

# RES OPzS Batteries

## Technical Data



BATTERIES



SOLAR PV



WIND



GENSET



# SUNLIGHT

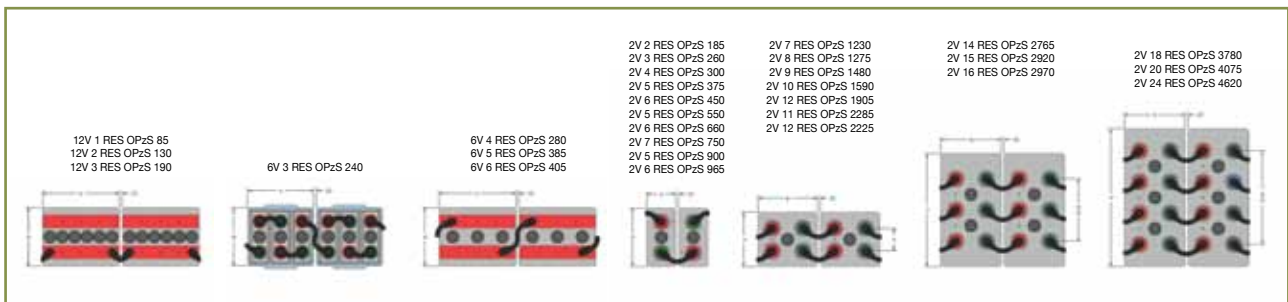
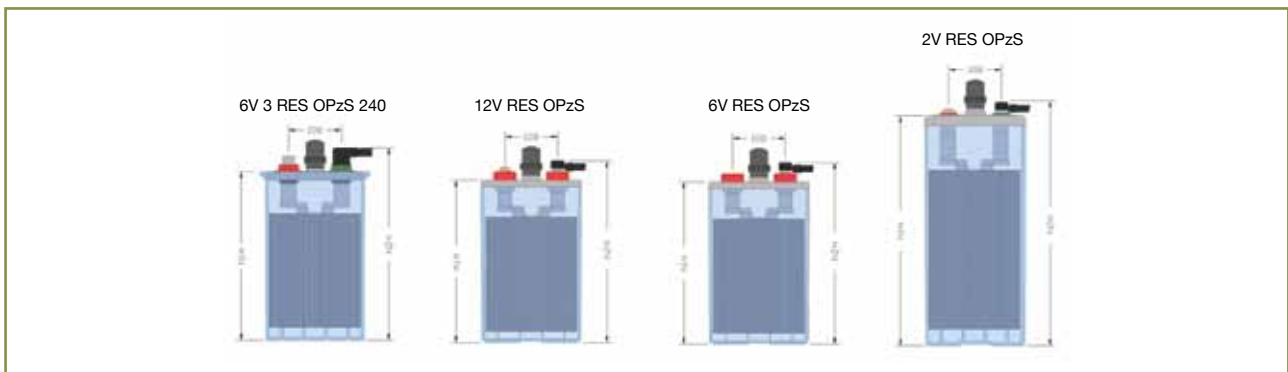
creating energy

## Product Range

Type	Positive Plates Number	Number of Poles	Nom. capacity (Ah at 20°C)					Length (mm)	Width (mm)	Height (mm)	Height <sub>2</sub> * (mm)	Poles Distance	Filled Weight (approx. kg)	Dry Weight (approx. kg)	Internal Resistance (mOhm)	Short Circuit Current (A)
			C240 1.85 Vpc	C120 1.85 Vpc	C48 1.80V pc	C24 1.80 Vpc	C12 1.80 Vpc									
2V 2 RES OPzS 185	2	2	197	187	168	148	132	103	206	355	369	-	14	8	1.620	1240
2V 3 RES OPzS 260	3	2	274	263	235	209	188	103	206	355	369	-	16	11	1.083	1860
2V 4 RES OPzS 300	4	2	310	300	272	243	224	103	206	355	369	-	18	13	0.847	2380
2V 5 RES OPzS 375	5	2	391	378	343	307	281	124	206	355	369	-	21	15	0.671	3000
2V 6 RES OPzS 450	6	2	470	454	411	368	338	145	206	355	369	-	26	19	0.575	3500
2V 5 RES OPzS 550	5	2	574	553	498	444	413	124	206	471	485	-	28	21	0.608	3300
2V 6 RES OPzS 660	6	2	686	661	596	530	494	145	206	471	485	-	34	24	0.518	3900
2V 7 RES OPzS 750	7	2	780	750	676	602	564	166	206	471	485	-	39	28	0.453	4450
2V 5 RES OPzS 900	5	2	948	904	797	695	639	145	206	646	660	-	42	29	0.537	3750
2V 6 RES OPzS 965	6	2	1006	966	859	754	703	145	206	646	660	-	46	33	0.447	4500
2V 7 RES OPzS 1230	7	4	1286	1230	1088	950	877	191	210	646	660	80	60	43	0.378	5350
2V 8 RES OPzS 1275	8	4	1330	1278	1139	1001	934	191	210	646	660	80	64	47	0.327	6200
2V 9 RES OPzS 1480	9	4	1546	1484	1319	1157	1076	233	210	646	660	110	73	53	0.292	6950
2V 10 RES OPzS 1590	10	4	1656	1592	1419	1248	1165	233	210	646	660	110	78	57	0.261	7750
2V 12 RES OPzS 1905	12	4	1985	1908	1695	1487	1391	275	210	646	660	140	91	66	0.228	8850
2V 11 RES OPzS 2285	11	4	2369	2286	2064	1830	1698	275	210	797	811	140	111	76	0.238	8500
2V 12 RES OPzS 2225	12	4	2294	2226	2024	1807	1701	275	210	797	811	140	115	81	0.225	9000
2V 14 RES OPzS 2765	13	6	2868	2770	2505	2224	2069	397	212	772	786	110	143	96	0.195	10350
2V 15 RES OPzS 2920	15	6	3019	2921	2650	2361	2208	397	212	772	786	110	149	103	0.176	11500
2V 16 RES OPzS 2970	16	6	3065	2972	2710	2424	2279	397	212	772	786	110	155	109	0.160	12600
2V 18 RES OPzS 3780	18	8	3917	3780	3419	3038	2811	487	212	772	786	110	184	125	0.140	14450
2V 20 RES OPzS 4075	20	8	4217	4076	3696	3291	3057	487	212	772	786	110	201	135	0.125	16200
2V 24 RES OPzS 4620	24	8	4769	4620	4199	3747	3508	576	212	772	786	140	230	158	0.108	18800
6V 3 RES OPzS 240	3	2	252	242	221	199	184	233	203 +	345	377	-	41	30	1.138	1780
6V 4 RES OPzS 280	4	2	293	283	261	237	223	272	205	332	361	-	47	35	0.900	2240
6V 5 RES OPzS 385	5	2	403	389	355	320	298	380	205	332	361	-	61	44	0.760	2660
6V 6 RES OPzS 405	6	2	422	408	376	341	323	380	205	332	361	-	67	51	0.667	3040
12V 1 RES OPzS 85	1	2	91	86	78	71	65	272	205	332	361	-	38	24	3.226	620
12V 2 RES OPzS 130	2	2	137	132	121	111	106	272	205	332	361	-	49	38	1.613	1260
12V 3 RES OPzS 190	3	2	199	191	176	161	155	380	205	332	361	-	70	53	1.138	1780

\* Includes installed connectors and shrouds

## Drawings



## Performance Data

### Discharge Constant Current at 20°C (Amperes)

End Voltage 1.90 V/cell													
		10 h	12 h	20 h	24 h	48 h	50 h	72 h	100 h	120 h	168 h	240 h	
2V Cells	2V 2 RES OPzS 185	10.86	9.53	6.51	5.66	3.23	3.12	2.29	1.72	1.46	1.07	0.77	
	2V 3 RES OPzS 260	15.23	13.35	9.09	7.88	4.48	4.33	3.17	2.38	2.02	1.48	1.06	
	2V 4 RES OPzS 300	17.70	15.46	10.43	9.02	5.09	4.92	3.59	2.68	2.27	1.66	1.18	
	2V 5 RES OPzS 375	22.33	19.50	13.16	11.39	6.42	6.21	4.53	3.38	2.86	2.09	1.49	
	2V 6 RES OPzS 450	26.69	23.32	15.75	13.63	7.70	7.43	5.43	4.05	3.43	2.51	1.79	
	2V 5 RES OPzS 550	30.93	27.13	18.49	16.04	9.16	8.86	6.51	4.89	4.15	3.06	2.18	
	2V 6 RES OPzS 660	36.84	32.32	22.04	19.13	10.94	10.58	7.77	5.84	4.96	3.65	2.61	
	2V 7 RES OPzS 750	41.76	36.63	24.96	21.66	12.38	11.97	8.79	6.61	5.62	4.13	2.95	
	2V 5 RES OPzS 900	46.18	40.87	28.50	24.92	14.62	14.16	10.53	7.99	6.83	5.06	3.64	
	2V 6 RES OPzS 965	50.50	44.54	30.81	26.88	15.66	15.16	11.24	8.50	7.25	5.36	3.84	
	2V 7 RES OPzS 1230	63.45	56.08	38.99	34.06	19.94	19.30	14.34	10.87	9.28	6.87	4.94	
	2V 8 RES OPzS 1275	67.50	59.47	41.05	35.79	20.80	20.13	14.90	11.26	9.60	7.09	5.07	
	2V 9 RES OPzS 1480	77.73	68.56	47.43	41.38	24.11	23.33	17.29	13.08	11.16	8.25	5.91	
	2V 10 RES OPzS 1590	84.15	74.14	51.16	44.60	25.92	25.07	18.57	14.03	11.95	8.82	6.32	
	2V 12 RES OPzS 1905	99.25	87.56	60.61	52.89	30.86	29.86	22.15	16.76	14.29	10.56	7.57	
	2V 11 RES OPzS 2285	124.75	110.26	76.32	66.48	38.35	37.08	27.31	20.53	17.46	12.85	9.19	
	2V 12 RES OPzS 2225	124.00	109.22	75.02	65.21	37.36	36.11	26.50	19.87	16.88	12.39	8.84	
	2V 14 RES OPzS 2765	152.02	134.23	92.73	80.74	46.49	44.95	33.07	24.85	21.12	15.54	11.11	
	2V 15 RES OPzS 2920	162.08	142.89	98.34	85.52	49.08	47.44	34.85	26.15	22.22	16.32	11.66	
	2V 16 RES OPzS 2970	168.06	147.83	101.20	87.87	50.16	48.48	35.53	26.61	22.58	16.56	11.81	
2V 18 RES OPzS 3780	209.51	184.90	127.58	111.02	63.83	61.70	45.36	34.07	28.96	21.30	15.22		
2V 20 RES OPzS 4075	227.75	200.77	138.13	120.11	68.87	66.57	48.89	36.68	31.16	22.90	16.36		
2V 24 RES OPzS 4620	258.64	227.79	156.41	135.93	77.82	75.22	55.20	41.39	35.14	25.80	18.41		
Monoblocks	6V 3 RES OPzS 240	14.58	12.73	8.56	7.40	4.14	4.00	2.91	2.16	1.83	1.34	0.96	
	6V 4 RES OPzS 280	17.26	15.03	10.05	8.66	4.81	4.65	3.37	2.50	2.12	1.55	1.10	
	6V 5 RES OPzS 385	23.10	20.19	13.60	11.75	6.59	6.37	4.63	3.45	2.93	2.14	1.53	
	6V 6 RES OPzS 405	24.55	21.39	14.31	12.34	6.88	6.64	4.82	3.58	3.03	2.22	1.58	
	12V 1 RES OPzS 85	5.29	4.61	3.09	2.67	1.49	1.44	1.05	0.78	0.66	0.49	0.35	
	12V 2 RES OPzS 130	8.28	7.17	4.73	4.06	2.24	2.16	1.56	1.16	0.98	0.72	0.52	
	12V 3 RES OPzS 190	11.95	10.35	6.83	5.86	3.23	3.12	2.26	1.68	1.42	1.04	0.75	
	End Voltage 1.85 V/cell												
			10 h	12 h	20 h	24 h	48 h	50 h	72 h	100 h	120 h	168 h	240 h
2V Cells	2V 2 RES OPzS 185	12.05	10.53	7.12	6.16	3.49	3.37	2.46	1.84	1.56	1.14	0.82	
	2V 3 RES OPzS 260	17.10	14.92	10.06	8.70	4.90	4.74	3.46	2.58	2.19	1.60	1.14	
	2V 4 RES OPzS 300	20.19	17.58	11.76	10.14	5.67	5.47	3.98	2.96	2.50	1.82	1.29	
	2V 5 RES OPzS 375	25.44	22.14	14.82	12.79	7.15	6.90	5.01	3.73	3.15	2.30	1.63	
	2V 6 RES OPzS 450	30.47	26.52	17.76	15.33	8.57	8.28	6.02	4.48	3.79	2.76	1.96	
	2V 5 RES OPzS 550	36.43	31.80	21.39	18.48	10.38	10.03	7.30	5.44	4.61	3.37	2.39	
	2V 6 RES OPzS 660	43.50	37.97	25.56	22.09	12.41	11.99	8.73	6.51	5.51	4.03	2.86	
	2V 7 RES OPzS 750	49.51	43.20	29.05	25.10	14.09	13.61	9.91	7.39	6.25	4.57	3.25	
	2V 5 RES OPzS 900	55.23	48.56	33.29	28.94	16.60	16.05	11.80	8.86	7.53	5.53	3.95	
	2V 6 RES OPzS 965	60.70	53.21	36.21	31.41	17.90	17.29	12.67	9.49	8.05	5.90	4.19	
	2V 7 RES OPzS 1230	75.85	66.62	45.57	39.58	22.66	21.90	16.08	12.07	10.25	7.52	5.36	
	2V 8 RES OPzS 1275	80.85	70.82	48.12	41.71	23.73	22.93	16.79	12.56	10.65	7.80	5.54	
	2V 9 RES OPzS 1480	93.06	81.59	55.56	48.19	27.47	26.55	19.46	14.58	12.37	9.06	6.44	
	2V 10 RES OPzS 1590	100.80	88.29	59.97	51.98	29.56	28.57	20.91	15.65	13.27	9.71	6.90	
	2V 12 RES OPzS 1905	119.74	104.96	71.44	61.97	35.32	34.14	25.02	18.74	15.90	11.64	8.27	
	2V 11 RES OPzS 2285	147.70	129.60	88.08	76.26	43.00	41.52	30.22	22.51	19.05	13.90	9.87	
	2V 12 RES OPzS 2225	147.64	129.15	87.15	75.29	42.17	40.71	29.55	21.95	18.55	13.51	9.56	
	2V 14 RES OPzS 2765	180.01	157.84	107.09	92.68	52.18	50.38	36.65	27.28	23.08	16.84	11.95	
	2V 15 RES OPzS 2920	192.14	168.23	113.77	98.36	55.21	53.30	38.72	28.79	24.34	17.74	12.58	
	2V 16 RES OPzS 2970	198.89	173.80	117.00	101.02	56.45	54.49	39.51	29.33	24.77	18.03	12.77	
2V 18 RES OPzS 3780	246.07	215.71	146.30	126.59	71.23	68.78	50.03	37.23	31.50	22.99	16.32		
2V 20 RES OPzS 4075	267.68	234.41	158.59	137.13	76.99	74.33	54.02	40.17	33.97	24.77	17.57		
2V 24 RES OPzS 4620	305.92	267.66	180.69	156.11	87.47	84.45	61.30	45.55	38.50	28.04	19.87		
Monoblocks	6V 3 RES OPzS 240	16.66	14.48	9.65	8.30	4.60	4.44	3.21	2.39	2.02	1.47	1.05	
	6V 4 RES OPzS 280	20.02	17.36	11.49	9.87	5.43	5.24	3.78	2.80	2.36	1.72	1.22	
	6V 5 RES OPzS 385	26.75	23.27	15.50	13.35	7.40	7.14	5.17	3.84	3.24	2.36	1.68	
	6V 6 RES OPzS 405	28.81	24.99	16.54	14.21	7.83	7.55	5.45	4.03	3.40	2.48	1.76	
	12V 1 RES OPzS 85	5.97	5.17	3.42	2.94	1.63	1.57	1.14	0.85	0.72	0.52	0.38	
	12V 2 RES OPzS 130	9.60	8.28	5.41	4.63	2.52	2.43	1.75	1.30	1.10	0.80	0.57	
12V 3 RES OPzS 190	13.96	12.04	7.86	6.72	3.66	3.53	2.54	1.88	1.59	1.16	0.83		

## Performance Data

### Discharge Constant Current at 20°C (Amperes)

#### End Voltage 2.00 V/cell

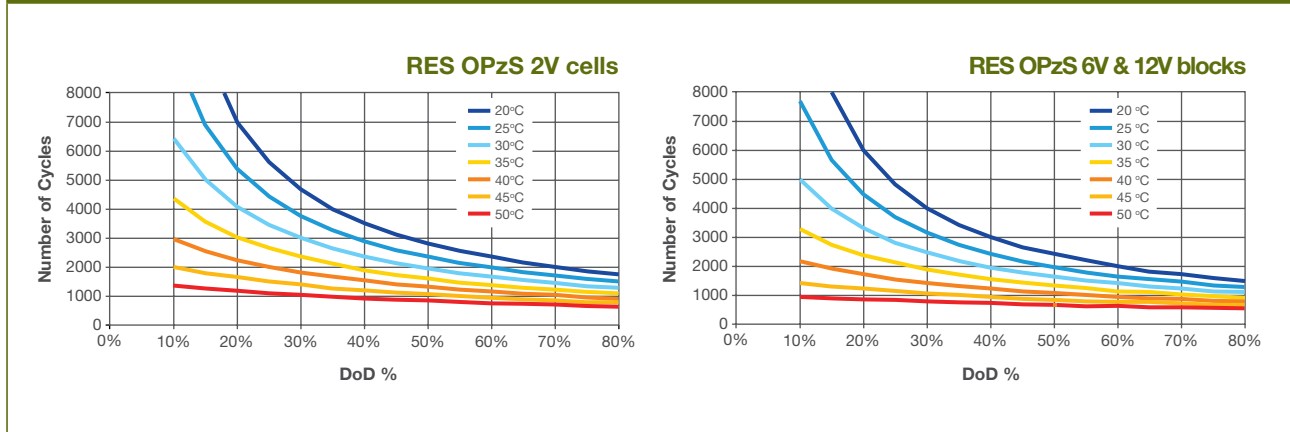
		10 h	12 h	20 h	24 h	48 h	50 h	72 h	100 h	120 h	168 h	240 h
2V Cells	2V 2 RES OPzS 185	5.45	4.85	3.44	3.03	1.81	1.75	1.31	1.00	0.86	0.64	0.46
	2V 3 RES OPzS 260	7.47	6.63	4.66	4.09	2.42	2.35	1.75	1.33	1.14	0.84	0.61
	2V 4 RES OPzS 300	8.38	7.41	5.16	4.52	2.65	2.56	1.90	1.43	1.22	0.90	0.65
	2V 5 RES OPzS 375	10.61	9.38	6.54	5.72	3.35	3.24	2.40	1.81	1.54	1.14	0.82
	2V 6 RES OPzS 450	12.57	11.12	7.77	6.81	4.00	3.87	2.87	2.17	1.85	1.37	0.98
	2V 5 RES OPzS 550	11.57	11.17	0.00	7.47	4.59	4.45	3.37	2.60	2.23	1.67	1.22
	2V 6 RES OPzS 660	13.36	12.92	0.00	8.86	5.46	5.30	4.02	3.09	2.66	2.00	1.46
	2V 7 RES OPzS 750	14.97	14.50	0.00	9.98	6.15	5.97	4.53	3.49	3.00	2.25	1.64
	2V 5 RES OPzS 900	14.31	14.01	12.76	11.59	7.52	7.32	5.68	4.47	3.88	2.95	2.18
	2V 6 RES OPzS 965	17.11	16.72	0.00	12.61	8.06	7.84	6.04	4.71	4.07	3.08	2.25
	2V 7 RES OPzS 1230	20.51	20.06	17.76	15.96	10.28	10.00	7.75	6.06	5.26	4.00	2.94
	2V 8 RES OPzS 1275	23.84	23.26	0.00	16.93	10.76	10.46	8.04	6.25	5.41	4.08	2.98
	2V 9 RES OPzS 1480	26.68	26.05	0.00	19.50	12.45	12.10	9.33	7.27	6.29	4.76	3.48
	2V 10 RES OPzS 1590	29.84	29.10	0.00	21.10	13.40	13.03	10.02	7.79	6.73	5.08	3.71
	2V 12 RES OPzS 1905	32.94	32.22	0.00	24.68	15.82	15.39	11.87	9.26	8.01	6.06	4.43
	2V 11 RES OPzS 2285	47.23	45.95	36.50	32.61	20.56	19.97	15.31	11.87	10.26	7.75	5.68
	2V 12 RES OPzS 2225	50.14	47.81	0.00	31.95	19.90	19.33	14.71	11.35	9.78	7.35	5.36
	2V 14 RES OPzS 2765	58.90	57.27	44.42	39.66	24.92	24.19	18.51	14.34	12.38	9.34	6.84
	2V 15 RES OPzS 2920	65.36	62.85	47.23	42.09	26.27	25.52	19.46	15.03	12.95	9.75	7.12
	2V 16 RES OPzS 2970	72.45	66.55	0.00	43.58	26.95	26.15	19.84	15.28	13.15	9.86	7.18
	2V 18 RES OPzS 3780	85.12	82.35	62.08	55.36	34.60	33.61	25.66	19.87	17.14	12.93	9.46
	2V 20 RES OPzS 4075	95.87	91.42	67.38	59.98	37.32	36.22	27.60	21.31	18.37	13.83	10.11
	2V 24 RES OPzS 4620	108.22	102.45	75.59	67.28	41.80	40.58	30.89	23.81	20.51	15.42	11.25
	Monoblocks	6V 3 RES OPzS 240	6.69	5.91	4.12	3.60	2.10	2.03	1.50	1.14	0.97	0.72
6V 4 RES OPzS 280		7.67	6.77	0.00	4.09	2.37	2.29	1.69	1.28	1.09	0.81	0.58
6V 5 RES OPzS 385		10.05	8.97	6.31	5.53	3.26	3.15	2.34	1.78	1.52	1.13	0.82
6V 6 RES OPzS 405		10.49	9.28	0.00	5.67	3.32	3.21	2.38	1.80	1.54	1.14	0.00
12V 1 RES OPzS 85		2.46	2.19	1.53	1.34	0.79	0.77	0.57	0.44	0.37	0.28	0.20
12V 2 RES OPzS 130		3.70	3.25	0.00	1.93	1.11	1.07	0.79	0.60	0.51	0.38	0.00
12V 3 RES OPzS 190		5.24	4.61	0.00	2.76	1.59	1.54	1.14	0.86	0.73	0.55	0.00

#### End Voltage 1.92 V/cell

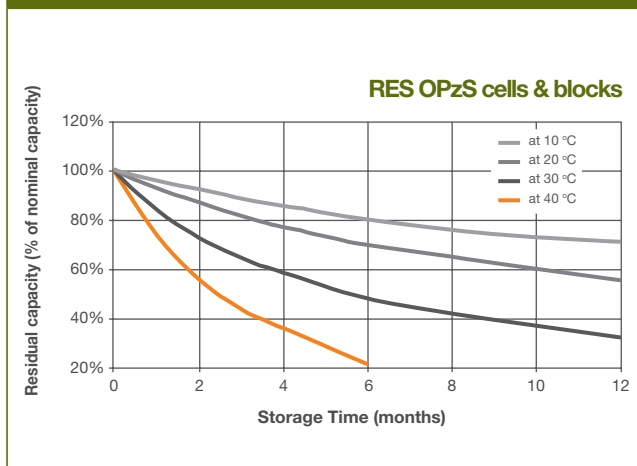
		10 h	12 h	20 h	24 h	48 h	50 h	72 h	100 h	120 h	168 h	240 h
2V Cells	2V 2 RES OPzS 185	10.14	8.92	6.12	5.33	3.06	2.96	2.18	1.64	1.39	1.02	0.73
	2V 3 RES OPzS 260	14.14	12.41	8.49	7.37	4.21	4.07	2.99	2.24	1.91	1.40	1.00
	2V 4 RES OPzS 300	16.30	14.26	9.66	8.37	4.74	4.58	3.35	2.50	2.12	1.55	1.11
	2V 5 RES OPzS 375	20.57	18.00	12.20	10.57	5.99	5.79	4.23	3.16	2.68	1.96	1.40
	2V 6 RES OPzS 450	24.55	21.49	14.58	12.64	7.17	6.93	5.07	3.79	3.22	2.36	1.68
	2V 5 RES OPzS 550	27.98	24.60	16.88	14.69	8.47	8.19	6.04	4.55	3.88	2.86	2.05
	2V 6 RES OPzS 660	33.28	29.27	20.11	17.50	10.10	9.77	7.21	5.44	4.63	3.42	2.45
	2V 7 RES OPzS 750	37.65	33.11	22.73	19.78	11.42	11.05	8.15	6.15	5.24	3.86	2.77
	2V 5 RES OPzS 900	41.49	36.83	25.91	22.73	13.52	13.10	9.80	7.48	6.41	4.77	3.45
	2V 6 RES OPzS 965	45.28	40.06	27.97	24.48	14.45	13.99	10.44	7.93	6.78	5.03	3.62
	2V 7 RES OPzS 1230	57.03	50.56	35.47	31.09	18.43	17.85	13.34	10.16	8.70	6.47	4.67
	2V 8 RES OPzS 1275	60.64	53.59	37.32	32.64	19.21	18.60	13.85	10.51	8.98	6.66	4.78
	2V 9 RES OPzS 1480	69.84	61.78	43.12	37.74	22.26	21.56	16.08	12.22	10.45	7.75	5.58
	2V 10 RES OPzS 1590	75.60	66.81	46.51	40.68	23.93	23.17	17.25	13.09	11.19	8.29	5.95
	2V 12 RES OPzS 1905	88.83	78.61	54.93	48.11	28.44	27.54	20.56	15.63	13.36	9.91	7.13
	2V 11 RES OPzS 2285	112.91	100.13	69.96	61.15	35.70	34.54	25.58	19.32	16.47	12.17	8.74
	2V 12 RES OPzS 2225	111.94	98.93	68.58	59.81	34.68	33.54	24.76	18.65	15.87	11.69	8.37
	2V 14 RES OPzS 2765	137.57	121.89	85.00	74.24	43.26	41.86	30.97	23.38	19.92	14.71	10.55
	2V 15 RES OPzS 2920	146.65	129.70	90.07	78.59	45.63	44.14	32.60	24.57	20.92	15.43	11.06
	2V 16 RES OPzS 2970	152.23	134.32	92.76	80.79	46.64	45.10	33.22	24.99	21.25	15.64	11.19
	2V 18 RES OPzS 3780	190.36	168.55	117.33	102.42	59.55	57.60	42.57	32.11	27.35	20.19	14.49
	2V 20 RES OPzS 4075	206.97	183.02	127.01	110.77	64.21	62.11	45.85	34.55	29.41	21.69	15.55
	2V 24 RES OPzS 4620	234.31	207.01	143.39	125.00	72.39	70.01	51.65	38.89	33.10	24.39	17.46
	Monoblocks	6V 3 RES OPzS 240	13.39	11.72	7.92	6.85	3.86	3.72	2.71	2.03	1.72	1.26
6V 4 RES OPzS 280		15.75	13.74	9.23	7.96	4.45	4.30	3.12	2.33	1.97	1.44	1.03
6V 5 RES OPzS 385		21.07	18.45	12.51	10.83	6.11	5.90	4.31	3.22	2.73	2.00	1.43
6V 6 RES OPzS 405		22.24	19.43	13.08	11.30	6.34	6.12	4.45	3.32	2.81	2.06	1.47
12V 1 RES OPzS 85		4.89	4.28	2.89	2.49	1.40	1.35	0.99	0.74	0.63	0.46	0.33
12V 2 RES OPzS 130		7.55	6.55	4.34	3.74	2.07	2.00	1.45	1.08	0.91	0.67	0.48
12V 3 RES OPzS 190		10.87	9.43	6.26	5.38	2.98	2.88	2.09	1.56	1.32	0.97	0.70

## Performance Curves

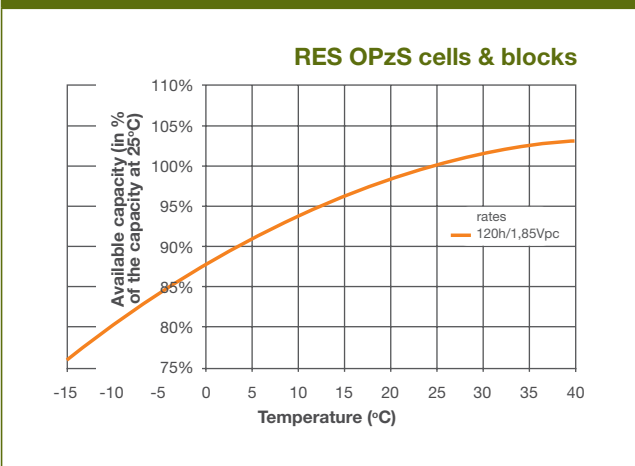
### Expected Number of Cycles vs. DoD



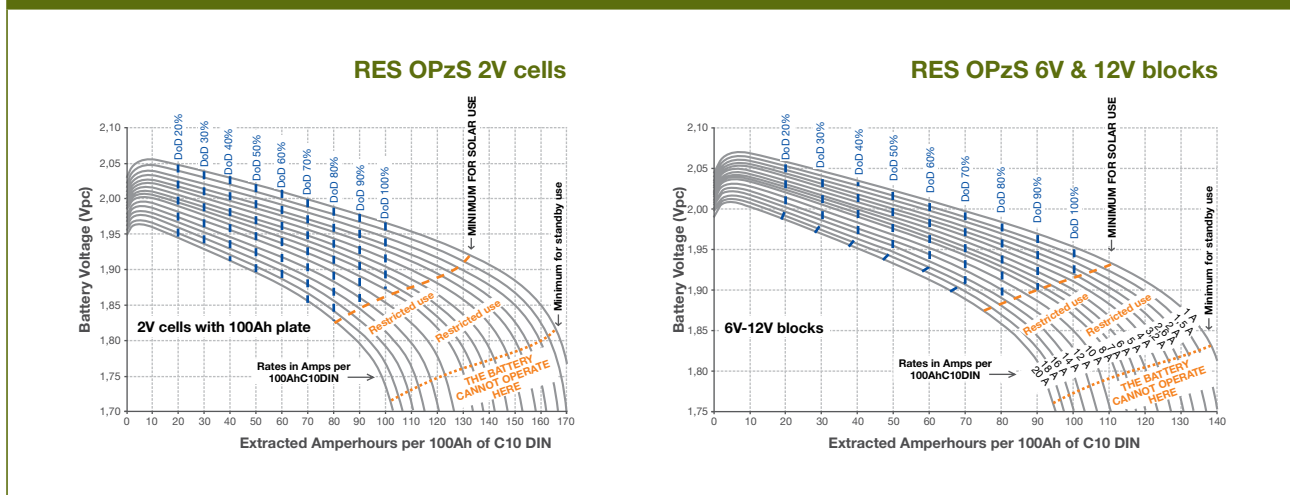
### Self-discharge characteristics



### Capacity vs temperature



### Guidance for the Initial Low-voltage Disconnect Settings (25°C Reference Temperature)



## Technical Features

### Design

<b>Positive plates</b>	Tubular plates with special low-antimony lead alloy ( $\leq 1.65\%$ Sb)
<b>Negative plates</b>	Pasted negative plates of grid design with optimized low-antimony lead alloy
<b>Separators</b>	Low resistance, microporous PVC
<b>Electrolyte</b>	Diluted sulphuric acid
<b>Container, lid material</b>	High impact, transparent SAN (Styrene Acrylonitrile) for container. Robust ABS (Acrylonitrile Butadien Styrene) Material for lid.
<b>Poles</b>	Premium design with insert and rubber seal in the lid for hardness and acid resistance. M10 brass inlay. Impedance measurements possible.
<b>Connectors</b>	Voltage measurements possible due to bolt-on type design. Steel bolts with plastic encapsulated heads. Insulated flexible connectors, optional solid connectors available.
<b>Ceramic Plugs</b>	Flame arresting design. Ceramic funnel plugs also available.

### Operation

<b>Number of cycles</b>	2300 cycles for 2V cells, 2000 cycles for 6V & 12V blocks (60% DoD, 20°C).
<b>Design life</b>	20 years for 2V cells, 18 years for 6V&12V blocks (stand-by float, 20°C).
<b>Maintenance</b>	Low topping up requirements.
<b>Operating temperature</b>	Recommended 10°C to 30°C. Max: 55°C.
<b>Storage Time</b>	Maximum shelf life up to 3 months at 20°C, 2 months at 30°C or 1 month at 40°C.
<b>Self discharge rate</b>	Approx. 2.5% per month at 20°C.

### Certified Quality

- Compliant with IEC 61427 requirements for photovoltaic energy systems
- Fully compliant with IEC 60896-11 requirements for vented lead-acid batteries
- Full conformity to DIN 40736-1 specifications for OPzS cells and DIN 40737-3 for OPzS blocks
- Compliant with the safety requirements of EN 50272-2 for stationary batteries
- Manufactured at SUNLIGHT's European production facilities, certified with ISO 9001, ISO 14001, BS OHSAS 18001

# Performance Data

## Discharge Constant Current at 20°C (Amperes)

End Voltage 1.83 V/cell													
		10 h	12 h	20 h	24 h	48 h	50 h	72 h	100 h	120 h	168 h	240 h	
2V Cells	2V 2 RES OPzS 185	12.31	10.74	7.25	6.27	3.54	3.42	2.50	1.87	1.58	1.16	0.83	
	2V 3 RES OPzS 260	17.54	15.29	10.28	8.88	4.99	4.82	3.51	2.62	2.22	1.62	1.16	
	2V 4 RES OPzS 300	20.83	18.10	12.08	10.41	5.80	5.60	4.06	3.02	2.55	1.86	1.32	
	2V 5 RES OPzS 375	26.23	22.80	15.21	13.11	7.31	7.06	5.12	3.81	3.22	2.35	1.66	
	2V 6 RES OPzS 450	31.43	27.33	18.24	15.73	8.77	8.47	6.15	4.57	3.86	2.81	1.99	
	2V 5 RES OPzS 550	37.97	33.08	22.16	19.11	10.68	10.31	7.49	5.57	4.71	3.44	2.44	
	2V 6 RES OPzS 660	45.37	39.54	26.49	22.86	12.77	12.33	8.96	6.66	5.64	4.11	2.92	
	2V 7 RES OPzS 750	51.71	45.03	30.15	26.00	14.52	14.01	10.17	7.57	6.40	4.67	3.31	
	2V 5 RES OPzS 900	57.86	50.77	34.61	30.03	17.10	16.53	12.11	9.06	7.69	5.64	4.01	
	2V 6 RES OPzS 965	63.72	55.73	37.73	32.67	18.48	17.85	13.03	9.73	8.24	6.02	4.27	
	2V 7 RES OPzS 1230	79.47	69.65	47.38	41.08	23.35	22.56	16.51	12.35	10.47	7.67	5.45	
	2V 8 RES OPzS 1275	84.78	74.12	50.10	43.36	24.49	23.65	17.26	12.87	10.90	7.96	5.64	
	2V 9 RES OPzS 1480	97.56	85.37	57.83	50.07	28.34	27.38	19.99	14.93	12.65	9.25	6.56	
	2V 10 RES OPzS 1590	105.71	92.40	62.45	54.04	30.51	29.47	21.50	16.04	13.58	9.91	7.03	
	2V 12 RES OPzS 1905	125.82	110.07	74.52	64.52	36.51	35.26	25.75	19.22	16.28	11.89	8.43	
	2V 11 RES OPzS 2285	154.46	135.18	91.28	78.86	44.13	42.59	30.90	22.95	19.40	14.14	10.02	
	2V 12 RES OPzS 2225	154.71	135.02	90.55	78.06	43.39	41.87	30.28	22.43	18.93	13.76	9.73	
	2V 14 RES OPzS 2765	188.27	164.67	111.03	95.87	53.57	51.71	37.49	27.83	23.51	17.12	12.14	
	2V 15 RES OPzS 2920	201.07	175.63	118.03	101.84	56.73	54.75	39.64	29.39	24.82	18.05	12.78	
	2V 16 RES OPzS 2970	208.01	181.37	121.38	104.58	58.02	55.98	40.46	29.96	25.27	18.36	12.98	
	2V 18 RES OPzS 3780	256.75	224.53	151.31	130.66	73.00	70.46	51.10	37.94	32.06	23.36	16.56	
	2V 20 RES OPzS 4075	279.34	244.03	164.10	141.61	78.95	76.20	55.20	40.96	34.59	25.18	17.84	
	2V 24 RES OPzS 4620	319.94	279.26	187.36	161.57	89.86	86.72	62.75	46.50	39.25	28.54	20.20	
	Monoblocks	6V 3 RES OPzS 240	17.18	14.91	9.90	8.51	4.71	4.54	3.28	2.43	2.06	1.50	1.06
6V 4 RES OPzS 280		20.75	17.97	11.85	10.17	5.58	5.38	3.88	2.87	2.42	1.76	1.25	
6V 5 RES OPzS 385		27.70	24.05	15.96	13.73	7.59	7.32	5.29	3.92	3.31	2.41	1.71	
6V 6 RES OPzS 405		29.98	25.96	17.12	14.69	8.06	7.77	5.60	4.14	3.49	2.54	1.80	
12V 1 RES OPzS 85		6.12	5.30	3.49	3.00	1.65	1.60	1.15	0.86	0.73	0.53	0.38	
12V 2 RES OPzS 130		9.95	8.57	5.58	4.77	2.59	2.50	1.80	1.33	1.12	0.82	0.58	
12V 3 RES OPzS 190		14.50	12.48	8.12	6.94	3.77	3.63	2.61	1.93	1.63	1.19	0.85	
End Voltage 1.80 V/cell													
		10 h	12 h	20 h	24 h	48 h	50 h	72 h	100 h	120 h	168 h	240 h	
2V Cells	2V 2 RES OPzS 185	12.57	10.96	7.37	6.37	3.59	3.47	2.53	1.89	1.60	1.17	0.84	
	2V 3 RES OPzS 260	17.97	15.64	10.49	9.06	5.08	4.91	3.58	2.67	2.26	1.65	1.17	
	2V 4 RES OPzS 300	21.46	18.63	12.39	10.67	5.93	5.72	4.15	3.08	2.60	1.90	1.34	
	2V 5 RES OPzS 375	27.01	23.45	15.60	13.44	7.47	7.21	5.23	3.88	3.28	2.39	1.69	
	2V 6 RES OPzS 450	32.40	28.13	18.72	16.12	8.97	8.66	6.28	4.66	3.94	2.87	2.03	
	2V 5 RES OPzS 550	39.63	34.44	22.93	19.75	10.97	10.59	7.67	5.70	4.81	3.51	2.49	
	2V 6 RES OPzS 660	47.40	41.20	27.44	23.63	13.13	12.67	9.18	6.82	5.76	4.20	2.98	
	2V 7 RES OPzS 750	54.10	47.00	31.27	26.92	14.94	14.41	10.44	7.75	6.54	4.77	3.38	
	2V 5 RES OPzS 900	60.88	53.24	36.01	31.17	17.61	17.01	12.41	9.27	7.85	5.74	4.08	
	2V 6 RES OPzS 965	67.21	58.62	39.39	34.02	19.07	18.42	13.39	9.97	8.43	6.15	4.35	
	2V 7 RES OPzS 1230	83.61	73.06	49.31	42.65	24.05	23.22	16.93	12.63	10.70	7.82	5.55	
	2V 8 RES OPzS 1275	89.32	77.86	52.25	45.11	25.26	24.39	17.73	13.19	11.15	8.13	5.75	
	2V 9 RES OPzS 1480	102.76	89.64	60.27	52.07	29.23	28.22	20.53	15.29	12.93	9.43	6.69	
	2V 10 RES OPzS 1590	111.37	97.07	65.12	56.22	31.48	30.39	22.08	16.43	13.89	10.12	7.16	
	2V 12 RES OPzS 1905	132.92	115.93	77.89	67.26	37.71	36.41	26.47	19.70	16.66	12.14	8.60	
	2V 11 RES OPzS 2285	162.25	141.47	94.66	81.56	45.26	43.68	31.59	23.41	19.77	14.38	10.18	
	2V 12 RES OPzS 2225	162.99	141.74	94.20	81.00	44.63	43.04	31.02	22.92	19.32	14.02	9.90	
	2V 14 RES OPzS 2765	197.81	172.38	115.18	99.20	54.97	53.04	38.34	28.40	23.97	17.43	12.33	
	2V 15 RES OPzS 2920	211.41	183.98	122.57	105.46	58.26	56.21	40.56	30.01	25.31	18.38	12.99	
	2V 16 RES OPzS 2970	218.58	189.92	126.03	108.32	59.61	57.49	41.42	30.60	25.79	18.70	13.20	
	2V 18 RES OPzS 3780	268.85	234.24	156.53	134.83	74.78	72.16	52.18	38.67	32.65	23.75	16.82	
	2V 20 RES OPzS 4075	292.60	254.72	169.87	146.23	80.93	78.08	56.41	41.77	35.24	25.62	18.13	
	2V 24 RES OPzS 4620	336.09	292.32	194.46	167.25	92.28	89.02	64.21	47.48	40.04	29.06	20.54	
	Monoblocks	6V 3 RES OPzS 240	17.68	15.33	10.14	8.72	4.81	4.64	3.35	2.48	2.10	1.53	1.08
6V 4 RES OPzS 280		21.48	18.57	12.20	10.46	5.72	5.52	3.97	2.94	2.47	1.80	1.27	
6V 5 RES OPzS 385		28.65	24.83	16.41	14.10	7.77	7.49	5.41	4.01	3.38	2.46	1.75	
6V 6 RES OPzS 405		31.18	26.95	17.69	15.16	8.28	7.99	5.74	4.24	3.58	2.60	1.84	
12V 1 RES OPzS 85		6.27	5.42	3.56	3.06	1.68	1.62	1.17	0.87	0.74	0.54	0.39	
12V 2 RES OPzS 130		10.30	8.85	5.74	4.91	2.66	2.56	1.84	1.36	1.15	0.84	0.60	
12V 3 RES OPzS 190		15.04	12.93	8.37	7.15	3.87	3.73	2.68	1.98	1.67	1.22	0.87	

## Performance Data

### Discharge Constant Power at 20°C (Watts/cell)

End Voltage 2.00 V/cell												
		10 h	12 h	20 h	24 h	48 h	50 h	72 h	100 h	120 h	168 h	240 h
2V Cells	2V 2 RES OPzS 185	10.76	9.59	6.84	6.03	3.64	3.52	2.65	2.03	1.75	1.31	0.95
	2V 3 RES OPzS 260	14.74	13.10	9.27	8.15	4.87	4.72	3.54	2.70	2.31	1.73	1.25
	2V 4 RES OPzS 300	16.55	14.66	10.28	9.01	5.33	5.16	3.84	2.91	2.49	1.85	1.33
	2V 5 RES OPzS 375	20.94	18.55	13.01	11.40	6.74	6.53	4.86	3.69	3.15	2.34	1.68
	2V 6 RES OPzS 450	24.81	22.00	15.46	13.57	8.04	7.79	5.81	4.41	3.77	2.80	2.02
	2V 5 RES OPzS 550	22.75	21.98	16.71	14.85	9.21	8.95	6.82	5.27	4.55	3.43	2.51
	2V 6 RES OPzS 660	26.25	25.41	19.80	17.61	10.96	10.64	8.12	6.28	5.42	4.09	2.99
	2V 7 RES OPzS 750	29.41	28.48	22.29	19.83	12.35	11.99	9.15	7.08	6.11	4.61	3.37
	2V 5 RES OPzS 900	28.10	27.52	25.27	22.94	15.07	14.68	11.47	9.05	7.89	6.05	4.48
	2V 6 RES OPzS 965	33.54	32.79	27.79	25.02	16.18	15.73	12.21	9.56	8.30	6.32	4.65
	2V 7 RES OPzS 1230	40.26	39.39	35.15	31.64	20.61	20.06	15.63	12.31	10.71	8.19	6.06
	2V 8 RES OPzS 1275	46.75	45.62	37.42	33.59	21.60	21.00	16.26	12.71	11.02	8.37	6.15
	2V 9 RES OPzS 1480	52.33	51.11	43.07	38.69	24.97	24.31	18.84	14.78	12.83	9.77	7.19
	2V 10 RES OPzS 1590	58.50	57.08	46.65	41.87	26.91	26.16	20.25	15.83	13.72	10.42	7.65
	2V 12 RES OPzS 1905	64.52	63.14	54.26	48.99	31.73	30.88	23.97	18.80	16.32	12.42	9.14
	2V 11 RES OPzS 2285	93.20	90.69	72.38	64.84	41.28	40.15	30.92	24.14	20.91	15.90	11.71
	2V 12 RES OPzS 2225	98.81	94.21	71.14	63.54	40.02	38.87	29.77	23.11	19.97	15.09	11.06
	2V 14 RES OPzS 2765	116.23	113.01	88.11	78.87	50.05	48.65	37.44	29.15	25.24	19.15	14.10
	2V 15 RES OPzS 2920	128.93	123.87	93.73	83.73	52.80	51.32	39.34	30.58	26.43	20.01	14.68
	2V 16 RES OPzS 2970	142.69	131.32	97.32	86.74	54.22	52.62	40.18	31.10	26.84	20.24	14.81
2V 18 RES OPzS 3780	168.20	163.14	123.20	110.10	69.54	67.56	51.89	40.39	34.96	26.50	19.51	
2V 20 RES OPzS 4075	189.43	180.25	133.77	119.36	74.98	72.89	55.81	43.34	37.46	28.36	20.82	
2V 24 RES OPzS 4620	213.53	201.81	150.06	133.88	84.01	81.65	62.46	48.44	41.84	31.62	23.19	
Monoblocks	6V 3 RES OPzS 240	13.20	11.69	8.19	7.17	4.22	4.08	3.04	2.31	1.98	1.47	1.07
	6V 4 RES OPzS 280	15.14	13.38	9.32	8.15	4.76	4.61	3.42	2.59	2.22	1.65	0.00
	6V 5 RES OPzS 385	19.83	17.73	12.55	11.02	6.54	6.34	4.74	3.61	3.10	2.32	1.69
	6V 6 RES OPzS 405	20.69	18.35	12.89	11.30	6.68	6.47	4.82	3.67	3.14	2.34	0.00
	12V 1 RES OPzS 85	4.86	4.32	3.05	2.68	1.59	1.54	1.16	0.88	0.76	0.57	0.42
	12V 2 RES OPzS 130	7.31	6.43	4.43	3.86	2.24	2.17	1.61	1.22	1.04	0.78	0.00
	12V 3 RES OPzS 190	10.35	9.12	6.30	5.50	3.20	3.10	2.30	1.75	1.50	1.12	0.00

End Voltage 1.92 V/cell												
		10 h	12 h	20 h	24 h	48 h	50 h	72 h	100 h	120 h	168 h	240 h
2V Cells	2V 2 RES OPzS 185	19.51	17.21	11.92	10.40	6.04	5.84	4.32	3.26	2.78	2.06	1.48
	2V 3 RES OPzS 260	27.21	23.96	16.51	14.38	8.31	8.04	5.94	4.48	3.82	2.82	2.02
	2V 4 RES OPzS 300	31.38	27.53	18.80	16.33	9.35	9.04	6.65	5.00	4.25	3.13	2.23
	2V 5 RES OPzS 375	39.60	34.75	23.74	20.62	11.82	11.42	8.40	6.31	5.37	3.95	2.82
	2V 6 RES OPzS 450	47.26	41.48	28.37	24.65	14.14	13.67	10.06	7.56	6.43	4.74	3.39
	2V 5 RES OPzS 550	53.67	47.32	32.73	28.55	16.65	16.11	11.96	9.07	7.74	5.75	4.14
	2V 6 RES OPzS 660	63.81	56.28	38.97	34.01	19.86	19.22	14.28	10.83	9.25	6.87	4.95
	2V 7 RES OPzS 750	72.19	63.66	44.05	38.44	22.45	21.73	16.14	12.24	10.45	7.76	5.59
	2V 5 RES OPzS 900	79.34	70.62	50.08	44.07	26.52	25.71	19.38	14.87	12.79	9.58	6.97
	2V 6 RES OPzS 965	86.68	76.88	54.09	47.49	28.38	27.50	20.65	15.79	13.54	10.11	7.32
	2V 7 RES OPzS 1230	109.11	96.99	68.58	60.28	36.16	35.05	26.38	20.22	17.37	13.00	9.44
	2V 8 RES OPzS 1275	116.12	102.90	72.22	63.35	37.73	36.56	27.41	20.94	17.95	13.38	9.68
	2V 9 RES OPzS 1480	133.70	118.59	83.43	73.23	43.72	42.37	31.81	24.33	20.87	15.58	11.28
	2V 10 RES OPzS 1590	144.79	128.28	90.00	78.95	47.01	45.55	34.15	26.08	22.35	16.67	12.05
	2V 12 RES OPzS 1905	170.01	150.83	106.22	93.30	55.82	54.10	40.66	31.10	26.68	19.92	14.42
	2V 11 RES OPzS 2285	216.23	192.28	135.49	118.78	70.22	67.99	50.69	38.52	32.95	24.50	17.70
	2V 12 RES OPzS 2225	214.57	190.14	132.90	116.26	68.25	66.07	49.09	37.20	31.76	23.54	16.96
	2V 14 RES OPzS 2765	263.54	234.14	164.63	144.25	85.11	82.40	61.38	46.61	39.85	29.61	21.38
	2V 15 RES OPzS 2920	281.05	249.27	174.56	152.76	89.81	86.93	64.64	49.02	41.87	31.07	22.40
	2V 16 RES OPzS 2970	291.97	258.34	179.89	157.17	91.86	88.90	65.92	49.88	42.55	31.50	22.67
2V 18 RES OPzS 3780	364.82	323.95	227.41	199.14	117.20	113.47	84.42	64.06	54.75	40.66	29.35	
2V 20 RES OPzS 4075	396.77	351.86	246.26	215.43	126.43	122.38	90.94	68.93	58.88	43.68	31.50	
2V 24 RES OPzS 4620	449.21	398.02	278.01	243.10	142.53	137.94	102.44	77.61	66.26	49.12	35.38	
Monoblocks	6V 3 RES OPzS 240	25.76	22.60	15.41	13.37	7.60	7.35	5.38	4.04	3.43	2.53	1.81
	6V 4 RES OPzS 280	30.30	26.51	17.94	15.53	8.78	8.48	6.19	4.64	3.93	2.89	2.07
	6V 5 RES OPzS 385	40.49	35.56	24.29	21.09	12.03	11.63	8.53	6.41	5.45	4.02	2.89
	6V 6 RES OPzS 405	42.76	37.44	25.40	22.00	12.48	12.06	8.83	6.61	5.62	4.13	2.96
	12V 1 RES OPzS 85	9.41	8.25	5.61	4.86	2.76	2.67	1.96	1.47	1.26	0.93	0.67
	12V 2 RES OPzS 130	14.54	12.66	8.46	7.29	4.08	3.94	2.87	2.15	1.83	1.35	0.97
	12V 3 RES OPzS 190	20.92	18.21	12.18	10.50	5.88	5.68	4.15	3.11	2.64	1.95	1.40



# Performance Data

## Discharge Constant Power at 20°C (Watts/cell)

End Voltage 1.90 V/cell												
		10 h	12 h	20 h	24 h	48 h	50 h	72 h	100 h	120 h	168 h	240 h
2V Cells	2V 2 RES OPzS 185	20.82	18.33	12.63	11.00	6.36	6.15	4.54	3.42	2.92	2.16	1.55
	2V 3 RES OPzS 260	29.19	25.66	17.61	15.32	8.82	8.53	6.28	4.73	4.03	2.97	2.13
	2V 4 RES OPzS 300	33.92	29.71	20.22	17.54	10.00	9.67	7.09	5.32	4.52	3.32	2.37
	2V 5 RES OPzS 375	42.79	37.49	25.51	22.13	12.63	12.20	8.95	6.72	5.71	4.20	3.00
	2V 6 RES OPzS 450	51.12	44.80	30.51	26.48	15.12	14.62	10.73	8.05	6.84	5.03	3.60
	2V 5 RES OPzS 550	58.99	51.89	35.66	31.04	17.94	17.35	12.83	9.69	8.26	6.11	4.40
	2V 6 RES OPzS 660	70.22	61.80	42.51	37.01	21.42	20.72	15.32	11.58	9.87	7.31	5.26
	2V 7 RES OPzS 750	79.60	70.03	48.13	41.90	24.23	23.44	17.33	13.10	11.17	8.26	5.94
	2V 5 RES OPzS 900	87.77	77.91	54.79	48.07	28.57	27.68	20.74	15.84	13.58	10.13	7.34
	2V 6 RES OPzS 965	96.07	84.98	59.29	51.89	30.63	29.66	22.14	16.85	14.42	10.73	7.74
	2V 7 RES OPzS 1230	120.66	106.97	75.01	65.74	38.96	37.74	28.24	21.54	18.46	13.76	9.95
	2V 8 RES OPzS 1275	128.47	113.53	79.04	69.13	40.69	39.40	29.38	22.34	19.11	14.20	10.23
	2V 9 RES OPzS 1480	147.89	130.83	91.30	79.91	47.14	45.65	34.08	25.94	22.20	16.51	11.92
	2V 10 RES OPzS 1590	160.18	141.54	98.51	86.15	50.70	49.09	36.60	27.82	23.79	17.68	12.74
	2V 12 RES OPzS 1905	188.74	166.98	116.59	102.07	60.31	58.41	43.63	33.22	28.43	21.15	15.25
	2V 11 RES OPzS 2285	237.41	210.49	147.06	128.54	75.13	72.70	53.91	40.79	34.81	25.78	18.56
	2V 12 RES OPzS 2225	236.15	208.66	144.63	126.15	73.22	70.83	52.35	39.50	33.66	24.86	17.85
	2V 14 RES OPzS 2765	289.41	256.36	178.74	156.14	91.09	88.15	65.31	49.38	42.12	31.18	22.43
	2V 15 RES OPzS 2920	308.67	272.99	189.62	165.46	96.20	93.06	68.84	51.98	44.31	32.76	23.54
	2V 16 RES OPzS 2970	320.38	282.70	195.30	170.13	98.39	95.16	70.22	52.92	45.06	33.25	23.85
2V 18 RES OPzS 3780	398.99	353.31	246.07	214.88	125.14	121.07	89.63	67.73	57.76	42.74	30.75	
2V 20 RES OPzS 4075	433.99	383.80	266.53	232.54	135.07	130.66	96.62	72.95	62.17	45.96	33.04	
2V 24 RES OPzS 4620	492.78	435.41	301.73	263.10	152.60	147.61	109.07	82.29	70.11	51.79	37.19	
Monoblocks	6V 3 RES OPzS 240	27.90	24.44	16.58	14.36	8.13	7.86	5.74	4.30	3.65	2.68	1.92
	6V 4 RES OPzS 280	33.04	28.86	19.45	16.81	9.45	9.13	6.65	4.97	4.21	3.09	2.21
	6V 5 RES OPzS 385	44.15	38.70	26.30	22.79	12.93	12.49	9.14	6.85	5.82	4.28	3.07
	6V 6 RES OPzS 405	46.92	41.00	27.68	23.93	13.49	13.03	9.51	7.11	6.03	4.43	3.17
	12V 1 RES OPzS 85	10.13	8.86	5.99	5.19	2.93	2.83	2.07	1.55	1.32	0.98	0.71
	12V 2 RES OPzS 130	15.86	13.78	9.16	7.89	4.39	4.24	3.09	2.30	1.96	1.44	1.04
	12V 3 RES OPzS 190	22.90	19.89	13.23	11.39	6.34	6.13	4.46	3.33	2.83	2.08	1.50

End Voltage 1.85 V/cell												
		10 h	12 h	20 h	24 h	48 h	50 h	72 h	100 h	120 h	168 h	240 h
2V Cells	2V 2 RES OPzS 185	22.91	20.10	13.72	11.92	6.82	6.60	4.85	3.64	3.10	2.28	1.64
	2V 3 RES OPzS 260	32.49	28.46	19.37	16.81	9.59	9.26	6.80	5.10	4.34	3.19	2.28
	2V 4 RES OPzS 300	38.35	33.49	22.61	19.57	11.06	10.69	7.81	5.84	4.95	3.63	2.58
	2V 5 RES OPzS 375	48.31	42.19	28.50	24.67	13.95	13.48	9.85	7.37	6.25	4.58	3.26
	2V 6 RES OPzS 450	57.83	50.52	34.14	29.56	16.73	16.16	11.81	8.84	7.50	5.50	3.91
	2V 5 RES OPzS 550	68.71	60.19	40.89	35.45	20.17	19.49	14.29	10.72	9.10	6.69	4.79
	2V 6 RES OPzS 660	82.00	71.85	48.84	42.34	24.11	23.30	17.08	12.82	10.89	8.01	5.73
	2V 7 RES OPzS 750	93.30	81.70	55.49	48.09	27.36	26.44	19.38	14.53	12.35	9.08	6.49
	2V 5 RES OPzS 900	103.65	91.49	63.38	55.30	32.17	31.13	23.06	17.44	14.87	11.00	7.90
	2V 6 RES OPzS 965	114.01	100.31	68.96	60.03	34.69	33.55	24.77	18.68	15.91	11.73	8.40
	2V 7 RES OPzS 1230	142.43	125.58	86.78	75.65	43.92	42.48	31.44	23.75	20.25	14.97	10.74
	2V 8 RES OPzS 1275	151.97	133.61	91.71	79.79	46.02	44.50	32.83	24.74	21.05	15.52	11.10
	2V 9 RES OPzS 1480	174.85	153.88	105.86	92.16	53.27	51.52	38.05	28.70	24.44	18.03	12.91
	2V 10 RES OPzS 1590	189.48	166.57	114.30	99.44	57.33	55.45	40.90	30.81	26.22	19.32	13.82
	2V 12 RES OPzS 1905	224.77	197.77	136.00	118.40	68.44	66.20	48.90	36.87	31.40	23.15	16.57
	2V 11 RES OPzS 2285	277.48	244.50	168.07	146.09	83.59	80.80	59.26	44.44	37.74	27.74	19.83
	2V 12 RES OPzS 2225	277.58	243.82	166.36	144.29	82.00	79.22	57.94	43.33	36.75	26.93	19.20
	2V 14 RES OPzS 2765	338.30	297.86	204.41	177.60	101.45	98.05	71.87	53.86	45.73	33.59	24.00
	2V 15 RES OPzS 2920	361.33	317.68	217.23	188.53	107.36	103.75	75.94	56.84	48.23	35.39	25.25
	2V 16 RES OPzS 2970	374.38	328.51	223.60	193.78	109.86	106.12	77.53	57.93	49.11	35.98	25.64
2V 18 RES OPzS 3780	463.05	407.63	279.57	242.84	138.63	133.98	98.18	73.57	62.46	45.88	32.79	
2V 20 RES OPzS 4075	503.88	443.07	303.15	263.14	149.87	144.82	106.03	79.38	67.37	49.44	35.31	
2V 24 RES OPzS 4620	575.71	505.75	345.18	299.40	170.19	164.44	120.27	89.96	76.31	55.95	39.91	
Monoblocks	6V 3 RES OPzS 240	31.59	27.57	18.54	16.01	8.98	8.67	6.31	4.71	3.99	2.92	2.09
	6V 4 RES OPzS 280	37.93	33.01	22.05	19.01	10.59	10.22	7.42	5.52	4.67	3.42	2.44
	6V 5 RES OPzS 385	50.61	44.18	29.73	25.68	14.41	13.91	10.13	7.56	6.41	4.70	3.36
	6V 6 RES OPzS 405	54.49	47.43	31.69	27.32	15.22	14.69	10.67	7.94	6.72	4.92	3.51
	12V 1 RES OPzS 85	11.32	9.86	6.59	5.68	3.18	3.07	2.23	1.67	1.42	1.05	0.75
	12V 2 RES OPzS 130	18.22	15.77	10.39	8.92	4.92	4.75	3.44	2.56	2.17	1.59	1.14
	12V 3 RES OPzS 190	26.47	22.90	15.08	12.95	7.14	6.89	4.99	3.71	3.15	2.31	1.66

## Performance Data

### Discharge Constant Power at 20°C (Watts/cell)

End Voltage 1.83 V/cell												
		10 h	12 h	20 h	24 h	48 h	50 h	72 h	100 h	120 h	168 h	240 h
2V Cells	2V 2 RES OPzS 185	23.38	20.48	13.95	12.11	6.92	6.69	4.91	3.69	3.14	2.31	1.66
	2V 3 RES OPzS 260	33.27	29.11	19.76	17.13	9.75	9.42	6.90	5.18	4.40	3.24	2.31
	2V 4 RES OPzS 300	39.46	34.42	23.17	20.04	11.30	10.91	7.96	5.95	5.04	3.69	2.63
	2V 5 RES OPzS 375	49.69	43.35	29.20	25.25	14.25	13.76	10.04	7.51	6.36	4.66	3.32
	2V 6 RES OPzS 450	59.52	51.93	35.00	30.27	17.09	16.50	12.05	9.01	7.64	5.59	3.98
	2V 5 RES OPzS 550	71.38	62.42	42.24	36.57	20.70	20.00	14.62	10.94	9.29	6.82	4.87
	2V 6 RES OPzS 660	85.25	74.57	50.48	43.71	24.75	23.91	17.49	13.09	11.11	8.16	5.83
	2V 7 RES OPzS 750	97.10	84.90	57.42	49.70	28.12	27.16	19.86	14.86	12.61	9.25	6.61
	2V 5 RES OPzS 900	108.19	95.30	65.70	57.22	33.07	31.98	23.61	17.80	15.16	11.19	8.03
	2V 6 RES OPzS 965	119.20	104.69	71.64	62.26	35.73	34.55	25.42	19.11	16.25	11.95	8.54
	2V 7 RES OPzS 1230	148.64	130.82	89.97	78.31	45.15	43.67	32.20	24.26	20.65	15.23	10.91
	2V 8 RES OPzS 1275	158.75	139.34	95.21	82.70	47.38	45.80	33.67	25.30	21.50	15.81	11.29
	2V 9 RES OPzS 1480	182.62	160.43	109.86	95.48	54.82	53.01	39.01	29.33	24.95	18.36	13.13
	2V 10 RES OPzS 1590	197.93	173.71	118.67	103.07	59.03	57.07	41.95	31.51	26.78	19.69	14.06
	2V 12 RES OPzS 1905	235.25	206.63	141.43	122.91	70.55	68.21	50.19	37.73	32.08	23.60	16.86
	2V 11 RES OPzS 2285	289.06	254.15	173.72	150.70	85.61	82.71	60.49	45.24	38.38	28.16	20.10
	2V 12 RES OPzS 2225	289.75	253.99	172.33	149.18	84.17	81.30	59.25	44.20	37.44	27.39	19.50
	2V 14 RES OPzS 2765	352.49	309.70	211.33	183.23	103.94	100.42	73.38	54.86	46.52	34.11	24.34
	2V 15 RES OPzS 2920	376.61	330.44	224.74	194.68	110.09	106.33	77.59	57.94	49.10	35.96	25.63
	2V 16 RES OPzS 2970	390.12	341.65	231.31	200.09	112.66	108.80	79.23	59.07	50.02	36.57	26.03
2V 18 RES OPzS 3780	481.32	422.80	288.40	250.07	141.81	136.99	100.11	74.85	63.v48	46.56	33.23	
2V 20 RES OPzS 4075	523.91	459.77	312.88	271.07	153.38	148.17	108.16	80.80	68.50	50.20	35.80	
2V 24 RES OPzS 4620	599.70	525.78	356.96	309.06	174.47	168.51	122.87	91.69	77.68	56.86	40.50	
Monoblocks	6V 3 RES OPzS 240	32.50	28.32	18.98	16.38	9.16	8.85	6.43	4.79	4.06	2.98	2.12
	6V 4 RES OPzS 280	39.20	34.07	22.69	19.54	10.85	10.47	7.59	5.64	4.77	3.49	2.48
	6V 5 RES OPzS 385	52.27	45.56	30.54	26.36	14.74	14.23	10.35	7.71	6.53	4.79	3.42
	6V 6 RES OPzS 405	56.51	49.12	32.71	28.16	15.64	15.09	10.94	8.13	6.88	5.03	3.58
	12V 1 RES OPzS 85	11.60	10.08	6.72	5.79	3.23	3.12	2.27	1.69	1.44	1.06	0.76
	12V 2 RES OPzS 130	18.83	16.27	10.69	9.17	5.04	4.87	3.52	2.62	2.22	1.63	1.17
	12V 3 RES OPzS 190	27.41	23.68	15.55	13.33	7.33	7.07	5.11	3.80	3.22	2.36	1.69
End Voltage 1.80 V/cell												
		10 h	12 h	20 h	24 h	48 h	50 h	72 h	100 h	120 h	168 h	240 h
2V Cells	2V 2 RES OPzS 185	23.83	20.85	14.17	12.29	7.01	6.78	4.98	3.74	3.18	2.34	1.68
	2V 3 RES OPzS 260	34.01	29.73	20.13	17.44	9.91	9.57	7.01	5.26	4.47	3.28	2.35
	2V 4 RES OPzS 300	40.56	35.33	23.72	20.50	11.53	11.14	8.12	6.06	5.14	3.76	2.67
	2V 5 RES OPzS 375	51.06	44.48	29.88	25.82	14.53	14.04	10.24	7.64	6.48	4.74	3.38
	2V 6 RES OPzS 450	61.19	53.32	35.83	30.97	17.44	16.84	12.28	9.17	7.78	5.69	4.05
	2V 5 RES OPzS 550	74.23	64.77	43.60	37.68	21.22	20.49	14.95	11.17	9.47	6.95	4.95
	2V 6 RES OPzS 660	88.74	77.44	52.15	45.07	25.38	24.52	17.89	13.37	11.34	8.31	5.93
	2V 7 RES OPzS 750	101.23	88.31	59.39	51.31	28.86	27.87	20.33	15.18	12.87	9.43	6.72
	2V 5 RES OPzS 900	113.32	99.55	68.14	59.21	33.96	32.83	24.15	18.16	15.45	11.39	8.15
	2V 6 RES OPzS 965	125.18	109.65	74.53	64.62	36.78	35.55	26.06	19.53	16.59	12.18	8.69
	2V 7 RES OPzS 1230	155.72	136.67	93.35	81.06	46.38	44.84	32.95	24.76	21.05	15.50	11.09
	2V 8 RES OPzS 1275	166.52	145.78	98.95	85.76	48.75	47.11	34.51	25.86	21.95	16.11	11.49
	2V 9 RES OPzS 1480	191.49	167.78	114.12	98.98	56.39	54.49	39.96	29.97	25.46	18.70	13.35
	2V 10 RES OPzS 1590	207.62	181.75	123.33	106.88	60.74	58.69	42.99	32.21	27.34	20.06	14.30
	2V 12 RES OPzS 1905	247.38	216.71	147.29	127.70	72.69	70.25	51.49	38.59	32.77	24.06	17.16
	2V 11 RES OPzS 2285	302.34	264.96	179.61	155.42	87.63	84.63	61.71	46.06	39.04	28.60	20.39
	2V 12 RES OPzS 2225	303.84	265.49	178.72	154.32	86.36	83.37	60.57	45.08	38.14	27.86	19.80
	2V 14 RES OPzS 2765	368.75	322.92	218.57	189.07	106.43	102.78	74.88	55.86	47.33	34.65	24.70
	2V 15 RES OPzS 2920	394.21	344.79	232.66	201.03	112.80	108.92	79.24	59.04	49.98	36.55	26.01
	2V 16 RES OPzS 2970	408.18	356.35	239.44	206.65	115.48	111.47	80.94	60.21	50.93	37.19	26.43
2V 18 RES OPzS 3780	501.95	439.54	297.52	257.36	144.96	140.00	102.04	76.15	64.53	47.26	33.70	
2V 20 RES OPzS 4075	546.60	478.17	322.94	279.18	156.89	151.49	110.30	82.24	69.66	50.98	36.32	
2V 24 RES OPzS 4620	627.25	548.27	369.35	319.00	178.75	172.58	125.47	93.43	79.08	57.80	41.12	
Monoblocks	6V 3 RES OPzS 240	33.38	29.04	19.41	16.74	9.34	9.02	6.55	4.88	4.13	3.03	2.16
	6V 4 RES OPzS 280	40.47	35.12	23.31	20.05	11.10	10.72	7.76	5.76	4.87	3.56	2.53
	6V 5 RES OPzS 385	53.92	46.91	31.34	27.01	15.06	14.54	10.56	7.86	6.66	4.87	3.48
	6V 6 RES OPzS 405	58.60	50.84	33.71	28.99	16.04	15.48	11.20	8.32	7.03	5.13	3.65
	12V 1 RES OPzS 85	11.85	10.29	6.84	5.89	3.28	3.16	2.30	1.72	1.46	1.07	0.77
	12V 2 RES OPzS 130	19.44	16.77	10.99	9.41	5.16	4.98	3.60	2.68	2.27	1.66	1.19
	12V 3 RES OPzS 190	28.36	24.46	16.00	13.71	7.51	7.24	5.24	3.89	3.29	2.41	1.73