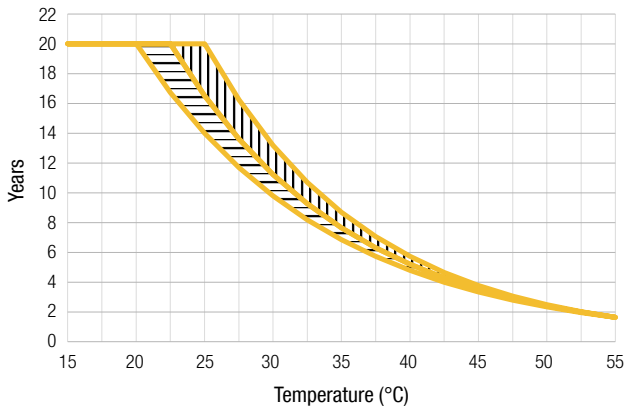
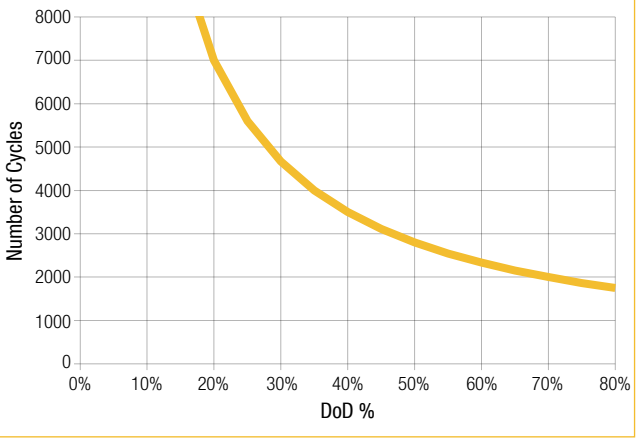
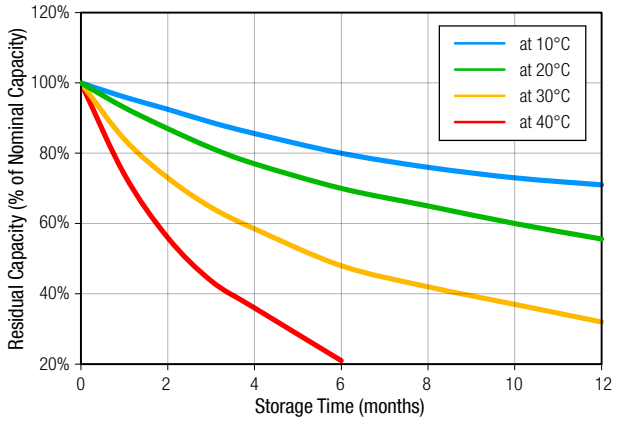
Expected Service Life vs. Operating Temperature



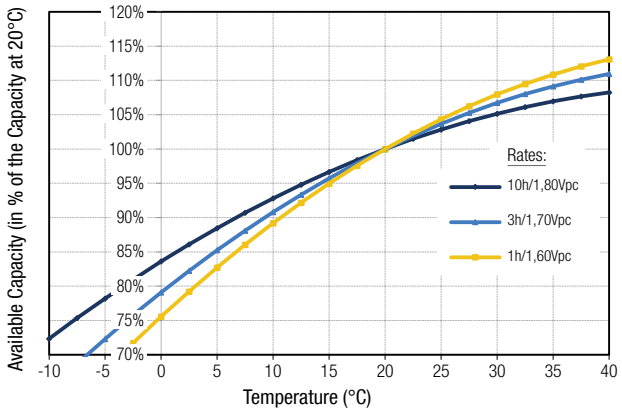
Number of Cycles vs. DOD



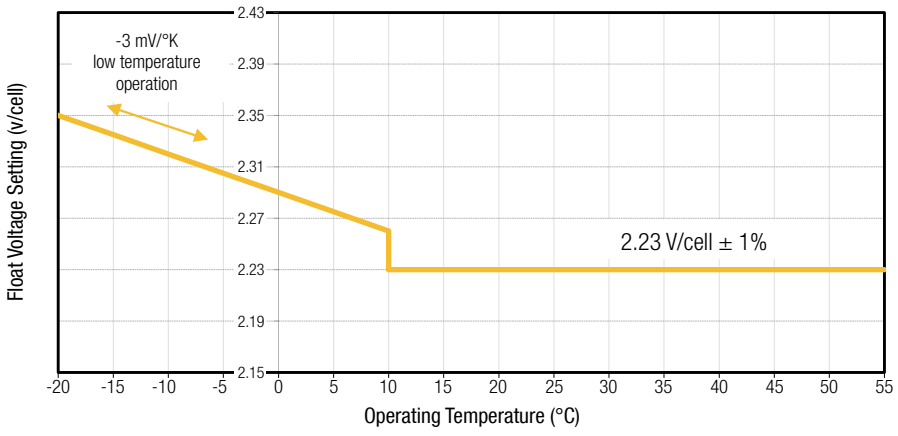
Self-Discharge Characteristics



Capacity vs. Temperature



Float Voltage Setting vs. Operating Temperature



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