

PERFORMANCE DATA OPzS Optima

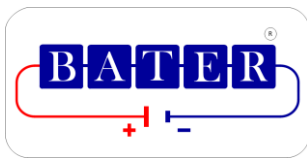
Constant current discharge (in A) @ +20°C to the end-of-discharge voltage

Ue=1.67 V/cell

No	Cell type	Discharge time										
		15'	30'	1h	2h	3h	4h	5h	6h	8h	10h	24h
1	2 OPzS 100	122.5	91.3	59.7	38.0	29.0	23.8	20.1	17.6	14.0	12.0	5.9
2	3 OPzS 150	183.8	137.0	89.6	57.0	43.5	35.8	30.1	26.4	21.0	18.0	8.9
3	4 OPzS 200	245.0	182.7	119.5	76.1	58.0	47.7	40.1	35.2	28.0	24.0	11.9
4	5 OPzS 250	304.0	225.7	148.3	93.9	71.7	58.8	49.5	43.5	34.5	29.6	14.8
5	6 OPzS 300	365.9	272.0	178.2	112.7	86.2	70.9	59.7	52.5	41.6	35.7	17.8
6	5 OPzS 350	389.6	309.9	218.1	144.9	111.8	91.3	77.3	67.4	54.5	46.1	23.5
7	6 OPzS 420	468.8	373.3	262.9	175.0	133.8	109.8	93.1	81.1	65.5	55.4	28.2
8	7 OPzS 490	547.1	435.8	306.7	204.0	156.9	128.3	108.7	94.8	76.6	64.8	32.9
9	6 OPzS 600	556.2	477.2	355.4	239.9	184.5	151.9	126.9	111.7	88.5	76.0	38.9
10	8 OPzS 800	737.8	632.8	472.9	318.6	245.1	201.9	168.4	147.8	116.5	100.9	51.8
11	10 OPzS 1000	922.7	791.9	590.3	398.7	306.8	252.7	210.5	185.7	145.7	126.3	64.5
12	12 OPzS 1200	1107.5	950.1	708.8	478.7	367.4	281.9	252.7	222.4	174.9	151.2	77.4
13	12 OPzS 1500	1199.0	1020.7	787.2	559.4	435.6	357.1	304.7	267.4	216.1	179.9	88.5
14	16 OPzS 2000	1595.9	1368.3	1049.9	747.3	580.8	476.8	406.2	356.7	289.1	240.8	119.7
15	20 OPzS 2500	2001.1	1714.2	1312.6	935.4	727.4	597.1	508.2	446.6	361.9	301.4	149.3
16	24 OPzS 3000	2401.3	2054.8	1572.4	1118.3	871.3	715.0	609.2	535.6	432.8	361.4	178.6

Ue=1.70 V/cell

No	Cell type	Discharge time										
		15'	30'	1h	2h	3h	4h	5h	6h	8h	10h	24h
1	2 OPzS 100	116.9	85.1	55.7	35.6	27.2	22.3	18.8	16.5	13.1	11.2	5.6
2	3 OPzS 150	175.4	127.6	83.6	53.4	40.7	33.5	28.2	24.8	19.7	16.8	8.3
3	4 OPzS 200	233.9	170.2	111.5	71.2	54.3	44.7	37.6	33.0	26.2	22.5	11.1
4	5 OPzS 250	292.6	213.0	140.3	89.0	67.9	55.8	46.9	41.3	32.7	28.0	14.0
5	6 OPzS 300	351.3	255.7	168.2	106.5	81.5	67.0	56.4	49.6	39.3	33.7	16.8
6	5 OPzS 350	346.4	261.7	190.1	126.4	97.5	79.6	67.4	58.8	47.5	40.2	20.5
7	6 OPzS 420	416.0	314.5	227.9	152.2	116.4	95.5	80.9	70.6	57.0	48.2	24.5
8	7 OPzS 490	484.7	366.2	265.7	177.1	136.3	111.4	94.4	82.3	66.5	56.3	28.6
9	6 OPzS 600	507.6	424.9	325.4	219.9	169.1	139.2	116.3	102.4	81.1	69.7	35.7
10	8 OPzS 800	676.8	567.2	434.9	293.5	225.8	186.0	155.1	136.2	107.3	92.9	47.7
11	10 OPzS 1000	846.0	709.5	543.3	367.1	282.5	232.7	193.9	171.0	134.2	116.3	59.4
12	12 OPzS 1200	1015.2	850.8	651.8	440.7	338.2	259.6	232.7	204.8	161.0	139.2	71.3
13	12 OPzS 1500	1184.4	1005.1	778.2	553.2	430.7	353.0	301.3	264.4	213.7	177.9	87.5
14	16 OPzS 2000	1572.6	1343.4	1034.9	737.2	572.9	470.4	400.7	351.9	285.2	237.6	118.1
15	20 OPzS 2500	1970.7	1681.7	1293.6	922.3	717.2	588.7	501.1	440.4	356.8	297.2	147.2
16	24 OPzS 3000	2368.8	2020.1	1552.4	1104.3	860.4	706.1	601.6	528.9	427.4	356.8	176.4



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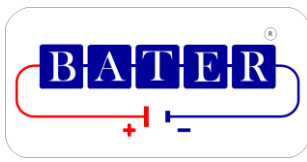
Constant current discharge (in A) @ +20°C to the end-of-discharge voltage

Ue=1.75 V/cell

No	Cell type	Discharge time										
		15'	30'	1h	2h	3h	4h	5h	6h	8h	10h	24h
1	2 OPzS 100	105.0	77.6	52.7	34.3	26.3	21.8	18.3	16.2	13.1	11.0	5.5
2	3 OPzS 150	157.5	116.4	79.1	51.5	39.5	32.7	27.5	24.3	19.7	16.6	8.2
3	4 OPzS 200	210.0	155.2	105.5	68.6	52.6	43.6	36.7	32.4	26.2	22.1	10.9
4	5 OPzS 250	262.8	194.0	132.3	85.9	65.6	54.4	45.9	40.5	32.1	27.5	13.7
5	6 OPzS 300	315.5	232.9	158.2	103.5	78.6	65.3	55.1	48.5	38.6	33.1	16.5
6	5 OPzS 350	296.6	237.8	180.1	123.4	95.3	78.4	66.6	58.0	46.8	39.7	20.2
7	6 OPzS 420	355.3	285.6	215.9	148.2	114.4	94.1	79.9	69.6	56.3	47.5	24.1
8	7 OPzS 490	415.0	333.4	251.8	173.1	133.3	109.4	93.3	81.1	65.6	55.5	28.2
9	6 OPzS 600	440.9	380.1	302.5	210.9	164.1	136.2	113.4	99.4	78.2	67.3	35.1
10	8 OPzS 800	588.2	506.5	403.0	281.6	219.8	182.0	151.1	132.2	103.4	89.7	46.8
11	10 OPzS 1000	734.5	633.9	504.5	352.2	274.5	226.7	188.9	166.0	129.2	112.3	58.3
12	12 OPzS 1200	881.8	760.3	605.0	421.8	329.2	272.5	226.7	198.8	156.0	134.2	70.0
13	12 OPzS 1500	987.3	863.7	701.5	518.3	411.8	342.1	291.3	257.5	208.7	174.0	85.2
14	16 OPzS 2000	1315.8	1152.3	935.4	691.5	549.1	455.5	388.8	344.0	278.3	231.6	115.1
15	20 OPzS 2500	1645.2	1439.9	1169.2	864.6	689.3	571.8	486.2	429.5	347.9	290.2	143.2
16	24 OPzS 3000	1973.7	1728.5	1402.1	1034.7	824.6	684.2	583.7	514.9	427.4	347.9	172.4

Ue=1.80 V/cell

No	Cell type	Discharge time										
		15'	30'	1h	2h	3h	4h	5h	6h	8h	10h	24h
1	2 OPzS 100	87.1	67.7	48.3	32.2	25.1	20.9	17.7	15.7	12.5	10.7	5.3
2	3 OPzS 150	130.6	101.5	72.4	48.4	37.6	31.3	26.5	23.6	18.8	16.1	8.0
3	4 OPzS 200	174.2	135.3	96.5	64.5	50.1	41.8	35.4	31.4	25.0	21.5	10.6
4	5 OPzS 250	218.0	169.2	120.4	80.6	62.7	52.2	44.2	39.3	31.3	26.8	13.3
5	6 OPzS 300	261.8	203.0	145.3	96.7	75.2	62.7	53.1	47.1	37.6	32.2	15.9
6	5 OPzS 350	248.8	208.0	161.2	115.4	91.6	75.9	64.9	56.8	45.9	38.8	19.8
7	6 OPzS 420	298.6	249.8	193.0	138.3	110.4	91.0	77.9	68.2	55.2	46.5	23.6
8	7 OPzS 490	348.4	291.6	225.9	161.2	128.3	105.4	90.9	79.5	64.3	54.3	27.6
9	6 OPzS 600	364.3	319.4	262.7	194.0	155.2	129.3	109.4	96.9	77.5	65.6	34.5
10	8 OPzS 800	485.7	425.9	350.3	258.7	206.9	173.0	146.2	129.2	103.4	87.5	46.0
11	10 OPzS 1000	607.1	532.4	437.8	323.3	258.6	215.8	183.0	161.0	129.2	109.3	57.3
12	12 OPzS 1200	728.6	638.9	525.4	388.0	310.3	258.6	218.7	193.8	155.0	131.2	68.8
13	12 OPzS 1500	811.2	737.4	620.9	476.6	384.9	322.2	277.4	245.5	198.8	167.0	81.7
14	16 OPzS 2000	1081.9	983.2	827.9	635.7	513.3	429.6	369.9	327.1	265.4	222.7	110.1
15	20 OPzS 2500	1351.6	1228.9	1034.9	793.9	641.6	538.0	463.3	409.6	332.0	278.3	136.2
16	24 OPzS 3000	1622.3	1473.7	1241.9	953.1	769.9	645.4	555.8	491.1	398.6	334.0	164.4



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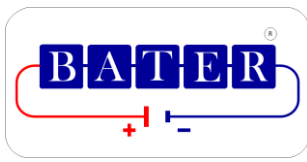
Constant current discharge (in A) @ +20°C to the end-of-discharge voltage

Ue=1.83 V/cell

No	Cell type	Discharge time										
		15'	30'	1h	2h	3h	4h	5h	6h	8h	10h	24h
1	2 OPzS 100	74.1	59.2	43.8	30.3	23.8	19.9	17.0	15.1	12.1	10.5	5.2
2	3 OPzS 150	111.2	88.8	65.7	45.5	35.7	29.9	25.5	22.7	18.2	15.7	7.8
3	4 OPzS 200	148.3	118.4	87.6	60.7	47.6	39.9	34.0	30.2	24.3	21.0	10.3
4	5 OPzS 250	185.1	148.3	109.5	75.9	59.5	49.8	42.5	37.8	30.3	26.1	13.0
5	6 OPzS 300	222.9	178.1	131.4	91.5	71.4	59.8	50.9	45.3	36.4	31.4	15.6
6	5 OPzS 350	218.0	185.1	148.3	108.4	87.5	72.8	62.7	55.0	44.4	37.4	19.1
7	6 OPzS 420	261.8	221.9	178.1	130.3	105.4	87.4	75.3	66.0	53.3	44.9	22.8
8	7 OPzS 490	305.6	258.7	208.0	152.2	122.3	101.4	87.8	77.0	62.2	52.4	26.6
9	6 OPzS 600	314.5	280.6	236.8	180.1	145.2	122.3	104.4	93.2	75.2	63.3	33.4
10	8 OPzS 800	419.0	374.2	315.4	239.8	193.0	163.1	139.2	124.3	100.4	84.4	44.5
11	10 OPzS 1000	524.5	467.7	395.1	300.5	240.7	202.9	174.0	155.1	125.2	105.4	55.4
12	12 OPzS 1200	629.0	561.2	473.7	360.2	289.5	243.7	208.8	185.9	150.1	126.2	66.5
13	12 OPzS 1500	708.7	647.8	558.3	438.8	358.1	301.3	261.5	231.6	188.8	158.0	77.6
14	16 OPzS 2000	945.5	863.7	744.3	585.0	477.5	401.8	349.0	309.2	252.5	211.7	104.0
15	20 OPzS 2500	1181.4	1079.7	930.4	731.3	596.8	503.2	435.5	385.7	315.1	264.4	129.3
16	24 OPzS 3000	1418.3	1296.6	1115.5	876.5	716.2	603.7	523.0	463.3	378.7	317.1	155.7

Ue=1.85 V/cell

No	Cell type	Discharge time										
		15'	30'	1h	2h	3h	4h	5h	6h	8h	10h	24h
1	2 OPzS 100	65.7	53.7	40.2	28.9	22.8	19.2	16.5	14.8	11.8	10.2	5.0
2	3 OPzS 150	98.5	80.6	60.3	43.3	34.2	28.9	24.8	22.1	17.7	15.3	7.5
3	4 OPzS 200	131.4	107.5	80.4	57.7	45.6	38.5	33.0	29.5	23.6	20.4	10.0
4	5 OPzS 250	164.2	134.3	100.5	72.1	57.0	48.0	41.3	36.9	29.4	25.5	14.5
5	6 OPzS 300	197.1	161.2	120.4	86.6	68.3	57.7	49.5	44.3	35.4	30.6	17.4
6	5 OPzS 350	199.1	170.2	138.3	103.5	83.5	69.8	60.4	53.1	43.0	36.2	20.2
7	6 OPzS 420	238.9	204.0	166.2	124.4	99.5	83.7	72.5	63.7	51.6	43.4	24.3
8	7 OPzS 490	278.7	237.8	194.0	145.3	116.4	97.8	84.5	74.4	60.2	50.7	28.4
9	6 OPzS 600	284.7	254.7	219.9	167.1	136.3	117.4	100.4	90.1	72.6	61.5	34.4
10	8 OPzS 800	379.2	339.3	293.6	222.9	182.0	156.1	134.2	120.3	96.7	82.0	45.9
11	10 OPzS 1000	474.8	424.9	366.2	278.6	226.8	193.9	166.0	149.1	120.3	101.4	57.2
12	12 OPzS 1200	569.3	509.5	439.8	334.3	273.5	233.7	199.9	178.9	144.1	122.3	68.5
13	12 OPzS 1500	644.0	595.1	517.5	407.9	335.2	283.4	245.6	218.7	179.9	151.1	85.5
14	16 OPzS 2000	858.9	793.1	690.6	544.2	446.6	377.9	327.1	291.3	239.5	201.8	114.0
15	20 OPzS 2500	1072.9	991.1	862.8	680.5	558.0	471.4	409.7	364.8	300.2	252.5	142.0
16	24 OPzS 3000	1287.9	1190.1	1035.9	815.8	669.4	565.9	491.2	437.4	359.8	303.2	171.0



PERFORMANCE DATA OPzS Optima

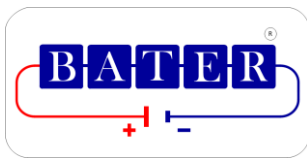
Constant current discharge (in A) @ +20°C to the end-of-discharge voltage

Ue=1.87 V/cell

No	Cell type	Discharge time										
		15'	30'	1h	2h	3h	4h	5h	6h	8h	10h	24h
1	2 OPzS 100	57.2	47.8	36.9	27.5	21.9	18.3	15.8	14.1	11.4	9.9	4.8
2	3 OPzS 150	85.8	71.6	55.4	41.2	32.8	27.5	23.6	21.2	17.1	14.8	7.2
3	4 OPzS 200	114.5	95.5	73.8	54.9	43.8	36.7	31.5	28.2	22.9	19.8	9.6
4	5 OPzS 250	143.3	119.4	92.3	68.6	54.7	45.8	39.5	35.3	28.5	24.8	12.2
5	6 OPzS 300	172.2	143.3	110.5	82.4	65.7	55.0	47.3	42.3	34.2	29.7	14.6
6	5 OPzS 350	179.2	155.2	128.4	97.5	78.4	66.0	57.3	50.6	41.1	34.7	17.5
7	6 OPzS 420	215.0	186.1	153.2	117.4	94.1	79.3	68.8	60.7	49.4	41.6	20.9
8	7 OPzS 490	250.8	216.9	179.1	136.3	109.4	92.5	80.2	70.9	57.6	48.6	24.4
9	6 OPzS 600	251.8	229.9	199.0	156.2	128.3	110.4	95.8	85.0	68.3	58.5	31.0
10	8 OPzS 800	336.4	306.5	265.7	207.9	172.1	147.2	127.3	113.3	90.9	78.1	41.3
11	10 OPzS 1000	420.0	383.1	331.4	260.7	214.9	184.0	159.1	142.2	113.3	97.6	51.4
12	12 OPzS 1200	504.6	459.7	398.0	312.4	257.6	220.8	191.9	170.0	136.2	117.3	61.7
13	12 OPzS 1500	579.3	537.4	468.7	371.1	309.4	264.5	231.7	206.8	171.0	143.1	68.7
14	16 OPzS 2000	772.4	716.5	624.9	495.5	412.8	353.0	309.2	276.4	227.6	191.8	93.1
15	20 OPzS 2500	965.4	895.6	781.2	618.8	515.3	441.6	386.8	345.0	285.2	239.6	115.2
16	24 OPzS 3000	1158.5	1074.7	938.4	743.2	618.7	529.1	464.3	414.5	341.9	287.3	138.4

Ue=1.90 V/cell

No	Cell type	Discharge time										
		15'	30'	1h	2h	3h	4h	5h	6h	8h	10h	24h
1	2 OPzS 100	45.1	40.0	32.2	24.2	19.8	16.9	14.6	13.1	10.6	9.2	4.4
2	3 OPzS 150	67.6	60.0	48.3	36.3	29.7	25.4	21.8	19.6	15.9	13.8	6.6
3	4 OPzS 200	90.2	80.0	64.4	48.4	39.6	33.8	29.1	26.1	21.2	18.4	8.8
4	5 OPzS 250	112.5	99.5	80.5	60.5	49.4	42.3	36.4	32.7	26.5	23.1	11.2
5	6 OPzS 300	135.4	120.4	96.6	72.5	59.4	50.7	43.7	39.3	31.8	27.6	13.4
6	5 OPzS 350	146.3	130.4	109.5	84.6	69.4	58.9	51.5	45.9	37.6	31.8	15.9
7	6 OPzS 420	175.2	157.2	131.4	101.5	83.3	70.7	61.8	55.1	45.1	38.2	18.9
8	7 OPzS 490	205.0	183.1	153.2	118.4	97.2	82.4	72.2	64.2	52.6	44.5	22.1
9	6 OPzS 600	210.0	189.1	168.2	135.3	112.4	98.0	85.3	76.2	62.4	53.9	28.3
10	8 OPzS 800	279.7	252.8	224.9	180.1	150.2	130.3	113.4	101.4	83.3	71.9	37.8
11	10 OPzS 1000	350.3	316.4	280.6	225.8	187.0	163.1	142.2	127.2	104.4	89.9	47.0
12	12 OPzS 1200	420.0	379.1	337.3	270.6	224.8	195.9	170.0	152.1	124.2	107.4	56.4
13	12 OPzS 1500	477.7	443.8	394.1	322.3	272.5	233.7	204.8	184.9	154.1	130.2	61.3
14	16 OPzS 2000	637.0	592.1	525.4	429.8	363.1	312.3	273.4	246.5	204.7	174.0	83.1
15	20 OPzS 2500	796.2	740.4	656.8	537.2	453.6	389.8	342.0	307.2	256.4	217.7	103.2
16	24 OPzS 3000	955.5	887.6	788.1	644.7	545.1	468.4	410.6	368.8	307.1	261.4	124.4



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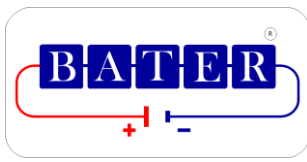
Constant power discharge in W/block (cell) @ +20°C to the end-of-discharge voltage

Ue=1.67 V/cell

No	Cell type	Discharge time										
		15'	30'	1h	2h	3h	4h	5h	6h	8h	10h	24h
1	2 OPzS 100	212.7	162.9	108.3	69.6	53.6	44.4	37.6	33.2	26.5	22.8	11.3
2	3 OPzS 150	319.1	244.3	162.4	104.4	80.5	66.6	56.5	49.8	39.8	34.1	16.9
3	4 OPzS 200	425.4	325.8	216.5	139.2	107.3	88.8	75.3	66.3	53.1	45.5	22.6
4	5 OPzS 250	527.3	401.8	267.2	172.1	132.2	110.1	92.9	82.0	65.3	56.2	28.1
5	6 OPzS 300	634.3	483.7	320.5	207.4	159.0	131.6	111.6	98.9	78.7	67.8	33.9
6	5 OPzS 350	676.3	552.7	393.9	265.9	206.5	170.0	144.8	126.6	103.1	87.4	44.8
7	6 OPzS 420	813.2	663.9	475.2	321.4	248.2	204.7	174.9	153.2	124.6	105.3	53.7
8	7 OPzS 490	950.4	776.8	554.8	374.7	289.8	239.4	203.8	178.6	145.4	122.5	62.7
9	6 OPzS 600	965.1	851.5	642.3	440.7	340.7	284.3	237.6	210.4	167.0	144.2	74.3
10	8 OPzS 800	1280.3	1126.9	852.7	584.2	451.3	376.7	316.2	279.5	221.2	191.0	98.6
11	10 OPzS 1000	1602.2	1410.6	1065.0	732.5	564.9	470.9	395.2	349.8	276.3	239.6	122.7
12	12 OPzS 1200	1922.9	1692.4	1279.1	878.6	678.5	565.0	474.1	420.1	331.4	287.2	147.3
13	12 OPzS 1500	2081.7	1819.1	1421.3	1026.3	803.8	665.8	571.2	503.7	410.1	342.8	169.1
14	16 OPzS 2000	2770.7	2437.7	1894.9	1372.5	1071.8	889.1	762.9	673.1	548.0	457.4	227.9
15	20 OPzS 2500	3473.7	3054.2	2369.8	1717.4	1339.7	1111.5	954.0	841.9	684.4	572.6	283.6
16	24 OPzS 3000	4169.0	3661.2	2838.3	2054.3	1605.6	1332.4	1142.8	1009.7	819.3	685.5	341.3

Ue=1.70 V/cell

No	Cell type	Discharge time										
		15'	30'	1h	2h	3h	4h	5h	6h	8h	10h	24h
1	2 OPzS 100	203.0	151.8	101.0	65.2	50.2	41.6	35.2	31.1	24.8	21.3	10.6
2	3 OPzS 150	304.6	227.6	151.5	97.7	75.3	62.4	52.9	46.6	37.3	32.0	15.9
3	4 OPzS 200	406.1	303.5	202.0	130.3	100.5	83.1	70.5	62.1	49.7	42.6	21.2
4	5 OPzS 250	507.6	379.1	252.8	163.2	125.3	104.4	88.1	77.7	61.9	53.3	26.7
5	6 OPzS 300	609.1	454.8	302.5	196.0	150.2	124.3	105.4	93.4	74.3	64.0	32.0
6	5 OPzS 350	601.2	466.7	343.3	231.8	180.0	148.2	126.3	110.3	89.8	76.2	39.1
7	6 OPzS 420	721.6	559.2	412.0	279.6	215.8	178.0	152.1	133.2	108.3	91.5	46.7
8	7 OPzS 490	842.0	652.8	480.6	325.3	251.7	207.9	177.0	155.1	126.2	106.4	54.5
9	6 OPzS 600	880.8	758.3	588.1	403.9	312.3	260.6	217.8	192.9	153.1	132.2	68.1
10	8 OPzS 800	1174.5	1010.0	784.1	538.2	415.8	347.1	291.3	257.5	203.7	175.9	90.9
11	10 OPzS 1000	1469.1	1263.8	980.2	674.5	520.2	433.6	363.9	322.1	254.4	220.7	113.0
12	12 OPzS 1200	1762.7	1515.5	1176.2	808.9	624.7	520.1	436.5	386.7	305.1	264.4	135.6
13	12 OPzS 1500	2056.3	1791.2	1405.1	1014.8	794.8	658.4	564.8	498.0	405.5	339.0	167.2
14	16 OPzS 2000	2730.1	2393.2	1867.8	1354.1	1057.4	877.1	752.7	664.1	540.7	451.3	224.8
15	20 OPzS 2500	3420.8	2996.2	2335.5	1693.3	1321.0	1095.9	940.6	830.1	674.9	564.6	279.6
16	24 OPzS 3000	4112.6	3599.3	2802.2	2028.6	1585.6	1315.7	1128.5	997.1	809.0	676.9	337.1



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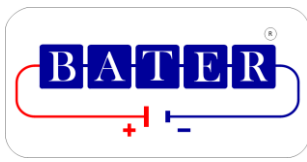
Constant power discharge in W/block (cell) @ +20°C to the end-of-discharge voltage

Ue=1.75 V/cell

No	Cell type	Discharge time										
		15'	30'	1h	2h	3h	4h	5h	6h	8h	10h	24h
1	2 OPzS 100	188.6	140.3	96.0	63.2	49.0	40.8	34.7	30.6	25.0	21.1	10.4
2	3 OPzS 150	282.9	210.5	144.0	94.8	73.6	61.2	52.0	45.9	37.5	31.6	15.6
3	4 OPzS 200	377.2	280.6	192.1	126.4	98.1	81.5	69.3	61.2	50.0	42.1	20.8
4	5 OPzS 250	467.8	350.3	239.8	158.2	122.3	101.4	86.6	76.5	61.2	52.7	26.3
5	6 OPzS 300	561.3	419.9	288.6	190.0	146.2	122.3	103.4	91.9	73.4	63.3	31.5
6	5 OPzS 350	528.5	428.9	328.4	227.8	177.1	147.2	125.3	109.4	89.2	75.7	38.7
7	6 OPzS 420	634.0	515.5	394.1	273.6	212.9	176.0	151.1	131.2	107.3	90.9	46.2
8	7 OPzS 490	739.5	601.0	459.7	319.4	248.7	204.9	176.0	153.1	125.2	106.4	53.9
9	6 OPzS 600	785.3	685.6	551.3	389.0	306.4	254.6	213.8	187.9	149.1	128.2	67.2
10	8 OPzS 800	1047.1	914.5	734.4	519.3	408.8	340.1	284.4	250.5	197.8	171.0	89.5
11	10 OPzS 1000	1308.8	1143.4	918.5	649.7	511.3	424.7	356.0	313.1	246.5	213.7	111.9
12	12 OPzS 1200	1570.6	1372.2	1102.6	780.0	612.7	510.2	427.5	376.8	296.2	257.4	133.6
13	12 OPzS 1500	1757.7	1559.3	1277.7	957.1	767.9	640.5	548.9	487.1	397.6	332.0	163.1
14	16 OPzS 2000	2343.9	2079.8	1703.6	1277.5	1023.5	854.3	732.8	650.1	529.7	443.3	219.7
15	20 OPzS 2500	2930.2	2599.2	2129.5	1595.8	1284.2	1070.1	916.7	812.2	661.9	553.7	273.4
16	24 OPzS 3000	3515.4	3118.6	2555.4	1910.2	1535.8	1281.9	1099.7	975.2	814.0	665.0	329.1

Ue=1.80 V/cell

No	Cell type	Discharge time										
		15'	30'	1h	2h	3h	4h	5h	6h	8h	10h	24h
1	2 OPzS 100	158.8	123.4	88.6	60.2	46.9	39.3	33.5	29.8	24.0	20.6	10.2
2	3 OPzS 150	238.1	185.1	132.8	90.3	70.4	59.0	50.3	44.7	35.9	30.9	15.3
3	4 OPzS 200	317.5	246.8	177.1	120.4	93.9	78.7	67.0	59.5	47.9	41.2	20.4
4	5 OPzS 250	397.1	308.5	221.9	150.2	117.4	98.4	83.8	74.5	59.9	51.4	25.7
5	6 OPzS 300	476.7	370.2	266.7	180.1	141.2	118.3	100.4	89.4	71.9	61.6	30.8
6	5 OPzS 350	453.9	380.1	296.5	214.9	172.1	143.2	123.3	107.4	87.9	74.3	38.1
7	6 OPzS 420	544.4	455.8	356.2	257.7	205.9	172.0	147.2	129.2	105.4	89.1	45.6
8	7 OPzS 490	635.0	531.4	415.0	300.5	240.7	198.9	172.0	151.1	123.2	104.4	53.2
9	6 OPzS 600	663.9	583.1	483.6	361.1	291.4	243.7	207.8	183.9	148.1	125.2	66.5
10	8 OPzS 800	885.8	777.2	644.8	481.5	387.9	325.2	276.4	245.5	197.8	168.0	88.8
11	10 OPzS 1000	1106.8	972.2	806.0	601.9	485.4	406.8	346.0	306.2	247.5	209.7	110.8
12	12 OPzS 1200	1328.7	1166.3	967.2	722.3	581.9	488.3	414.6	367.8	296.2	251.5	132.5
13	12 OPzS 1500	1479.0	1345.4	1142.4	887.5	721.2	607.6	526.0	466.2	379.7	320.1	157.9
14	16 OPzS 2000	1971.7	1794.2	1523.5	1182.9	961.9	809.5	701.0	621.3	506.9	426.4	212.4
15	20 OPzS 2500	2465.4	2243.0	1904.6	1478.4	1202.6	1013.4	877.0	776.4	634.1	532.8	262.9
16	24 OPzS 3000	2958.0	2691.7	2285.7	1774.9	1443.3	1216.3	1052.0	931.5	761.3	639.1	316.7



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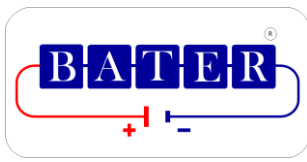
Constant power discharge in W/block (cell) @ +20°C to the end-of-discharge voltage

Ue=1.83 V/cell

No	Cell type	Discharge time										
		15'	30'	1h	2h	3h	4h	5h	6h	8h	10h	24h
1	2 OPzS 100	136.9	110.0	81.1	57.2	45.1	37.9	32.4	28.9	23.4	20.2	10.0
2	3 OPzS 150	205.3	164.9	121.7	85.8	67.7	56.9	48.6	43.3	35.0	30.3	15.0
3	4 OPzS 200	273.7	219.9	162.2	114.4	90.2	75.9	64.8	57.8	46.7	40.5	20.0
4	5 OPzS 250	341.4	274.6	203.0	142.3	112.4	94.8	80.9	72.2	58.4	50.6	25.2
5	6 OPzS 300	410.1	329.4	243.8	171.1	135.3	113.4	96.9	86.6	70.1	60.7	30.1
6	5 OPzS 350	402.1	343.3	274.6	204.0	166.1	138.2	119.3	105.4	85.4	72.3	37.0
7	6 OPzS 420	482.7	412.0	330.4	244.7	198.9	166.1	143.2	126.3	102.4	86.8	44.2
8	7 OPzS 490	562.3	480.6	385.1	285.5	231.8	192.9	167.0	147.1	119.3	101.4	51.7
9	6 OPzS 600	580.3	520.4	438.8	338.3	273.5	231.7	199.9	177.9	145.1	122.3	64.9
10	8 OPzS 800	773.3	693.6	585.1	451.7	365.1	309.3	266.5	237.6	192.8	163.0	86.4
11	10 OPzS 1000	966.4	867.7	731.4	564.1	456.6	385.9	331.1	295.2	240.5	203.8	108.0
12	12 OPzS 1200	1159.5	1040.9	877.7	676.5	547.1	463.4	397.7	354.9	288.2	243.5	128.8
13	12 OPzS 1500	1307.8	1202.1	1033.9	823.8	677.4	573.8	498.1	442.4	363.8	306.2	150.2
14	16 OPzS 2000	1742.8	1602.1	1378.2	1098.4	903.2	765.8	664.2	589.5	486.0	408.5	202.9
15	20 OPzS 2500	2178.7	2003.1	1723.5	1373.0	1130.0	956.7	830.2	736.6	607.3	510.9	250.8
16	24 OPzS 3000	2614.7	2403.2	2067.8	1647.6	1355.8	1148.6	996.3	883.8	728.5	613.3	302.0

Ue=1.85 V/cell

No	Cell type	Discharge time										
		15'	30'	1h	2h	3h	4h	5h	6h	8h	10h	24h
1	2 OPzS 100	122.4	100.5	75.1	54.7	43.5	36.8	31.6	28.3	22.8	19.8	9.7
2	3 OPzS 150	183.6	150.8	112.7	82.1	65.3	55.2	47.4	42.5	34.2	29.7	14.5
3	4 OPzS 200	244.8	201.0	150.3	109.4	87.0	73.6	63.2	56.7	45.6	39.6	19.4
4	5 OPzS 250	306.6	250.8	188.1	136.3	108.4	92.0	79.0	70.8	57.0	49.5	28.3
5	6 OPzS 300	367.3	301.5	225.9	163.2	130.3	110.4	94.9	84.9	68.5	59.4	34.0
6	5 OPzS 350	371.2	317.4	258.7	196.0	159.2	133.3	115.3	101.4	83.3	70.3	39.5
7	6 OPzS 420	444.9	381.1	311.5	234.8	191.0	160.1	139.2	122.3	100.4	84.3	47.4
8	7 OPzS 490	519.5	444.8	363.2	273.6	222.8	187.0	162.1	142.2	116.3	98.4	55.3
9	6 OPzS 600	530.5	475.7	412.0	316.4	260.6	223.8	192.9	173.0	140.1	119.3	67.2
10	8 OPzS 800	707.7	634.9	549.3	421.8	347.2	298.4	256.5	229.6	186.9	159.0	89.6
11	10 OPzS 1000	884.8	794.1	686.6	526.3	433.7	370.9	319.2	286.3	232.6	197.8	112.0
12	12 OPzS 1200	1061.0	952.3	823.9	631.8	521.2	446.5	382.8	343.0	279.3	237.6	134.0
13	12 OPzS 1500	1200.3	1111.5	970.2	772.0	639.6	541.0	470.3	419.5	347.9	294.2	167.0
14	16 OPzS 2000	1600.4	1481.7	1293.6	1028.7	852.5	722.0	627.4	558.7	464.2	392.6	222.0
15	20 OPzS 2500	2000.6	1851.9	1617.0	1286.4	1065.3	902.0	784.5	698.9	580.4	490.0	278.0
16	24 OPzS 3000	2400.7	2222.1	1940.4	1543.1	1278.2	1083.0	941.6	838.0	696.7	588.4	334.0



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Constant power discharge in W/block (cell) @ +20°C to the end-of-discharge voltage

Ue=1.87 V/cell

No	Cell type	Discharge time										
		15'	30'	1h	2h	3h	4h	5h	6h	8h	10h	24h
1	2 OPzS 100	108.0	90.1	70.2	52.2	42.0	35.4	30.5	27.3	22.2	19.4	9.4
2	3 OPzS 150	162.0	135.1	105.2	78.3	63.0	53.1	45.8	41.0	33.3	29.1	14.1
3	4 OPzS 200	216.0	180.1	140.3	104.5	84.1	70.8	61.1	54.7	44.4	38.8	18.9
4	5 OPzS 250	269.7	225.9	175.1	131.3	105.4	88.5	76.2	68.3	55.5	48.5	24.0
5	6 OPzS 300	323.5	270.7	210.0	157.2	126.3	106.4	91.6	82.0	66.6	58.1	28.7
6	5 OPzS 350	338.4	292.6	242.8	186.0	151.2	127.3	111.4	98.0	80.1	68.0	34.4
7	6 OPzS 420	406.1	351.3	291.6	222.9	181.0	152.2	133.2	117.3	96.2	81.6	41.0
8	7 OPzS 490	472.8	410.0	339.3	260.7	210.9	178.0	155.1	137.2	112.3	95.2	47.9
9	6 OPzS 600	475.8	433.9	377.1	298.5	247.7	213.8	184.9	165.0	133.2	114.3	60.8
10	8 OPzS 800	634.0	578.2	502.5	398.0	330.2	284.4	246.6	219.7	176.9	153.1	81.0
11	10 OPzS 1000	793.3	723.4	627.9	497.5	411.8	256.6	309.2	274.4	220.6	190.8	100.7
12	12 OPzS 1200	951.5	867.7	754.3	595.9	494.4	426.6	370.9	329.0	264.4	229.6	121.3
13	12 OPzS 1500	1092.8	1014.0	888.6	709.4	594.8	511.2	449.4	400.6	332.0	281.3	134.6
14	16 OPzS 2000	1457.1	1352.3	1184.2	945.2	792.8	681.2	598.6	534.8	443.3	374.7	182.0
15	20 OPzS 2500	1821.4	1690.7	1480.7	1181.9	991.7	851.3	748.7	668.0	553.6	469.2	226.2
16	24 OPzS 3000	2185.7	2029.0	1776.3	1418.7	1189.7	1021.4	897.9	802.2	664.9	562.6	272.6

Ue=1.90 V/cell

No	Cell type	Discharge time										
		15'	30'	1h	2h	3h	4h	5h	6h	8h	10h	24h
1	2 OPzS 100	86.1	76.6	61.7	46.7	38.4	32.9	28.4	25.5	20.8	18.1	8.8
2	3 OPzS 150	129.1	114.9	92.5	70.1	57.6	49.3	42.6	38.3	31.2	27.2	13.3
3	4 OPzS 200	172.2	153.2	123.4	93.4	76.8	65.7	56.8	51.1	41.5	36.3	17.7
4	5 OPzS 250	215.0	191.1	154.2	116.4	96.0	82.1	71.0	63.9	52.0	45.4	22.4
5	6 OPzS 300	257.8	228.9	185.1	140.3	115.4	98.6	85.1	76.7	62.4	54.5	26.9
6	5 OPzS 350	278.7	249.8	210.0	163.2	134.3	114.4	100.4	89.7	73.6	62.7	31.7
7	6 OPzS 420	334.4	299.5	251.8	196.0	161.1	137.2	120.3	107.4	88.4	75.2	37.8
8	7 OPzS 490	390.2	349.3	293.6	228.8	189.0	160.1	140.2	125.3	103.4	87.8	44.2
9	6 OPzS 600	400.1	362.2	323.4	261.7	217.8	189.9	166.0	149.1	122.2	106.4	56.6
10	8 OPzS 800	533.5	482.6	430.9	348.2	290.5	253.6	221.7	198.8	163.0	142.1	75.5
11	10 OPzS 1000	666.9	604.0	538.3	435.8	363.1	317.2	276.4	248.5	203.7	176.9	93.6
12	12 OPzS 1200	800.2	724.4	645.8	522.3	435.7	379.9	332.1	297.2	244.5	212.7	112.2
13	12 OPzS 1500	909.7	847.8	755.3	622.8	529.2	455.5	399.7	360.9	301.2	257.4	122.9
14	16 OPzS 2000	1213.3	1130.4	1007.0	829.7	705.2	606.6	532.9	481.1	401.5	343.9	165.4
15	20 OPzS 2500	1515.8	1414.0	1258.8	1037.7	881.3	758.8	666.2	601.4	501.9	429.4	205.6
16	24 OPzS 3000	1819.4	1696.6	1510.6	1244.6	1057.4	910.0	799.4	721.7	602.3	515.9	248.0



PERFORMANCE DATA **OPzS Optima**



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