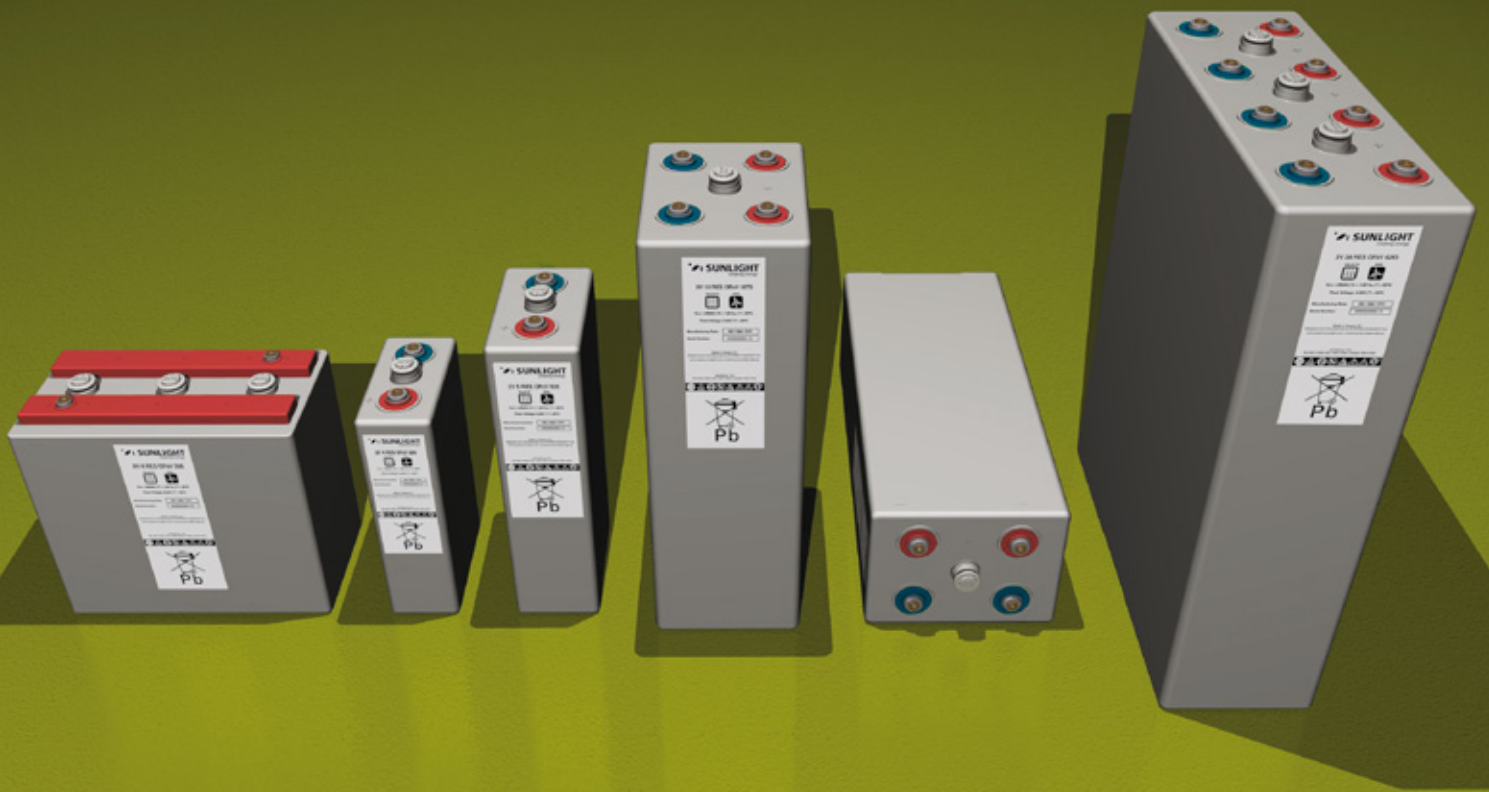


RES OPzV Batteries

Technical Data



BATTERIES



SOLAR PV



WIND



GENSET



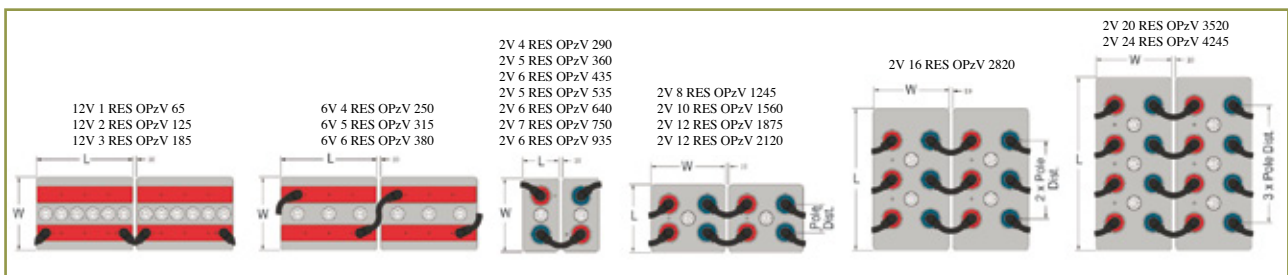
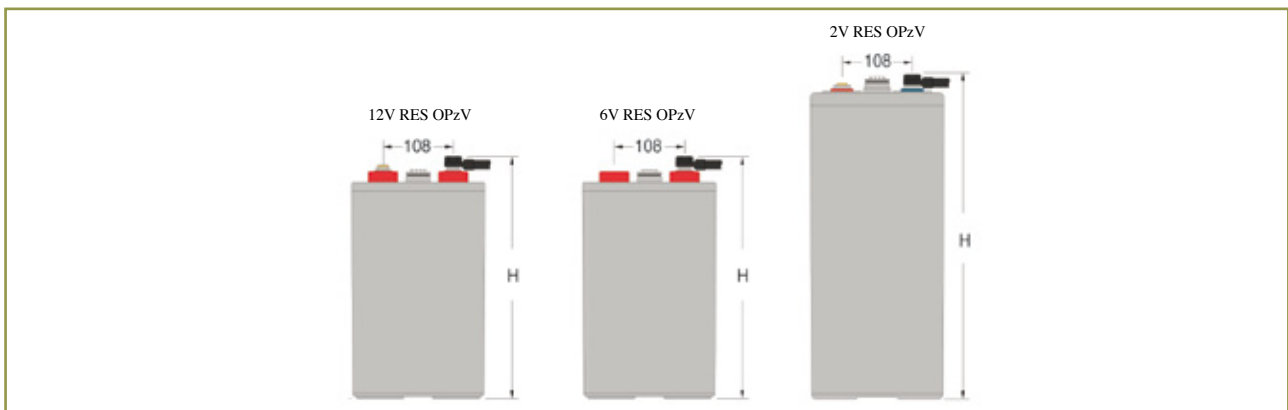
SUNLIGHT
creating energy

Product Range

	Type	Positive Plates Number	Number of Poles	Nom. capacity (Ah at 20°C)					Length (mm)	Width (mm)	Height* (mm)	Poles Dist. (mm)	Weight (approx kg)	Short Circuit Current (A)	Internal Resistance (mOhm)
				C240 1.85 Vpc	C120 1.85 Vpc	C48 1.80 Vpc	C24 1.80 Vpc	C12 1.75 Vpc							
Cells	2V 4 RES OPzV 290	4	2	301	290	281	258	232	103	206	382	-	20	2300	0.88
	2V 5 RES OPzV 360	5	2	376	363	352	323	290	124	206	382	-	24	2860	0.71
	2V 6 RES OPzV 435	6	2	452	435	423	388	347	145	206	382	-	28	3380	0.60
	2V 5 RES OPzV 535	5	2	561	536	517	472	420	124	206	498	-	31	3380	0.60
	2V 6 RES OPzV 640	6	2	675	644	622	567	504	145	206	498	-	37	3980	0.51
	2V 7 RES OPzV 750	7	2	789	753	727	662	588	166	206	498	-	42	4520	0.45
	2V 6 RES OPzV 935	6	2	986	937	892	809	716	145	206	673	-	50	4360	0.47
	2V 8 RES OPzV 1245	8	4	1311	1247	1187	1077	954	191	210	673	80	68	5980	0.34
	2V 10 RES OPzV 1560	10	4	1641	1560	1485	1347	1193	233	210	673	110	82	7380	0.28
	2V 12 RES OPzV 1875	12	4	1976	1877	1786	1618	1432	275	210	673	140	97	8640	0.24
	2V 12 RES OPzV 2120	12	4	2214	2120	2050	1878	1678	275	210	824	140	120	9440	0.22
	2V 16 RES OPzV 2820	16	6	2949	2824	2731	2503	2237	399	214	799	110	165	12680	0.16
	2V 20 RES OPzV 3520	20	8	3678	3523	3412	3127	2796	487	212	799	110	200	16240	0.13
	2V 24 RES OPzV 4245	24	8	4438	4248	4106	3760	3357	576	212	799	140	240	18460	0.11
Blocks	6V 4 RES OPzV 250	4	2	263	253	250	233	212	272	205	371	-	48	2260	2.70
	6V 5 RES OPzV 315	5	2	330	317	313	292	265	380	205	371	-	63	2740	2.22
	6V 6 RES OPzV 380	6	2	397	381	377	350	318	380	205	371	-	70	3220	1.89
	12V 1 RES OPzV 65	1	2	65	63	62	58	52	272	205	371	-	43	620	19.80
	12V 2 RES OPzV 125	2	2	130	125	124	115	105	272	205	371	-	52	1240	9.90
	12V 3 RES OPzV 185	3	2	196	188	186	173	158	380	205	371	-	72	1720	7.08

*Includes installed connectors and shrouds.

Drawings



All dimensions and weights shown are subject to manufacturing tolerances

Technical Features

Design

Positive plates	Tubular plates with corrosion resistant Lead Calcium Tin Alloy.
Negative plates	Pasted negative plates of grid design with optimized Lead Calcium Tin Alloy.
Separators	Low resistance, microporous PVC.
Electrolyte	Diluted sulphuric acid fixed as GEL.
Container, lid material	Plastic case made of polymer plastic ABS (Acrylonitrile Butadien Styrene) material. Optionally in flame retardant plastic ABS (UL 94-V0).
Poles	Premium design with insert and rubber seal in the lid for hardness and acid resistance. M10 brass inlay. Impedance measurements possible.
Connectors	Accurate voltage measurements possible due to bolt-on type design. Steel bolts with plastic encapsulated heads. Insulated flexible connectors, optional solid connectors available.
Pressure relief valve	Relief valve with integral flame arrestor.

Operation

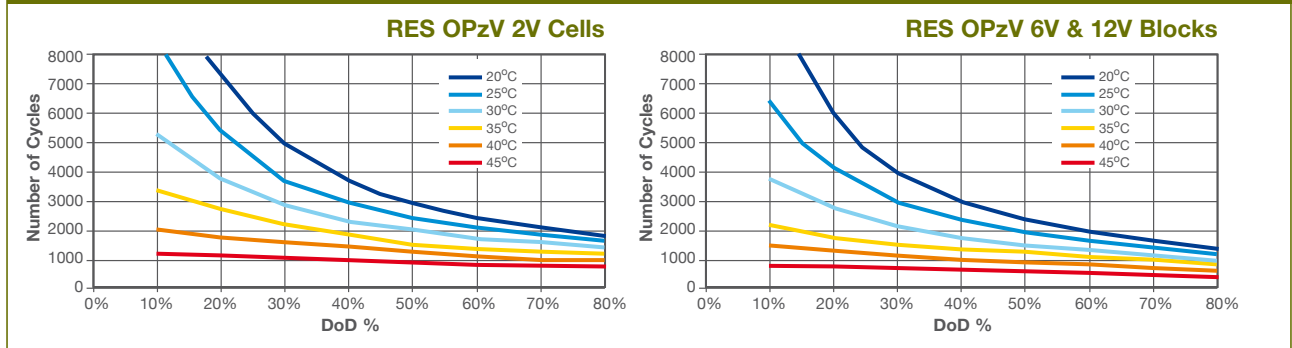
Number of cycles	2500 cycles for 2V cells, 2000 cycles for 6V & 12V blocks (60% DoD, 20°C).
Design life	18 years for 2V cells, 15 years for 6V & 12V blocks (stand-by float, 20°C).
Maintenance	No water refilling during life.
Operating temperature	Recommended 15°C to 35°C. Min: -20°C / Max: 45°C.
Storage Time	Maximum shelf life up to 6 months at 20°C, 4 months at 30°C or 2 months at 40°C.
Self discharge rate	Approx. 2 % per month at 20°C.

Certified Quality

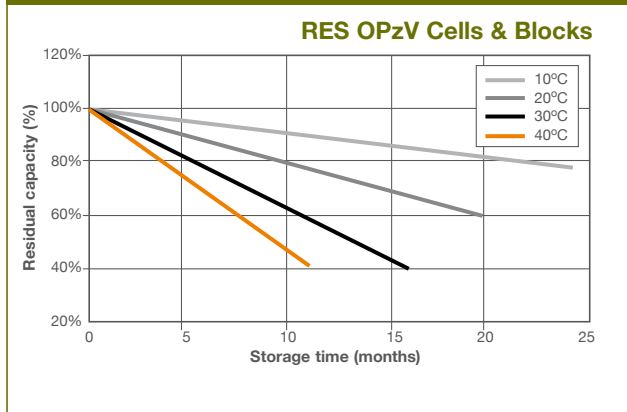
- Compliant with IEC 61427 requirements for photovoltaic energy systems
- “Long Life” according to Eurobat classification
- Tested according to IEC 60896-21 and fully compliant with IEC 60896-22 requirements for valve regulated batteries
- Full conformity to DIN 40742 specifications for OPzV cells and DIN 40744 for OPzV 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 Curves

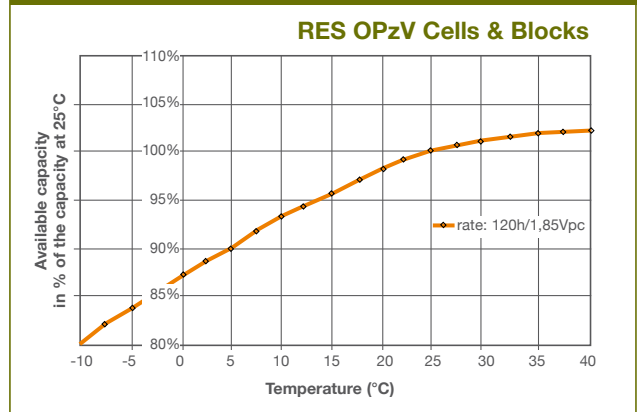
Expected Number of Cycles vs. DoD



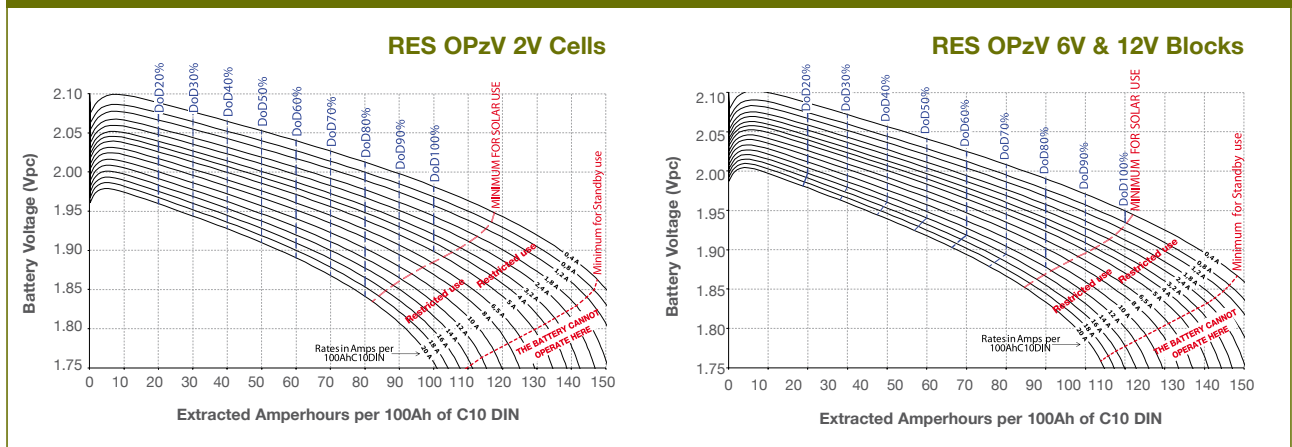
Self-discharge Characteristics



Capacity vs. Temperature



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



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
Monoblocks	12V 1 RES OPzV 65	2.25	1.97	1.34	1.16	0.66	0.64	0.47	0.35	0.30	0.23	0.15
	12V 2 RES OPzV 125	4.50	3.94	2.67	2.32	1.32	1.28	0.93	0.70	0.60	0.45	0.31
	12V 3 RES OPzV 185	6.61	5.80	3.95	3.43	1.96	1.90	1.40	1.05	0.90	0.68	0.46
	6V 4 RES OPzV 250	9.27	8.12	5.51	4.78	2.72	2.63	1.92	1.44	1.23	0.92	0.63
	6V 5 RES OPzV 315	11.50	10.07	6.85	5.95	3.39	3.28	2.40	1.80	1.54	1.15	0.79
	6V 6 RES OPzV 380	13.61	11.94	8.15	7.08	4.04	3.91	2.87	2.16	1.85	1.38	0.95
2V Cells	4 RES OPzV 290	9.91	8.72	6.03	5.27	3.07	2.97	2.20	1.67	1.41	1.04	0.73
	5 RES OPzV 360	12.34	10.87	7.52	6.57	3.83	3.71	2.75	2.09	1.77	1.30	0.91
	6 RES OPzV 435	14.73	12.98	8.99	7.86	4.59	4.45	3.30	2.51	2.12	1.55	1.10
	5 RES OPzV 535	16.76	14.87	10.47	9.19	5.47	5.30	3.97	3.04	2.58	1.91	1.38
	6 RES OPzV 640	19.92	17.69	12.48	10.97	6.55	6.35	4.75	3.65	3.10	2.30	1.65
	7 RES OPzV 750	22.92	20.37	14.42	12.69	7.61	7.38	5.53	4.25	3.61	2.68	1.93
	6 RES OPzV 935	28.02	25.03	17.98	15.90	9.70	9.40	7.11	5.46	4.69	3.49	2.56
	8 RES OPzV 1245	37.88	33.80	24.19	21.36	12.99	12.59	9.50	7.29	6.25	4.66	3.41
	10 RES OPzV 1560	47.07	42.03	30.12	26.62	16.21	15.71	11.87	9.10	7.81	5.82	4.27
	12 RES OPzV 1875	55.71	49.80	35.82	31.69	19.37	18.77	14.21	10.91	9.37	6.99	5.13
	12 RES OPzV 2120	65.36	58.22	41.44	36.54	22.00	21.32	16.02	12.21	10.42	7.68	5.42
	16 RES OPzV 2820	87.52	77.93	55.41	48.83	29.37	28.46	21.37	16.29	13.90	10.24	7.23
	20 RES OPzV 3520	108.77	96.82	68.75	60.55	36.41	35.23	26.49	20.13	17.21	12.67	8.92
	24 RES OPzV 4245	130.24	116.14	82.84	73.09	44.12	42.77	32.16	24.55	20.94	15.44	10.93

		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
Monoblocks	12V 1 RES OPzV 65	3.76	3.25	2.14	1.83	1.01	0.97	0.70	0.52	0.44	0.32	0.23
	12V 2 RES OPzV 125	7.52	6.50	4.27	3.66	2.01	1.94	1.40	1.04	0.88	0.65	0.47
	12V 3 RES OPzV 185	11.16	9.66	6.37	5.46	3.01	2.91	2.10	1.57	1.33	0.98	0.70
	6V 4 RES OPzV 250	15.31	13.24	8.71	7.47	4.10	3.96	2.86	2.13	1.80	1.32	0.95
	6V 5 RES OPzV 315	19.06	16.50	10.87	9.32	5.13	4.95	3.58	2.66	2.25	1.65	1.19
	6V 6 RES OPzV 380	22.73	19.69	12.99	11.15	6.15	5.93	4.29	3.19	2.70	1.98	1.43
2V Cells	4 RES OPzV 290	16.84	14.62	9.72	8.37	4.67	4.51	3.28	2.45	2.08	1.52	1.09
	5 RES OPzV 360	21.03	18.25	12.13	10.45	5.83	5.63	4.10	3.06	2.60	1.90	1.36
	6 RES OPzV 435	25.17	21.86	14.54	12.52	6.99	6.75	4.92	3.67	3.11	2.29	1.63
	5 RES OPzV 535	29.59	25.80	17.32	14.97	8.45	8.16	5.98	4.49	3.82	2.82	2.03
	6 RES OPzV 640	35.37	30.85	20.73	17.92	10.13	9.79	7.17	5.39	4.58	3.38	2.43
	7 RES OPzV 750	41.02	35.80	24.10	20.84	11.81	11.41	8.37	6.29	5.35	3.95	2.85
	6 RES OPzV 935	49.50	43.35	29.45	25.54	14.64	14.16	10.45	7.89	6.73	4.99	3.60
	8 RES OPzV 1245	66.42	58.12	39.41	34.16	19.54	18.89	13.93	10.52	8.97	6.65	4.79
	10 RES OPzV 1560	82.80	72.48	49.18	42.65	24.41	23.61	17.42	13.15	11.22	8.31	5.99
	12 RES OPzV 1875	98.74	86.50	58.80	51.02	29.27	28.30	20.90	15.79	13.48	9.99	7.20
	12 RES OPzV 2120	116.23	101.52	68.41	59.17	33.52	32.39	23.75	17.83	15.17	11.19	8.04
	16 RES OPzV 2820	155.28	135.59	91.31	78.96	44.70	43.19	31.66	23.77	20.22	14.91	10.71
	20 RES OPzV 3520	193.92	169.26	113.89	98.46	55.68	53.80	39.42	29.59	25.17	18.55	13.32
	24 RES OPzV 4245	231.89	202.65	136.74	118.31	67.12	64.86	47.59	35.76	30.42	22.45	16.13

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
Monoblocks	12V 1 RES OPzV 65	4.06	3.51	2.30	1.97	1.07	1.04	0.75	0.55	0.47	0.34	0.25
	12V 2 RES OPzV 125	8.13	7.02	4.59	3.93	2.15	2.07	1.49	1.11	0.94	0.69	0.49
	12V 3 RES OPzV 185	12.10	10.45	6.85	5.87	3.22	3.10	2.24	1.66	1.41	1.03	0.74
	6V 4 RES OPzV 250	16.51	14.26	9.34	8.00	4.37	4.22	3.04	2.25	1.90	1.39	1.00
	6V 5 RES OPzV 315	20.58	17.78	11.66	9.99	5.46	5.27	3.80	2.82	2.38	1.74	1.25
	6V 6 RES OPzV 380	24.57	21.25	13.95	11.95	6.55	6.32	4.56	3.38	2.86	2.10	1.50
2V Cells	4 RES OPzV 290	18.16	15.74	10.41	8.95	4.96	4.79	3.48	2.59	2.19	1.61	1.15
	5 RES OPzV 360	22.68	19.65	13.00	11.18	6.20	5.99	4.35	3.24	2.74	2.01	1.43
	6 RES OPzV 435	27.17	23.55	15.59	13.40	7.44	7.18	5.22	3.89	3.29	2.41	1.72
	5 RES OPzV 535	32.12	27.94	18.65	16.08	9.01	8.70	6.35	4.75	4.04	2.98	2.14
	6 RES OPzV 640	38.42	33.43	22.34	19.26	10.81	10.44	7.62	5.71	4.85	3.58	2.57
	7 RES OPzV 750	44.62	38.85	25.99	22.42	12.60	12.17	8.90	6.67	5.67	4.18	3.00
	6 RES OPzV 935	53.89	47.06	31.72	27.44	15.59	15.06	11.08	8.34	7.11	5.25	3.78
	8 RES OPzV 1245	72.20	63.00	42.40	36.67	20.79	20.09	14.76	11.11	9.46	6.99	5.03
	10 RES OPzV 1560	90.07	78.61	52.95	45.79	25.98	25.11	18.45	13.89	11.83	8.75	6.29
	12 RES OPzV 1875	107.56	93.95	63.37	54.84	31.17	30.12	22.16	16.69	14.22	10.52	7.57
	12 RES OPzV 2120	126.58	110.25	73.75	63.62	35.72	34.50	25.20	18.87	16.03	11.79	8.46
	16 RES OPzV 2820	169.03	147.19	98.41	84.88	47.63	46.00	33.59	25.15	21.36	15.72	11.26
	20 RES OPzV 3520	211.16	183.82	122.81	105.90	59.37	57.34	41.87	31.34	26.61	19.57	14.03
	24 RES OPzV 4245	252.65	220.17	147.45	127.24	71.53	69.09	50.50	37.83	32.14	23.66	16.96

		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
Monoblocks	12V 1 RES OPzV 65	4.69	4.04	2.62	2.24	1.21	1.17	0.84	0.62	0.52	0.38	0.27
	12V 2 RES OPzV 125	9.38	8.07	5.24	4.47	2.42	2.33	1.67	1.24	1.04	0.76	0.54
	12V 3 RES OPzV 185	14.02	12.07	7.84	6.70	3.63	3.50	2.51	1.86	1.57	1.14	0.82
	6V 4 RES OPzV 250	18.97	16.33	10.60	9.06	4.90	4.72	3.39	2.50	2.11	1.54	1.10
	6V 5 RES OPzV 315	23.68	20.39	13.25	11.32	6.13	5.91	4.24	3.13	2.64	1.93	1.37
	6V 6 RES OPzV 380	28.35	24.42	15.89	13.58	7.36	7.10	5.10	3.76	3.18	2.32	1.65
2V Cells	4 RES OPzV 290	20.76	17.93	11.77	10.09	5.54	5.34	3.86	2.86	2.42	1.76	1.25
	5 RES OPzV 360	25.93	22.40	14.70	12.61	6.92	6.68	4.82	3.58	3.02	2.20	1.57
	6 RES OPzV 435	31.09	26.87	17.64	15.13	8.31	8.01	5.79	4.29	3.63	2.65	1.88
	5 RES OPzV 535	37.14	32.18	21.27	18.28	10.12	9.77	7.08	5.27	4.47	3.27	2.34
	6 RES OPzV 640	44.51	38.58	25.51	21.93	12.15	11.73	8.51	6.33	5.37	3.93	2.81
	7 RES OPzV 750	51.82	44.93	29.74	25.57	14.18	13.69	9.94	7.40	6.27	4.60	3.29
	6 RES OPzV 935	62.80	54.55	36.28	31.25	17.46	16.86	12.30	9.20	7.81	5.74	4.11
	8 RES OPzV 1245	83.92	72.85	48.40	41.67	23.26	22.46	16.37	12.24	10.39	7.64	5.46
	10 RES OPzV 1560	104.80	91.00	60.48	52.09	29.09	28.09	20.48	15.32	13.00	9.56	6.84
	12 RES OPzV 1875	125.49	109.02	72.54	62.49	34.94	33.74	24.61	18.42	15.64	11.50	8.23
	12 RES OPzV 2120	147.53	127.87	84.45	72.54	40.09	38.69	28.04	20.86	17.66	12.93	9.22
	16 RES OPzV 2820	196.84	170.58	112.62	96.73	53.43	51.56	37.37	27.80	23.53	17.23	12.29
	20 RES OPzV 3520	246.02	213.14	140.65	120.78	66.69	64.35	46.63	34.68	29.36	21.49	15.33
	24 RES OPzV 4245	294.79	255.59	168.95	145.15	80.28	77.47	56.18	41.81	35.40	25.92	18.49

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
Monoblocks	12V 1 RES OPzV 65	4.88	4.20	2.71	2.32	1.25	1.20	0.86	0.63	0.54	0.39	0.28
	12V 2 RES OPzV 125	9.77	8.39	5.43	4.63	2.50	2.41	1.72	1.27	1.07	0.78	0.55
	12V 3 RES OPzV 185	14.62	12.57	8.14	6.95	3.75	3.61	2.59	1.91	1.61	1.17	0.84
	6V 4 RES OPzV 250	19.73	16.96	10.98	9.37	5.05	4.87	3.49	2.57	2.17	1.58	1.12
	6V 5 RES OPzV 315	24.64	21.19	13.73	11.72	6.32	6.09	4.36	3.22	2.71	1.97	1.41
	6V 6 RES OPzV 380	29.53	25.40	16.47	14.06	7.60	7.32	5.25	3.87	3.26	2.38	1.69
2V Cells	4 RES OPzV 290	21.53	18.58	12.16	10.42	5.70	5.49	3.96	2.93	2.48	1.80	1.28
	5 RES OPzV 360	26.91	23.22	15.20	13.02	7.12	6.87	4.95	3.67	3.10	2.25	1.60
	6 RES OPzV 435	32.27	27.85	18.24	15.62	8.55	8.25	5.95	4.40	3.72	2.71	1.92
	5 RES OPzV 535	38.69	33.48	22.06	18.94	10.44	10.07	7.29	5.41	4.58	3.35	2.39
	6 RES OPzV 640	46.39	40.15	26.47	22.73	12.54	12.10	8.75	6.50	5.50	4.03	2.87
	7 RES OPzV 750	54.06	46.81	30.88	26.52	14.64	14.13	10.23	7.60	6.43	4.71	3.36
	6 RES OPzV 935	65.61	56.89	37.67	32.40	18.00	17.38	12.64	9.43	8.00	5.87	4.19
	8 RES OPzV 1245	87.59	75.91	50.22	43.18	23.97	23.14	16.82	12.55	10.64	7.80	5.57
	10 RES OPzV 1560	109.43	94.86	62.78	53.99	29.98	28.94	21.04	15.70	13.31	9.76	6.97
	12 RES OPzV 1875	131.15	113.73	75.35	64.81	36.03	34.78	25.30	18.89	16.01	11.75	8.40
	12 RES OPzV 2120	154.10	133.35	87.71	75.24	41.35	39.89	28.83	21.40	18.10	13.22	9.42
	16 RES OPzV 2820	205.55	177.84	116.94	100.30	55.11	53.16	38.42	28.52	24.11	17.61	12.54
	20 RES OPzV 3520	256.93	222.25	146.08	125.27	68.80	66.37	47.96	35.59	30.09	21.98	15.66
	24 RES OPzV 4245	308.02	266.63	175.52	150.57	82.81	79.90	57.76	42.89	36.27	26.50	18.88

		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
Monoblocks	12V 1 RES OPzV 65	5.10	4.37	2.82	2.40	1.29	1.24	0.89	0.65	0.55	0.40	0.28
	12V 2 RES OPzV 125	10.20	8.75	5.63	4.80	2.58	2.48	1.77	1.31	1.10	0.80	0.57
	12V 3 RES OPzV 185	15.30	13.13	8.46	7.21	3.87	3.73	2.67	1.97	1.66	1.20	0.86
	6V 4 RES OPzV 250	20.60	17.68	11.40	9.71	5.22	5.02	3.59	2.64	2.23	1.62	1.15
	6V 5 RES OPzV 315	25.75	22.10	14.25	12.15	6.53	6.29	4.50	3.31	2.79	2.03	1.44
	6V 6 RES OPzV 380	30.90	26.53	17.12	14.60	7.85	7.56	5.41	3.98	3.35	2.44	1.73
2V Cells	4 RES OPzV 290	22.40	19.30	12.58	10.77	5.86	5.65	4.07	3.01	2.54	1.84	1.31
	5 RES OPzV 360	28.00	24.13	15.73	13.46	7.33	7.07	5.09	3.76	3.17	2.31	1.64
	6 RES OPzV 435	33.60	28.95	18.88	16.16	8.80	8.49	6.11	4.52	3.81	2.77	1.96
	5 RES OPzV 535	40.50	34.98	22.94	19.66	10.78	10.40	7.50	5.56	4.70	3.43	2.44
	6 RES OPzV 640	48.60	41.98	27.54	23.61	12.95	12.49	9.01	6.68	5.65	4.12	2.94
	7 RES OPzV 750	56.70	48.99	32.16	27.58	15.14	14.60	10.54	7.82	6.61	4.83	3.44
	6 RES OPzV 935	69.00	59.67	39.26	33.69	18.59	17.94	13.00	9.68	8.19	6.00	4.28
	8 RES OPzV 1245	92.00	79.53	52.28	44.86	24.73	23.86	17.29	12.87	10.89	7.97	5.69
	10 RES OPzV 1560	115.00	99.43	65.38	56.11	30.94	29.86	21.64	16.10	13.63	9.98	7.12
	12 RES OPzV 1875	138.00	119.36	78.56	67.43	37.21	35.91	26.03	19.38	16.41	12.02	8.57
	12 RES OPzV 2120	162.00	139.83	91.41	78.25	42.71	41.18	29.67	21.97	18.56	13.53	9.62
	16 RES OPzV 2820	216.00	186.41	121.83	104.28	56.91	54.87	39.53	29.27	24.72	18.02	12.81
	20 RES OPzV 3520	270.00	232.98	152.22	130.29	71.08	68.54	49.37	36.55	30.87	22.50	16.00
	24 RES OPzV 4245	324.00	279.73	182.98	156.66	85.55	82.49	59.44	44.02	37.18	27.11	19.28

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
Monoblocks	12V 1 RES OPzV 65	4.48	3.93	2.68	2.33	1.34	1.30	0.95	0.72	0.62	0.46	0.32
	12V 2 RES OPzV 125	8.96	7.85	5.36	4.66	2.69	2.60	1.91	1.44	1.23	0.92	0.64
	12V 3 RES OPzV 185	13.15	11.55	7.93	6.90	3.99	3.86	2.85	2.15	1.85	1.39	0.96
	6V 4 RES OPzV 250	18.44	16.18	11.06	9.61	5.53	5.35	3.93	2.95	2.55	1.88	1.30
	6V 5 RES OPzV 315	22.87	20.08	13.75	11.96	6.89	6.67	4.90	3.69	3.19	2.36	1.63
	6V 6 RES OPzV 380	27.05	23.79	16.34	14.23	8.21	7.94	5.87	4.42	3.82	2.83	1.96
2V Cells	4 RES OPzV 290	19.66	17.34	12.07	10.56	6.22	6.02	4.48	3.43	2.90	2.14	1.52
	5 RES OPzV 360	24.48	21.61	15.05	13.17	7.76	7.52	5.60	4.28	3.62	2.67	1.90
	6 RES OPzV 435	29.21	25.80	17.99	15.75	9.30	9.00	6.71	5.13	4.35	3.20	2.28
	5 RES OPzV 535	33.19	29.49	20.90	18.39	11.07	10.72	8.07	6.20	5.30	3.95	2.87
	6 RES OPzV 640	39.45	35.08	24.92	21.95	13.24	12.83	9.67	7.43	6.35	4.74	3.45
	7 RES OPzV 750	45.36	40.39	28.78	25.39	15.37	14.90	11.24	8.65	7.41	5.53	4.03
	6 RES OPzV 935	55.44	49.63	35.86	31.77	19.62	19.02	14.49	11.15	9.64	7.24	5.38
	8 RES OPzV 1245	74.99	67.03	48.26	42.71	26.27	25.48	19.37	14.89	12.86	9.64	7.15
	10 RES OPzV 1560	93.17	83.32	60.08	53.20	32.78	31.79	24.18	18.60	16.07	12.05	8.95
	12 RES OPzV 1875	110.20	98.72	71.43	63.31	39.17	37.98	28.94	22.30	19.27	14.47	10.76
	12 RES OPzV 2120	129.45	115.51	82.75	73.06	44.42	43.16	32.53	25.08	21.34	15.81	11.30
	16 RES OPzV 2820	173.36	154.64	110.66	97.66	59.30	57.62	43.40	33.45	28.45	21.08	15.06
	20 RES OPzV 3520	215.45	192.07	137.26	121.13	73.47	71.38	53.75	41.31	35.21	26.07	18.57
	24 RES OPzV 4245	257.94	230.35	165.40	146.15	89.08	86.55	65.30	50.44	42.88	31.81	22.77

		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
Monoblocks	12V 1 RES OPzV 65	7.32	6.35	4.20	3.61	2.01	1.94	1.41	1.05	0.89	0.66	0.48
	12V 2 RES OPzV 125	14.64	12.69	8.41	7.23	4.01	3.87	2.82	2.10	1.79	1.32	0.95
	12V 3 RES OPzV 185	21.72	18.85	12.52	10.77	6.00	5.80	4.22	3.16	2.68	1.98	1.43
	6V 4 RES OPzV 250	29.80	25.86	17.15	14.75	8.19	7.90	5.74	4.29	3.64	2.68	1.93
	6V 5 RES OPzV 315	37.11	32.22	21.39	18.40	10.23	9.87	7.18	5.36	4.55	3.35	2.42
	6V 6 RES OPzV 380	44.22	38.42	25.55	22.00	12.25	11.83	8.61	6.43	5.46	4.03	2.91
2V Cells	4 RES OPzV 290	32.72	28.48	19.07	16.47	9.29	8.97	6.57	4.93	4.19	3.09	2.22
	5 RES OPzV 360	40.83	35.55	23.82	20.57	11.60	11.21	8.21	6.16	5.24	3.86	2.78
	6 RES OPzV 435	48.87	42.56	28.53	24.64	13.91	13.44	9.85	7.39	6.29	4.64	3.33
	5 RES OPzV 535	57.31	50.11	33.91	29.39	16.78	16.22	11.95	9.02	7.69	5.71	4.13
	6 RES OPzV 640	68.48	59.89	40.58	35.17	20.11	19.44	14.33	10.82	9.23	6.86	4.96
	7 RES OPzV 750	79.37	69.47	47.14	40.88	23.42	22.65	16.71	12.62	10.78	8.01	5.80
	6 RES OPzV 935	95.71	84.06	57.58	50.09	29.05	28.11	20.89	15.87	13.58	10.13	7.34
	8 RES OPzV 1245	128.48	112.76	77.09	67.03	38.79	37.53	27.86	21.15	18.09	13.49	9.77
	10 RES OPzV 1560	160.14	140.59	96.19	83.66	48.46	46.89	34.82	26.44	22.62	16.87	12.23
	12 RES OPzV 1875	190.87	167.69	114.94	100.03	58.07	56.19	41.77	31.74	27.17	20.27	14.70
	12 RES OPzV 2120	224.89	196.98	133.84	116.09	66.54	64.34	47.48	35.86	30.60	22.69	16.39
	16 RES OPzV 2820	300.49	263.14	178.68	154.96	88.75	85.82	63.31	47.80	40.78	30.23	21.84
	20 RES OPzV 3520	375.23	328.47	222.83	193.19	110.54	106.88	78.81	59.48	50.74	37.61	27.16
	24 RES OPzV 4245	448.55	393.12	267.47	232.11	133.24	128.85	95.15	71.90	61.37	45.52	32.90

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
Monoblocks	12V 1 RES OPzV 65	7.88	6.82	4.50	3.86	2.13	2.06	1.49	1.11	0.94	0.69	0.50
	12V 2 RES OPzV 125	15.75	13.64	9.00	7.73	4.27	4.12	2.99	2.23	1.89	1.39	1.00
	12V 3 RES OPzV 185	23.42	20.29	13.42	11.53	6.39	6.17	4.48	3.34	2.83	2.09	1.51
	6V 4 RES OPzV 250	32.00	27.72	18.31	15.73	8.69	8.38	6.08	4.53	3.84	2.82	2.03
	6V 5 RES OPzV 315	39.87	34.56	22.85	19.63	10.85	10.47	7.59	5.66	4.80	3.53	2.54
	6V 6 RES OPzV 380	47.57	41.26	27.32	23.48	13.01	12.56	9.11	6.80	5.76	4.24	3.06
2V Cells	4 RES OPzV 290	35.12	30.52	20.35	17.55	9.84	9.50	6.94	5.20	4.41	3.25	2.33
	5 RES OPzV 360	43.84	38.11	25.42	21.92	12.29	11.87	8.67	6.49	5.52	4.06	2.91
	6 RES OPzV 435	52.50	45.65	30.46	26.27	14.74	14.24	10.41	7.79	6.62	4.87	3.50
	5 RES OPzV 535	61.89	54.00	36.35	31.44	17.83	17.23	12.65	9.52	8.11	6.01	4.34
	6 RES OPzV 640	74.01	64.60	43.53	37.65	21.37	20.66	15.17	11.43	9.74	7.22	5.21
	7 RES OPzV 750	85.90	75.02	50.62	43.81	24.91	24.08	17.70	13.34	11.37	8.43	6.09
	6 RES OPzV 935	103.64	90.79	61.74	53.59	30.81	29.80	22.06	16.71	14.28	10.62	7.69
	8 RES OPzV 1245	138.93	121.63	82.59	71.64	41.11	39.76	29.40	22.26	19.02	14.14	10.23
	10 RES OPzV 1560	173.27	151.73	103.09	89.45	51.37	49.69	36.76	27.83	23.78	17.69	12.80
	12 RES OPzV 1875	206.81	181.22	123.32	107.06	61.60	59.58	44.11	33.43	28.57	21.26	15.40
	12 RES OPzV 2120	243.59	212.85	143.64	124.30	70.64	68.28	50.20	37.81	32.21	23.84	17.19
	16 RES OPzV 2820	325.34	284.22	191.70	165.86	94.20	91.05	66.92	50.39	42.93	31.76	22.90
	20 RES OPzV 3520	406.43	354.93	239.20	206.90	117.41	113.47	83.37	62.76	53.46	39.54	28.49
	24 RES OPzV 4245	486.08	424.96	287.12	248.56	141.44	136.72	100.58	75.79	64.59	47.82	34.48

		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
Monoblocks	12V 1 RES OPzV 65	9.00	7.77	5.08	4.35	2.38	2.30	1.66	1.23	1.04	0.76	0.55
	12V 2 RES OPzV 125	18.00	15.53	10.17	8.71	4.77	4.60	3.32	2.46	2.08	1.53	1.09
	12V 3 RES OPzV 185	26.85	23.20	15.21	13.03	7.15	6.89	4.98	3.70	3.13	2.29	1.65
	6V 4 RES OPzV 250	36.39	31.43	20.60	17.65	9.66	9.32	6.72	4.99	4.22	3.09	2.22
	6V 5 RES OPzV 315	45.40	39.23	25.73	22.05	12.08	11.65	8.41	6.24	5.28	3.87	2.77
	6V 6 RES OPzV 380	54.30	46.94	30.83	26.43	14.50	13.98	10.10	7.50	6.35	4.65	3.34
2V Cells	4 RES OPzV 290	39.75	34.45	22.81	19.62	10.89	10.51	7.64	5.70	4.83	3.54	2.53
	5 RES OPzV 360	49.65	43.04	28.50	24.51	13.61	13.14	9.55	7.12	6.03	4.42	3.16
	6 RES OPzV 435	59.52	51.60	34.18	29.40	16.33	15.77	11.46	8.55	7.24	5.31	3.80
	5 RES OPzV 535	70.84	61.59	41.09	35.43	19.85	19.17	13.99	10.47	8.90	6.56	4.72
	6 RES OPzV 640	84.85	73.79	49.27	42.48	23.82	23.01	16.80	12.58	10.69	7.88	5.67
	7 RES OPzV 750	98.71	85.89	57.40	49.51	27.80	26.85	19.61	14.69	12.49	9.21	6.63
	6 RES OPzV 935	119.41	104.12	69.95	60.46	34.23	33.08	24.30	18.29	15.58	11.53	8.30
	8 RES OPzV 1245	159.68	139.15	93.38	80.69	45.62	44.09	32.36	24.35	20.74	15.33	11.04
	10 RES OPzV 1560	199.35	173.76	116.67	100.82	57.04	55.12	40.47	30.46	25.94	19.18	13.82
	12 RES OPzV 1875	238.52	208.02	139.83	120.88	68.48	66.18	48.62	36.61	31.19	23.08	16.63
	12 RES OPzV 2120	280.68	244.20	162.93	140.43	78.62	75.93	55.42	41.48	35.23	25.95	18.62
	16 RES OPzV 2820	374.58	325.85	217.31	187.29	104.81	101.22	73.86	55.28	46.95	34.57	24.80
	20 RES OPzV 3520	468.19	407.16	271.37	233.83	130.77	126.28	92.13	68.94	58.54	43.10	30.92
	24 RES OPzV 4245	560.60	487.94	325.85	280.92	157.43	152.04	111.02	83.13	70.62	52.02	37.34

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
Monoblocks	12V 1 RES OPzV 65	9.34	8.05	5.25	4.50	2.45	2.36	1.70	1.26	1.07	0.78	0.56
	12V 2 RES OPzV 125	18.68	16.10	10.51	8.99	4.90	4.73	3.41	2.52	2.13	1.56	1.12
	12V 3 RES OPzV 185	27.91	24.08	15.74	13.48	7.36	7.10	5.12	3.79	3.21	2.35	1.68
	6V 4 RES OPzV 250	37.72	32.55	21.27	18.21	9.93	9.58	6.90	5.11	4.32	3.16	2.26
	6V 5 RES OPzV 315	47.09	40.64	26.58	22.76	12.42	11.98	8.63	6.40	5.41	3.96	2.83
	6V 6 RES OPzV 380	56.37	48.68	31.87	27.30	14.92	14.39	10.37	7.69	6.50	4.76	3.41
2V Cells	4 RES OPzV 290	41.11	35.60	23.51	20.20	11.18	10.79	7.83	5.82	4.93	3.61	2.58
	5 RES OPzV 360	51.37	44.48	29.38	25.25	13.97	13.49	9.78	7.28	6.17	4.51	3.22
	6 RES OPzV 435	61.59	53.34	35.24	30.29	16.77	16.18	11.74	8.74	7.40	5.42	3.87
	5 RES OPzV 535	73.54	63.87	42.49	36.59	20.42	19.72	14.36	10.73	9.11	6.70	4.81
	6 RES OPzV 640	88.13	76.56	50.96	43.90	24.52	23.67	17.24	12.89	10.94	8.05	5.78
	7 RES OPzV 750	102.61	89.18	59.42	51.19	28.62	27.64	20.14	15.06	12.79	9.41	6.76
	6 RES OPzV 935	124.28	108.20	72.42	62.51	35.21	34.01	24.91	18.71	15.92	11.76	8.45
	8 RES OPzV 1245	166.05	144.50	96.61	83.36	46.90	45.31	33.17	24.90	21.18	15.63	11.24
	10 RES OPzV 1560	207.38	180.50	120.73	104.19	58.65	56.66	41.49	31.15	26.50	19.56	14.06
	12 RES OPzV 1875	248.33	216.25	144.79	125.00	70.44	68.06	49.86	37.46	31.87	23.54	16.93
	12 RES OPzV 2120	292.08	253.77	168.70	145.22	80.89	78.09	56.84	42.46	36.02	26.47	18.97
	16 RES OPzV 2820	389.70	338.53	224.97	193.63	107.81	104.09	75.75	56.58	47.99	35.27	25.27
	20 RES OPzV 3520	487.14	423.06	280.99	241.80	134.57	129.92	94.52	70.59	59.88	44.00	31.52
	24 RES OPzV 4245	583.59	507.22	337.45	290.55	161.98	156.39	113.87	85.09	72.20	53.07	38.04

		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
Monoblocks	12V 1 RES OPzV 65	9.71	8.36	5.44	4.65	2.52	2.43	1.75	1.29	1.09	0.80	0.57
	12V 2 RES OPzV 125	19.43	16.72	10.87	9.29	5.05	4.86	3.50	2.59	2.19	1.60	1.14
	12V 3 RES OPzV 185	29.10	25.06	16.31	13.95	7.58	7.31	5.26	3.89	3.29	2.40	1.72
	6V 4 RES OPzV 250	39.24	33.80	22.00	18.81	10.22	9.86	7.09	5.24	4.43	3.24	2.31
	6V 5 RES OPzV 315	49.02	42.23	27.51	23.52	12.79	12.33	8.87	6.56	5.54	4.05	2.90
	6V 6 RES OPzV 380	58.76	50.64	33.02	28.24	15.37	14.81	10.66	7.89	6.67	4.87	3.48
2V Cells	4 RES OPzV 290	42.63	36.86	24.26	20.82	11.48	11.07	8.02	5.96	5.04	3.68	2.63
	5 RES OPzV 360	53.27	46.07	30.32	26.03	14.35	13.84	10.02	7.45	6.30	4.61	3.29
	6 RES OPzV 435	63.90	55.26	36.39	31.23	17.22	16.62	12.04	8.95	7.57	5.53	3.95
	5 RES OPzV 535	76.68	66.48	44.03	37.87	21.03	20.30	14.74	10.99	9.32	6.85	4.91
	6 RES OPzV 640	91.95	79.74	52.85	45.46	25.26	24.38	17.71	13.21	11.20	8.23	5.90
	7 RES OPzV 750	107.19	92.98	61.67	53.06	29.50	28.48	20.70	15.44	13.09	9.62	6.90
	6 RES OPzV 935	130.12	113.02	75.20	64.79	36.25	35.00	25.56	19.15	16.27	11.99	8.61
	8 RES OPzV 1245	173.65	150.77	100.23	86.33	48.25	46.60	34.01	25.47	21.64	15.94	11.44
	10 RES OPzV 1560	216.98	188.42	125.31	107.94	60.36	58.29	42.55	31.87	27.08	19.96	14.32
	12 RES OPzV 1875	260.12	225.98	150.42	129.61	72.54	70.06	51.16	38.34	32.58	24.01	17.24
	12 RES OPzV 2120	305.70	265.01	175.20	150.54	83.30	80.39	58.34	43.47	36.84	27.02	19.34
	16 RES OPzV 2820	407.72	353.41	233.56	200.67	111.01	107.13	77.73	57.92	49.08	36.00	25.76
	20 RES OPzV 3520	509.69	441.70	291.79	250.66	138.62	133.77	97.04	72.30	61.26	44.92	32.15
	24 RES OPzV 4245	611.12	529.95	350.58	301.29	166.83	161.01	116.87	87.11	73.83	54.16	38.77

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