

Battery Chemistry Cost Analysis

Product	Price	Nominal Voltage*	Ah Capacity (C/20)*	Total kWh Capacity <small>(Nom X Ah Capacity)</small>	Supported Depth of Discharge*	Usable kWh Capacity <small>(Total kWh Cap. X DOD)</small>	Life Expectancy (Cycles)*	Life Expectancy (Years) <small>(Cycles / 365)</small>	Lifetime Usable kWhs <small>(Usable kWh Cap. X Cycles)</small>	Purchase Price per Usable kWh Capacity <small>(Price / Usable kWh Capacity)</small>	Lifetime Cost per kWh Delivered <small>(Price / Lifetime Usable kWhs)</small>
NICKEL IRON											
Iron Edison Nickel Iron	\$970.00	12	112.5	1.35	80%	1.08	11,000	30.1	11,880	\$898.15	\$0.082
Iron Edison Nickel Iron	\$9,700.00	24	560	13.44	80%	10.75	11,000	30.1	118,272	\$902.16	\$0.082
Iron Edison Nickel Iron	\$36,800.00	48	1,125	54.00	80%	43.20	11,000	30.1	475,200	\$851.85	\$0.077
LEAD ACID											
HUP SO6-85-17/12	\$2,679.00	12	845	10.14	80%	8.11	2,100	5.8	17,035	\$330.25	\$0.157
HUP SO6-85-25/24	\$6,900.00	24	1,270	30.48	80%	24.38	2,100	5.8	51,206	\$282.97	\$0.135
HUP SO6-85-33/48	\$17,876.00	48	1,690	81.12	80%	64.90	2,100	5.8	136,282	\$275.46	\$0.131
Trojan L-16RE-B	\$349.00	6	370	2.22	35%	0.78	2,000	5.5	1,554	\$449.16	\$0.225
Trojan L-16H	\$363.00	6	435	2.61	30%	0.78	2,000	5.5	1,566	\$463.60	\$0.232
Trojan L-16RE-2V	\$365.00	2	1100	2.20	35%	0.77	2,000	5.5	1,540	\$474.03	\$0.237
Trojan T105-RE	\$175.00	6	250	1.50	40%	0.60	2,000	5.5	1,200	\$291.67	\$0.146
Surrette 12-CS-11PS	\$1,245.00	12	357	4.28	30%	1.29	3,300	9.0	4,241	\$968.72	\$0.294
Surrette 12KS33PS	\$942.00	2	1767	3.53	50%	1.77	3,300	9.0	5,831	\$533.11	\$0.162
Surrette 4-CS-17PS	\$682.00	4	546	2.18	50%	1.09	3,300	9.0	3,604	\$624.54	\$0.189
Surrette 6-CS-17P	\$985.00	6	546	3.28	50%	1.64	3,300	9.0	5,405	\$601.34	\$0.182
Outback Power EnergyCell 200GH	\$545.00	12	191	2.29	30%	0.69	1,000	2.7	688	\$792.61	\$0.793
Outback Power EnergyCell RE170	\$438.00	12	154	1.85	30%	0.55	1,000	2.7	554	\$790.04	\$0.790
Outback Power EnergyCell 200NC	\$499.00	12	178	2.14	30%	0.64	5,000	13.7	3,204	\$778.71	\$0.156
Outback Power EnergyCell 1300RE	\$16,078.00	48	1148	55.10	30%	16.53	3,000	8.2	49,594	\$972.59	\$0.324
Outback Power EnergyCell 2700RE	\$25,641.00	48	2288	109.82	30%	32.95	3,000	8.2	98,842	\$778.25	\$0.259
Deka MK 8L16LTP	\$283.00	6	370	2.22	30%	0.67	1,000	2.7	666	\$424.92	\$0.425
Deka MK 8G4DLTP	\$543.00	12	183	2.20	50%	1.10	1,000	2.7	1,098	\$494.54	\$0.495
Deka MKB8GU1	\$95.00	12	31.6	0.38	30%	0.11	1,000	2.7	114	\$835.09	\$0.835
Deka MK8A8D AGM	\$587.00	12	245	2.94	25%	0.74	1,200	3.3	882	\$798.64	\$0.666
Deka Unigy II 3AVR75-29	\$2,595.00	6	1284	7.70	30%	2.31	1,000	2.7	2,311	\$1,122.79	\$1.123
Concord SunXtender PVX-3050T	\$414.00	6	305	1.83	50%	0.92	1,000	2.7	915	\$452.46	\$0.452
Concord SunXtender PVX-2580L	\$706.00	12	258	3.10	50%	1.55	1,000	2.7	1,548	\$456.07	\$0.456
Concord SunXtender PVX-1040T	\$308.00	12	104	1.25	50%	0.62	1,000	2.7	624	\$493.59	\$0.494
Concord SunXtender PVX-1080T	\$302.00	12	108	1.30	50%	0.65	1,000	2.7	648	\$466.05	\$0.466
Universal UB8D	\$485.00	12	250	3.00	30%	0.90	1,200	3.3	1,080	\$538.89	\$0.449
Universal UB30H	\$245.00	12	98	1.18	30%	0.35	1,200	3.3	423	\$694.44	\$0.579
Universal UB4D	\$378.00	12	200	2.40	30%	0.72	1,200	3.3	864	\$525.00	\$0.438
Aquion M110-LS83	\$14,995.00	48		30.60	70%	21.42	3,000	8.2	64,260	\$700.05	\$0.233
Aquion S30	\$1,195.00	48		2.60	70%	1.82	3,000	8.2	5,460	\$656.59	\$0.219

* Data taken from published manufacturer spec sheets.