

Power

AlphaCell™ OPzS

Stationary Flooded Tubular Lead Acid Battery



Single Cell



Monoblock

Constant Current data for AlphaCell OPzS—Block and Cells

Discharging currents for OPzS—Blocks and cells based on End-of-Discharge voltages

Final voltage is 1.9V/cell:

Cell Type:	Discharging time									
	10min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	24hr
1 OPzS 12-50:	24.0	20.0	15.8	10.2	8.3	6.7	5.8	5.0	4.2	1.8
2 OPzS 12-100:	46.6	38.9	30.5	20.9	17.1	14.5	12.7	9.1	7.7	3.5
3 OPzS 12-150:	69.7	58.1	45.6	31.3	25.6	21.6	19.0	13.7	11.6	5.2
4 OPzS 6-200:	93.3	77.7	61.0	41.8	34.3	29.0	25.3	18.3	15.4	6.9
5 OPzS 6-250:	116.3	97.0	76.0	52.2	42.8	36.1	31.7	22.8	19.3	8.7
6 OPzS 6-300:	139.9	116.6	91.4	62.7	51.4	43.4	38.0	27.4	23.1	10.4
2 OPzS 2-100:	46.6	38.9	30.5	20.9	17.1	14.5	12.7	9.1	7.7	3.5
3 OPzS 2-150:	69.7	58.1	45.6	31.3	25.6	21.6	19.0	13.7	11.6	5.2
4 OPzS 2-200:	93.3	77.7	61.0	41.8	34.3	29.0	25.3	18.3	15.4	6.9
5 OPzS 2-250:	116.3	97.0	76.0	52.2	42.8	36.1	31.7	22.8	19.3	8.7
6 OPzS 2-300:	139.9	116.6	91.4	62.7	51.4	43.4	38.0	27.4	23.1	10.4
5 OPzS 2-350:	142.5	118.7	96.1	68.3	56.0	47.7	42.3	32.0	28.8	13.0
6 OPzS 2-420:	171.1	142.6	115.4	82.0	67.2	57.3	50.7	38.4	34.6	15.6
7 OPzS 2-490:	199.3	166.1	134.5	95.5	78.3	66.7	59.1	44.7	40.4	18.2
6 OPzS 2-600:	225.9	188.2	160.0	119.1	97.6	85.9	74.1	52.4	42.4	19.1
8 OPzS 2-800:	301.2	251.0	213.3	158.8	130.2	114.5	98.8	69.8	56.5	25.4
10 OPzS 2-1000:	376.5	313.7	266.7	198.5	162.7	143.1	123.5	87.3	70.6	31.8
12 OPzS 2-1200:	451.8	376.5	320.0	238.2	195.3	171.8	148.2	104.7	84.7	38.1
12 OPzS 2-1500:	529.4	441.2	388.2	312.1	255.9	214.7	189.7	135.3	107.4	48.3
16 OPzS 2-2000:	705.9	588.2	517.6	416.1	341.2	286.3	252.9	180.4	143.1	64.4
20 OPzS 2-2500:	882.4	735.3	647.1	520.1	426.5	357.8	316.2	225.5	178.9	80.5
24 OPzS 2-3000:	1058.8	882.4	776.5	624.1	511.8	429.4	379.4	270.6	214.7	96.6



Discharging currents for OPzS—Blocks and cells based on End-of-Discharge voltages

Final voltage is 1.87V/cell:

Cell Type:	Discharging time									
	10min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	24hr
1 OPzS 12-50:	28.0	23.3	17.5	10.3	9.2	7.7	6.7	5.0	4.2	2.2
2 OPzS 12-100:	54.4	45.3	35.2	21.2	19.0	16.0	13.9	10.0	9.1	4.3
3 OPzS 12-150:	81.3	67.8	52.7	31.6	28.5	23.9	20.8	15.0	13.7	6.5
4 OPzS 6-200:	108.8	90.7	70.5	42.3	38.1	32.0	27.8	20.0	18.3	8.6
5 OPzS 6-250:	135.7	113.1	87.9	52.8	47.5	39.9	34.7	25.0	22.8	10.8
6 OPzS 6-300:	163.2	136.0	105.7	63.5	57.1	48.0	41.7	30.0	27.4	13.0
2 OPzS 2-100:	54.4	45.3	35.2	21.2	19.0	16.0	13.9	10.0	9.1	4.3
3 OPzS 2-150:	81.3	67.8	52.7	31.6	28.5	23.9	20.8	15.0	13.7	6.5
4 OPzS 2-200:	108.8	90.7	70.5	42.3	38.1	32.0	27.8	20.0	18.3	8.6
5 OPzS 2-250:	135.7	113.1	87.9	52.8	47.5	39.9	34.7	25.0	22.8	10.8
6 OPzS 2-300:	163.2	136.0	105.7	63.5	57.1	48.0	41.7	30.0	27.4	13.0
5 OPzS 2-350:	173.8	144.8	115.7	69.1	65.6	55.3	48.0	35.4	32.3	14.8
6 OPzS 2-420:	208.7	173.9	138.9	83.0	78.7	66.3	57.7	42.5	38.8	17.8
7 OPzS 2-490:	243.2	202.7	161.8	96.7	91.7	77.3	67.2	49.5	45.2	20.7
6 OPzS 2-600:	278.8	232.4	189.4	120.6	112.9	95.9	82.9	58.8	52.9	24.3
8 OPzS 2-800:	371.8	309.8	252.5	160.7	150.6	127.8	110.6	78.4	70.6	32.4
10 OPzS 2-1000:	464.7	387.3	315.7	200.9	188.2	159.8	138.2	98.0	88.2	40.5
12 OPzS 2-1200:	557.6	464.7	378.8	241.1	225.9	191.8	165.9	117.6	105.9	48.6
12 OPzS 2-1500:	607.1	505.9	454.4	315.9	289.7	245.6	213.4	150.0	130.9	60.1
16 OPzS 2-2000:	809.4	674.5	605.9	421.2	386.3	327.5	284.3	200.0	174.5	80.1
20 OPzS 2-2500:	1011.8	843.1	757.4	526.5	482.8	409.3	355.4	250.0	218.1	100.1
24 OPzS 2-3000:	1214.1	1011.8	908.8	631.8	579.4	491.2	426.5	300.0	261.8	120.2

Discharging currents for OPzS—Blocks and cells based on End-of-Discharge voltages

Final voltage is 1.83V/cell:

Cell Type:	Discharging time									
	10min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	24hr
1 OPzS 12-50:	32.0	26.7	20.0	12.7	10.0	8.1	7.5	5.0	4.2	2.3
2 OPzS 12-100:	62.9	52.4	40.7	28.9	22.9	17.5	16.2	10.9	9.7	4.6
3 OPzS 12-150:	94.0	78.3	60.9	43.3	34.2	26.2	24.2	16.2	14.5	6.9
4 OPzS 6-200:	125.7	104.8	81.3	57.9	45.7	35.0	32.4	21.7	19.4	9.2
5 OPzS 6-250:	156.8	130.7	101.5	72.2	57.0	43.7	40.4	27.1	24.2	11.5
6 OPzS 6-300:	188.6	157.1	122.0	86.8	68.6	52.6	48.6	32.6	29.1	13.8
2 OPzS 2-100:	62.9	52.4	40.7	28.9	22.9	17.5	16.2	10.9	9.7	4.6
3 OPzS 2-150:	94.0	78.3	60.9	43.3	34.2	26.2	24.2	16.2	14.5	6.9
4 OPzS 2-200:	125.7	104.8	81.3	57.9	45.7	35.0	32.4	21.7	19.4	9.2
5 OPzS 2-250:	156.8	130.7	101.5	72.2	57.0	43.7	40.4	27.1	24.2	11.5
6 OPzS 2-300:	188.6	157.1	122.0	86.8	68.6	52.6	48.6	32.6	29.1	13.8
5 OPzS 2-350:	210.0	175.0	137.3	99.9	78.9	63.1	54.9	38.1	34.3	15.8
6 OPzS 2-420:	252.2	210.2	164.9	120.0	94.8	75.9	65.9	45.7	41.2	18.9
7 OPzS 2-490:	293.9	244.9	192.1	139.8	110.4	88.4	76.8	53.3	48.0	22.1
6 OPzS 2-600:	343.8	286.5	223.5	163.8	129.4	107.1	94.1	65.3	58.8	27.0
8 OPzS 2-800:	458.4	382.0	298.0	218.4	172.5	142.7	125.5	87.1	78.4	36.0
10 OPzS 2-1000:	572.9	477.5	372.5	273.0	215.7	178.4	156.9	108.8	98.0	45.0
12 OPzS 2-1200:	687.5	572.9	447.1	327.6	258.8	214.1	188.2	130.6	117.6	54.0
12 OPzS 2-1500:	776.5	647.1	530.9	409.5	323.5	269.1	235.3	166.2	147.1	67.5
16 OPzS 2-2000:	1035.3	862.7	707.8	546.0	431.4	358.8	313.7	221.6	196.1	90.0
20 OPzS 2-2500:	1294.1	1078.4	884.8	682.6	539.2	448.5	392.2	277.0	245.1	112.5
24 OPzS 2-3000:	1552.9	1294.1	1061.8	819.1	647.1	538.2	470.6	332.4	294.1	135.0



Discharging currents for OPzS—Blocks and cells based on End-of-Discharge voltages

Final voltage is 1.80V/cell:

Cell Type:	Discharging time									
	10min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	24hr
1 OPzS 12-50:	35.0	29.2	20.8	13.9	10.8	8.0	7.5	5.8	5.0	2.3
2 OPzS 12-100:	85.7	71.4	48.6	30.5	23.8	18.4	17.1	11.4	10.0	4.5
3 OPzS 12-150:	128.2	106.8	72.6	45.6	35.6	27.5	25.6	17.1	15.0	6.8
4 OPzS 6-200:	171.4	142.9	97.1	61.1	47.6	36.8	34.3	22.9	20.0	9.0
5 OPzS 6-250:	213.9	178.2	121.2	76.2	59.4	45.9	42.8	28.5	25.0	11.3
6 OPzS 6-300:	257.1	214.3	145.7	91.6	71.4	55.1	51.4	34.3	30.0	13.5
2 OPzS 2-100:	85.7	71.4	48.6	30.5	23.8	18.4	17.1	11.4	10.0	4.5
3 OPzS 2-150:	128.2	106.8	72.6	45.6	35.6	27.5	25.6	17.1	15.0	6.8
4 OPzS 2-200:	171.4	142.9	97.1	61.1	47.6	36.8	34.3	22.9	20.0	9.0
5 OPzS 2-250:	213.9	178.2	121.2	76.2	59.4	45.9	42.8	28.5	25.0	11.3
6 OPzS 2-300:	257.1	214.3	145.7	91.6	71.4	55.1	51.4	34.3	30.0	13.5
5 OPzS 2-350:	275.3	229.4	157.8	105.6	82.4	66.6	58.3	39.8	35.0	15.8
6 OPzS 2-420:	316.5	263.8	189.6	126.8	98.9	80.0	70.1	47.8	42.0	18.9
7 OPzS 2-490:	368.8	307.3	220.9	147.8	115.2	93.2	81.6	55.7	49.0	22.1
6 OPzS 2-600:	374.1	311.8	252.9	181.0	141.2	112.9	100.0	68.8	60.0	27.0
8 OPzS 2-800:	498.8	415.7	337.3	241.3	188.2	150.6	133.3	91.8	80.0	36.0
10 OPzS 2-1000:	623.5	519.6	421.6	301.7	235.3	188.2	166.7	114.7	100.0	45.0
12 OPzS 2-1200:	748.2	623.5	505.9	362.0	282.4	225.9	200.0	137.6	120.0	54.0
12 OPzS 2-1500:	917.6	764.7	588.2	433.6	338.2	280.9	250.0	175.0	150.0	67.5
16 OPzS 2-2000:	1223.5	1019.6	784.3	578.2	451.0	374.5	333.3	233.3	200.0	90.0
20 OPzS 2-2500:	1529.4	1274.5	980.4	722.7	563.7	468.1	416.7	291.7	250.0	112.5
24 OPzS 2-3000:	1835.3	1529.4	1176.5	867.3	676.5	561.8	500.0	350.0	300.0	135.0

Discharging currents for OPzS—Blocks and cells based on End-of-Discharge voltages

Final voltage is 1.75V/cell:

Cell Type:	Discharging time									
	10min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	24hr
1 OPzS 12-50:	42.0	36.2	23.0	16.0	12.3	9.0	8.6	6.5	5.1	2.3
2 OPzS 12-100:	90.4	75.3	51.4	32.3	24.9	19.4	18.1	12.0	10.2	4.6
3 OPzS 12-150:	135.2	112.7	76.9	48.3	37.2	29.1	27.1	17.9	15.2	6.9
4 OPzS 6-200:	180.8	150.7	102.9	64.6	49.7	38.9	36.2	24.0	20.3	9.1
5 OPzS 6-250:	225.6	188.0	128.3	80.6	62.1	48.5	45.2	29.9	25.4	11.4
6 OPzS 6-300:	271.2	226.0	154.3	96.8	74.6	58.3	54.3	36.0	30.5	13.7
2 OPzS 2-100:	90.4	75.3	51.4	32.3	24.9	19.4	18.1	12.0	10.2	4.6
3 OPzS 2-150:	135.2	112.7	76.9	48.3	37.2	29.1	27.1	17.9	15.2	6.9
4 OPzS 2-200:	180.8	150.7	102.9	64.6	49.7	38.9	36.2	24.0	20.3	9.1
5 OPzS 2-250:	225.6	188.0	128.3	80.6	62.1	48.5	45.2	29.9	25.4	11.4
6 OPzS 2-300:	271.2	226.0	154.3	96.8	74.6	58.3	54.3	36.0	30.5	13.7
5 OPzS 2-350:	296.5	247.1	175.0	115.9	89.2	71.1	61.8	41.2	35.5	16.0
6 OPzS 2-420:	356.1	296.7	210.2	139.2	107.2	85.3	74.2	49.5	42.6	19.2
7 OPzS 2-490:	414.9	345.7	244.9	162.1	124.9	99.4	86.4	57.6	49.7	22.4
6 OPzS 2-600:	451.8	376.5	282.4	198.6	152.9	118.8	105.9	72.9	60.9	27.4
8 OPzS 2-800:	602.4	502.0	376.5	264.8	203.9	158.4	141.2	97.3	81.2	36.5
10 OPzS 2-1000:	752.9	627.5	470.6	331.0	254.9	198.0	176.5	121.6	101.5	45.7
12 OPzS 2-1200:	903.5	752.9	564.7	397.2	305.9	237.6	211.8	145.9	121.8	54.8
12 OPzS 2-1500:	1094.1	911.8	691.2	496.6	382.4	297.1	264.7	185.3	152.3	68.5
16 OPzS 2-2000:	1458.8	1215.7	921.6	662.1	509.8	396.1	352.9	247.1	203.0	91.4
20 OPzS 2-2500:	1823.5	1519.6	1152.0	827.6	637.3	495.1	441.2	308.8	253.8	114.2
24 OPzS 2-3000:	2188.2	1823.5	1382.4	993.1	764.7	594.1	529.4	370.6	304.5	137.0



Discharging currents for OPzS—Blocks and cells based on End-of-Discharge voltages

Final voltage is 1.70V/cell:

Cell Type:	Discharging time									
	30min	0.5hr	1hr	2hr	3hr	4hr	5hr	8hr	10hr	24hr
1 OPzS 12-50:	45.7	38.0	24.5	19.2	14.6	9.7	9.1	6.8	5.1	2.3
2 OPzS 12-100:	97.1	81.0	55.2	33.8	25.7	20.2	19.0	12.1	10.2	4.6
3 OPzS 12-150:	145.3	121.0	82.6	50.6	38.4	30.2	28.5	18.1	15.3	6.9
4 OPzS 6-200:	194.3	161.9	110.5	67.7	51.4	40.4	38.1	24.2	20.4	9.2
5 OPzS 6-250:	242.4	202.0	137.8	84.4	64.2	50.4	47.5	30.1	25.6	11.5
6 OPzS 6-300:	291.4	242.9	165.7	101.5	77.1	60.6	57.1	36.2	30.7	13.8
2 OPzS 2-100:	97.1	81.0	55.2	33.8	25.7	20.2	19.0	12.1	10.2	4.6
3 OPzS 2-150:	145.3	121.0	82.6	50.6	38.4	30.2	28.5	18.1	15.3	6.9
4 OPzS 2-200:	194.3	161.9	110.5	67.7	51.4	40.4	38.1	24.2	20.4	9.2
5 OPzS 2-250:	242.4	202.0	137.8	84.4	64.2	50.4	47.5	30.1	25.6	11.5
6 OPzS 2-300:	291.4	242.9	165.7	101.5	77.1	60.6	57.1	36.2	30.7	13.8
5 OPzS 2-350:	324.5	270.4	188.7	119.7	91.0	73.4	68.6	41.5	35.8	16.1
6 OPzS 2-420:	389.8	324.8	226.7	143.7	109.2	88.2	82.4	49.8	42.9	19.3
7 OPzS 2-490:	454.1	378.4	264.1	167.5	127.3	102.8	96.0	58.0	50.1	22.5
6 OPzS 2-600:	508.2	423.5	305.9	205.1	155.9	124.7	114.7	73.4	61.3	27.6
8 OPzS 2-800:	677.6	564.7	407.8	273.5	207.8	166.3	152.9	97.9	81.8	36.8
10 OPzS 2-1000:	847.1	705.9	509.8	341.8	259.8	207.8	191.2	122.4	102.2	46.0
12 OPzS 2-1200:	1016.5	847.1	611.8	410.2	311.8	249.4	229.4	146.9	122.6	55.2
12 OPzS 2-1500:	1217.6	1014.7	750.0	512.8	389.7	311.8	279.4	186.6	153.3	69.0
16 OPzS 2-2000:	1623.5	1352.9	1000.0	683.7	519.6	415.7	372.5	248.8	204.4	92.0
20 OPzS 2-2500:	2029.4	1691.2	1250.0	854.6	649.5	519.6	465.7	311.0	255.5	115.0
24 OPzS 2-3000:	2435.3	2029.4	1500.0	1025.5	779.4	623.5	558.8	373.1	306.6	138.0

Constant Power discharge data for AlphaCell OPzS—Block and Cells

Watts Per/Cell @ Discharging power in Watts/cell for OPzS—Block and cells TAB in dependance of end-of-Discharge voltages

Final voltage is 1.9V/cell:

Cell Type:	Discharging time									
	10min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	24hr
1 OPzS 12-50:	46.8	39.0	30.9	19.8	16.3	13.0	11.4	9.8	8.1	3.6
2 OPzS 12-100:	90.9	75.8	59.4	40.8	33.4	28.2	24.7	17.8	15.0	6.8
3 OPzS 12-150:	136.0	113.3	88.9	61.0	50.0	42.2	37.0	26.7	22.6	10.2
4 OPzS 6-200:	181.9	151.5	118.9	81.5	66.9	56.5	49.4	35.7	30.1	13.5
5 OPzS 6-250:	226.9	189.1	148.3	101.7	83.4	70.4	61.7	44.5	37.6	16.9
6 OPzS 6-300:	272.8	227.3	178.3	122.3	100.3	84.7	74.1	53.5	45.1	20.3
2 OPzS 2-100:	90.9	75.8	59.4	40.8	33.4	28.2	24.7	17.8	15.0	6.8
3 OPzS 2-150:	136.0	113.3	88.9	61.0	50.0	42.2	37.0	26.7	22.6	10.2
4 OPzS 2-200:	181.9	151.5	118.9	81.5	66.9	56.5	49.4	35.7	30.1	13.5
5 OPzS 2-250:	226.9	189.1	148.3	101.7	83.4	70.4	61.7	44.5	37.6	16.9
6 OPzS 2-300:	272.8	227.3	178.3	122.3	100.3	84.7	74.1	53.5	45.1	20.3
5 OPzS 2-350:	277.8	231.5	187.4	133.1	109.2	93.1	82.4	62.3	56.2	25.3
6 OPzS 2-420:	333.6	278.0	225.0	159.9	131.1	111.8	98.9	74.8	67.5	30.4
7 OPzS 2-490:	388.7	323.9	262.2	186.2	152.7	130.1	115.2	87.1	78.7	35.4
6 OPzS 2-600:	440.5	367.1	312.0	232.2	190.4	167.5	144.5	102.1	82.6	37.2
8 OPzS 2-800:	587.3	489.4	416.0	309.6	253.9	223.3	192.7	136.1	110.1	49.6
10 OPzS 2-1000:	734.1	611.8	520.0	387.0	317.4	279.1	240.9	170.1	137.6	61.9
12 OPzS 2-1200:	880.9	734.1	624.0	464.4	380.8	334.9	289.1	204.2	165.2	74.3
12 OPzS 2-1500:	1032.4	860.3	757.1	608.5	499.0	418.7	369.9	263.8	209.3	94.2
16 OPzS 2-2000:	1376.5	1147.1	1009.4	811.3	665.3	558.2	493.2	351.8	279.1	125.6
20 OPzS 2-2500:	1720.6	1433.8	1261.8	1014.2	831.6	697.8	616.5	439.7	348.9	157.0
24 OPzS 2-3000:	2064.7	1720.6	1514.1	1217.0	997.9	837.4	739.9	527.6	418.7	188.4



Discharging power in Watts/cell for OPzS—Block and cells TAB in dependance of end-of-Discharge voltages

Final voltage is 1.87V/cell:

Cell Type:	Discharging time									
	10min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	24hr
1 OPzS 12-50:	54.2	45.2	33.9	19.9	17.7	14.8	12.9	9.7	8.1	4.3
2 OPzS 12-100:	105.3	87.7	68.2	41.0	36.9	31.0	26.9	19.4	17.7	8.4
3 OPzS 12-150:	157.4	131.2	102.0	61.2	55.1	46.3	40.2	29.0	26.5	12.5
4 OPzS 6-200:	210.5	175.4	136.4	81.9	73.7	61.9	53.8	38.7	35.4	16.7
5 OPzS 6-250:	262.7	218.9	170.1	102.2	92.0	77.3	67.1	48.4	44.1	20.9
6 OPzS 6-300:	315.8	263.2	204.6	122.9	110.6	92.9	80.7	58.1	53.1	25.1
2 OPzS 2-100:	105.3	87.7	68.2	41.0	36.9	31.0	26.9	19.4	17.7	8.4
3 OPzS 2-150:	157.4	131.2	102.0	61.2	55.1	46.3	40.2	29.0	26.5	12.5
4 OPzS 2-200:	210.5	175.4	136.4	81.9	73.7	61.9	53.8	38.7	35.4	16.7
5 OPzS 2-250:	262.7	218.9	170.1	102.2	92.0	77.3	67.1	48.4	44.1	20.9
6 OPzS 2-300:	315.8	263.2	204.6	122.9	110.6	92.9	80.7	58.1	53.1	25.1
5 OPzS 2-350:	336.2	280.2	223.9	133.7	126.9	107.0	93.0	68.5	62.4	28.6
6 OPzS 2-420:	403.8	336.5	268.7	160.6	152.3	128.4	111.7	82.2	75.0	34.4
7 OPzS 2-490:	470.6	392.2	313.1	187.1	177.5	149.6	130.1	95.8	87.4	40.1
6 OPzS 2-600:	539.5	449.6	366.5	233.3	218.5	185.5	160.5	113.8	102.4	47.0
8 OPzS 2-800:	719.4	599.5	488.7	311.0	291.4	247.4	214.0	151.8	136.6	62.7
10 OPzS 2-1000:	899.2	749.3	610.9	388.8	364.2	309.2	267.5	189.7	170.7	78.4
12 OPzS 2-1200:	1079.0	899.2	733.0	466.5	437.1	371.1	321.0	227.6	204.9	94.0
12 OPzS 2-1500:	1174.7	978.9	879.3	611.3	560.6	475.2	413.0	290.3	253.3	116.2
16 OPzS 2-2000:	1566.2	1305.2	1172.4	815.0	747.4	633.6	550.1	387.0	337.7	155.0
20 OPzS 2-2500:	1957.8	1631.5	1465.5	1018.8	934.3	792.0	687.7	483.8	422.1	193.7
24 OPzS 2-3000:	2349.3	1957.8	1758.6	1222.5	1121.2	950.4	825.2	580.5	506.5	232.5

Discharging power in Watts/cell for OPzS—Block and cells TAB in dependance of end-of-Discharge voltages

Final voltage is 1.83V/cell:

Cell Type:	Discharging time									
	10min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	24hr
1 OPzS 12-50:	61.3	51.1	38.3	24.2	19.2	15.5	14.4	9.6	8.0	4.4
2 OPzS 12-100:	120.4	100.3	77.9	55.4	43.8	33.6	31.0	20.8	18.6	8.8
3 OPzS 12-150:	180.0	150.0	116.5	82.8	65.4	50.2	46.4	31.1	27.8	13.2
4 OPzS 6-200:	240.7	200.6	155.8	110.8	87.5	67.1	62.0	41.6	37.2	17.6
5 OPzS 6-250:	300.4	250.3	194.4	138.3	109.2	83.7	77.4	51.9	46.4	22.0
6 OPzS 6-300:	361.1	300.9	233.6	166.2	131.3	100.7	93.0	62.4	55.8	26.4
2 OPzS 2-100:	120.4	100.3	77.9	55.4	43.8	33.6	31.0	20.8	18.6	8.8
3 OPzS 2-150:	180.0	150.0	116.5	82.8	65.4	50.2	46.4	31.1	27.8	13.2
4 OPzS 2-200:	240.7	200.6	155.8	110.8	87.5	67.1	62.0	41.6	37.2	17.6
5 OPzS 2-250:	300.4	250.3	194.4	138.3	109.2	83.7	77.4	51.9	46.4	22.0
6 OPzS 2-300:	361.1	300.9	233.6	166.2	131.3	100.7	93.0	62.4	55.8	26.4
5 OPzS 2-350:	402.2	335.1	262.8	191.3	151.1	120.9	105.1	73.0	65.7	30.2
6 OPzS 2-420:	483.0	402.5	315.7	229.8	181.5	145.3	126.3	87.6	78.9	36.2
7 OPzS 2-490:	562.8	469.0	367.8	267.7	211.5	169.3	147.1	102.1	92.0	42.2
6 OPzS 2-600:	658.3	548.6	428.1	313.7	247.8	205.0	180.2	125.0	112.6	51.7
8 OPzS 2-800:	877.7	731.5	570.7	418.3	330.4	273.4	240.3	166.7	150.2	68.9
10 OPzS 2-1000:	1097.2	914.3	713.4	522.8	413.0	341.7	300.4	208.4	187.7	86.2
12 OPzS 2-1200:	1316.6	1097.2	856.1	627.4	495.6	410.0	360.5	250.1	225.3	103.4
12 OPzS 2-1500:	1486.9	1239.1	1016.6	784.3	619.6	515.4	450.6	318.2	281.6	129.3
16 OPzS 2-2000:	1982.6	1652.2	1355.5	1045.7	826.1	687.1	600.8	424.3	375.5	172.4
20 OPzS 2-2500:	2478.2	2065.2	1694.4	1307.1	1032.6	858.9	751.0	530.4	469.4	215.4
24 OPzS 2-3000:	2973.9	2478.2	2033.3	1568.5	1239.1	1030.7	901.2	636.5	563.2	258.5



Discharging power in Watts/cell for OPzS—Block and cells TAB in dependance of end-of-Discharge voltages

Final voltage is 1.80V/cell:

Cell Type:	Discharging time									
	10min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	24hr
1 OPzS 12-50:	66.5	55.4	39.6	26.4	20.6	15.2	14.3	11.1	9.5	4.3
2 OPzS 12-100:	162.9	135.7	92.3	58.0	45.2	34.9	32.6	21.7	19.0	8.6
3 OPzS 12-150:	243.5	202.9	138.0	86.7	67.6	52.3	48.7	32.5	28.5	12.8
4 OPzS 6-200:	325.7	271.4	184.6	116.0	90.5	69.8	65.1	43.4	38.0	17.1
5 OPzS 6-250:	406.4	338.6	230.3	144.7	112.9	87.2	81.3	54.2	47.5	21.4
6 OPzS 6-300:	488.6	407.1	276.9	174.0	135.7	104.8	97.7	65.1	57.0	25.7
2 OPzS 2-100:	162.9	135.7	92.3	58.0	45.2	34.9	32.6	21.7	19.0	8.6
3 OPzS 2-150:	243.5	202.9	138.0	86.7	67.6	52.3	48.7	32.5	28.5	12.8
4 OPzS 2-200:	325.7	271.4	184.6	116.0	90.5	69.8	65.1	43.4	38.0	17.1
5 OPzS 2-250:	406.4	338.6	230.3	144.7	112.9	87.2	81.3	54.2	47.5	21.4
6 OPzS 2-300:	488.6	407.1	276.9	174.0	135.7	104.8	97.7	65.1	57.0	25.7
5 OPzS 2-350:	523.1	435.9	299.9	200.6	156.5	126.5	110.8	75.6	66.5	29.9
6 OPzS 2-420:	601.4	501.2	360.2	240.9	187.9	152.0	133.1	90.8	79.8	35.9
7 OPzS 2-490:	700.7	583.9	419.7	280.7	219.0	177.1	155.1	105.8	93.1	41.9
6 OPzS 2-600:	710.8	592.4	480.6	343.9	268.2	214.6	190.0	130.8	114.0	51.3
8 OPzS 2-800:	947.8	789.8	640.8	458.5	357.6	286.1	253.3	174.4	152.0	68.4
10 OPzS 2-1000:	1184.7	987.3	801.0	573.2	447.1	357.6	316.7	217.9	190.0	85.5
12 OPzS 2-1200:	1421.6	1184.7	961.2	687.8	536.5	429.2	380.0	261.5	228.0	102.6
12 OPzS 2-1500:	1743.5	1452.9	1117.6	823.9	642.6	533.7	475.0	332.5	285.0	128.3
16 OPzS 2-2000:	2324.7	1937.3	1490.2	1098.5	856.9	711.6	633.3	443.3	380.0	171.0
20 OPzS 2-2500:	2905.9	2421.6	1862.7	1373.2	1071.1	889.5	791.7	554.2	475.0	213.8
24 OPzS 2-3000:	3487.1	2905.9	2235.3	1647.8	1285.3	1067.4	950.0	665.0	570.0	256.5

Discharging power in Watts/cell for OPzS—Block and cells TAB in dependance of end-of-Discharge voltages

Final voltage is 1.75V/cell:

Cell Type:	Discharging time									
	10min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	24hr
1 OPzS 12-50:	78.8	67.9	43.1	30.0	23.1	16.9	16.1	12.2	9.5	4.3
2 OPzS 12-100:	169.5	141.3	96.4	60.5	46.6	36.4	33.9	22.5	19.0	8.6
3 OPzS 12-150:	253.6	211.3	144.2	90.6	69.8	54.5	50.7	33.6	28.5	12.8
4 OPzS 6-200:	339.0	282.5	192.9	121.1	93.2	72.9	67.9	45.0	38.1	17.1
5 OPzS 6-250:	423.1	352.5	240.6	151.1	116.4	90.9	84.7	56.1	47.6	21.4
6 OPzS 6-300:	508.5	423.8	289.3	181.6	139.8	109.3	101.8	67.5	57.1	25.7
2 OPzS 2-100:	169.5	141.3	96.4	60.5	46.6	36.4	33.9	22.5	19.0	8.6
3 OPzS 2-150:	253.6	211.3	144.2	90.6	69.8	54.5	50.7	33.6	28.5	12.8
4 OPzS 2-200:	339.0	282.5	192.9	121.1	93.2	72.9	67.9	45.0	38.1	17.1
5 OPzS 2-250:	423.1	352.5	240.6	151.1	116.4	90.9	84.7	56.1	47.6	21.4
6 OPzS 2-300:	508.5	423.8	289.3	181.6	139.8	109.3	101.8	67.5	57.1	25.7
5 OPzS 2-350:	555.9	463.2	328.1	217.2	167.3	133.3	115.8	77.2	66.6	30.0
6 OPzS 2-420:	667.7	556.4	394.1	260.9	200.9	159.9	139.1	92.7	79.9	36.0
7 OPzS 2-490:	777.9	648.3	459.2	304.0	234.1	186.3	162.1	108.0	93.3	42.0
6 OPzS 2-600:	847.1	705.9	529.4	372.4	286.8	222.8	198.5	136.8	114.2	51.4
8 OPzS 2-800:	1129.4	941.2	705.9	496.6	382.4	297.1	264.7	182.4	152.3	68.5
10 OPzS 2-1000:	1411.8	1176.5	882.4	620.7	477.9	371.3	330.9	227.9	190.3	85.6
12 OPzS 2-1200:	1694.1	1411.8	1058.8	744.8	573.5	445.6	397.1	273.5	228.4	102.8
12 OPzS 2-1500:	2051.5	1709.6	1296.0	931.1	716.9	557.0	496.3	347.4	285.5	128.5
16 OPzS 2-2000:	2735.3	2279.4	1727.9	1241.4	955.9	742.6	661.8	463.2	380.6	171.3
20 OPzS 2-2500:	3419.1	2849.3	2159.9	1551.8	1194.9	928.3	827.2	579.0	475.8	214.1
24 OPzS 2-3000:	4102.9	3419.1	2591.9	1862.1	1433.8	1114.0	992.6	694.9	570.9	256.9



Discharging power in Watts/cell for OPzS—Block and cells TAB in dependance of end-of-Discharge voltages

Final voltage is 1.70V/cell:

Cell Type:	Discharging time									
	10min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	24hr
1 OPzS 12-50:	84.5	70.3	45.3	35.5	27.0	17.9	16.8	12.6	9.5	4.3
2 OPzS 12-100:	179.7	149.8	102.2	62.6	47.6	37.4	35.2	22.4	18.9	8.5
3 OPzS 12-150:	268.7	223.9	152.8	93.6	71.1	55.9	52.7	33.4	28.4	12.8
4 OPzS 6-200:	359.4	299.5	204.4	125.2	95.1	74.7	70.5	44.7	37.8	17.0
5 OPzS 6-250:	448.4	373.7	255.0	156.2	118.7	93.2	87.9	55.8	47.3	21.3
6 OPzS 6-300:	539.1	449.3	306.6	187.8	142.7	112.1	105.7	67.1	56.7	25.5
2 OPzS 2-100:	179.7	149.8	102.2	62.6	47.6	37.4	35.2	22.4	18.9	8.5
3 OPzS 2-150:	268.7	223.9	152.8	93.6	71.1	55.9	52.7	33.4	28.4	12.8
4 OPzS 2-200:	359.4	299.5	204.4	125.2	95.1	74.7	70.5	44.7	37.8	17.0
5 OPzS 2-250:	448.4	373.7	255.0	156.2	118.7	93.2	87.9	55.8	47.3	21.3
6 OPzS 2-300:	539.1	449.3	306.6	187.8	142.7	112.1	105.7	67.1	56.7	25.5
5 OPzS 2-350:	600.3	500.2	349.1	221.5	168.3	135.8	127.0	76.7	66.2	29.8
6 OPzS 2-420:	721.1	600.9	419.4	265.9	202.1	163.2	152.5	92.1	79.4	35.7
7 OPzS 2-490:	840.0	700.0	488.6	309.9	235.5	190.2	177.7	107.3	92.6	41.7
6 OPzS 2-600:	940.2	783.5	565.9	379.5	288.4	230.7	212.2	135.9	113.4	51.0
8 OPzS 2-800:	1253.6	1044.7	754.5	505.9	384.5	307.6	282.9	181.2	151.3	68.1
10 OPzS 2-1000:	1567.1	1305.9	943.1	632.4	480.6	384.5	353.7	226.5	189.1	85.1
12 OPzS 2-1200:	1880.5	1567.1	1131.8	758.9	576.8	461.4	424.4	271.7	226.9	102.1
12 OPzS 2-1500:	2252.6	1877.2	1387.5	948.6	721.0	576.8	516.9	345.2	283.6	127.6
16 OPzS 2-2000:	3003.5	2502.9	1850.0	1264.8	961.3	769.0	689.2	460.2	378.1	170.2
20 OPzS 2-2500:	3754.4	3128.7	2312.5	1581.0	1201.6	961.3	861.5	575.3	472.7	212.7
24 OPzS 2-3000:	4505.3	3754.4	2775.0	1897.3	1441.9	1153.5	1033.8	690.3	567.2	255.2

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Alpha Industrial Power
MTI Systems

United States
Canada

Bellingham, Washington Tel: 360 647 2360 Fax: 360 671 4936
Burnaby, British Columbia Tel: 604 439 3009 Fax: 604 439 3039

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