Leadcrystal

Energy Evolved.

Lead Crystal Energy Solutions

Next-generation lead crystal battery systems for a sustainable future. High-performance, high-safety, and 99% recyclable.

LEAD CRYSTAL® BATTERIES

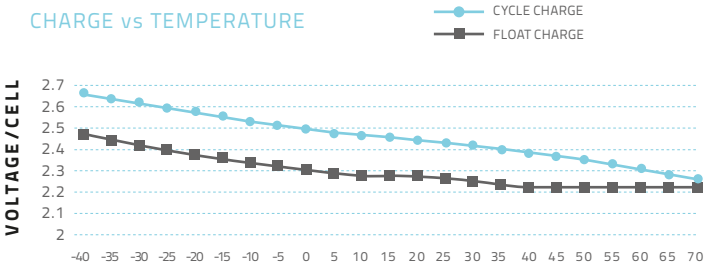
LEAD CRYSTAL® BATTERIES

POWERED BY
Betta Batteries

SPECIFICATION

Nominal Voltage		12V	
Rated Capacity (3 hour rate)		150 AH	
Dimension	Total Height (top of terminal) Height Length Width	241 mm 241 mm 486 mm 170 mm	9.49" 9.49" 19.13" 6.69"
Weight		Approximately 50 kg / 110.13 lbs	
Capacity 25°C	10 hour rate (17A) 5 hour rate (31A) 2 hour rate (65A)	170 AH 155 AH 130 AH	
Internal Resistance	Fully charged Battery (25°C)	=<6.0mΩ	
Self-Discharge 25°C	Capacity after 3 month storage Capacity after 6 month storage Capacity after 12 month storage	95% 85% 80%	
Max Discharge Current 25°C	1500A (5S)		
Terminal	Standard	M8	
	Optional		
Charging (Constant Voltage)	Cycle	Initial Charging Current 30A 14.7V (25℃)	
	Float	13.7V (25℃)	

CHARGE vs TEMPERATURE



CHARGE vs TEMPERATURE CHART

temperature	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
Cycle Charge	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.47	2.47	2.45	2.45	2.43	2.41	2.39	2.37	2.35	2.33	2.31	2.29	2.27
Float Charge (voltage/cell)	2.46	2.44	2.42	2.40	2.38	2.36	2.34	2.32	2.31	2.30	2.29	2.29	2.29	2.27	2.26	2.24	2.23	2.23	2.23	2.23	2.23	2.23	2.23

CONSTANT CURRENT DISCHARGE CHARACTERISTICS: UNITS AMPERES (25°C)

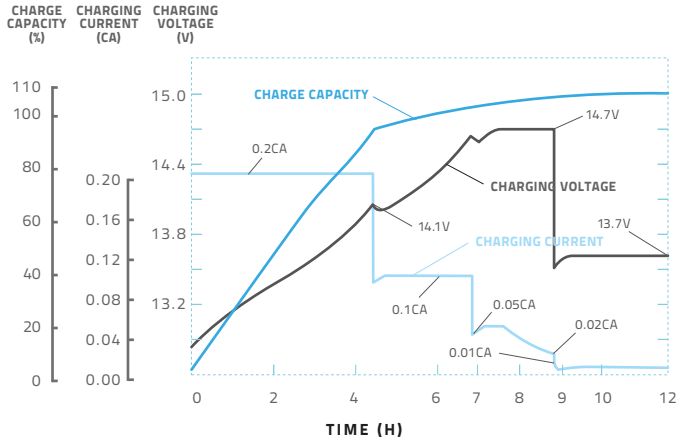
End Voltage per cell	5min	15min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	459	293	193	145	100	67.2	51.0	40.7	33.3	31.2	23.3	17.8	15.7	9.78	7.88
1.67V	395	265	179	137	99.1	66.3	49.9	39.8	32.8	29.8	22.5	17.5	15.4	9.61	7.88
1.70V	377	257	173	136	98.3	65.5	49.3	39.0	32.0	28.6	21.8	17.3	15.3	9.52	7.85
1.75V	343	241	166	130	97.4	64.6	48.7	38.3	31.3	27.5	21.2	17.1	15.1	9.35	7.84
1.80V	303	220	160	126	96.9	63.8	47.6	37.6	30.6	27.4	20.8	17.0	14.8	9.18	7.80
1.83V	265	201	148	117	94.4	62.9	46.5	36.0	30.2	26.4	20.0	16.4	14.2	9.10	7.58
1.85V	226	182	136	108	91.8	62.1	44.8	34.7	29.4	25.5	19.3	16.0	13.7	9.01	7.36

DISCHARGE DATA WITH CONSTANT POWER UNITS: WATTS PER CELL (25°C)

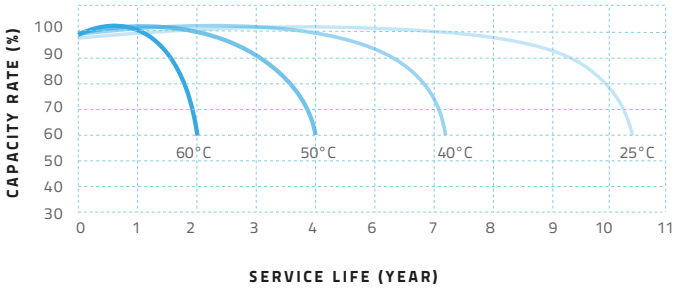
End Voltage per cell	5min	15min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	757	510.3	349	266	185	134	94.8	76.3	64.9	57.0	43.1	35.1	29.4	18.2	15.3
1.67V	677	475	326	254	185	130	94.6	75.9	63.6	56.3	42.2	34.3	29.4	18.2	15.3
1.70V	655	463	318	252	184	127	92.2	75.4	62.7	56.0	42.1	34.0	29.4	18.2	15.3
1.75V	604	435	307	244	183	122	90.9	74.3	62.2	55.1	41.2	33.65	29.4	18.2	15.2
1.80V	548	401	297	236	183	118	90.1	72.9	61.4	54.3	40.5	33.3	28.5	18.1	15.2
1.83V	484	371	277	221	182	114	89.4	70.5	60.8	52.8	39.2	32.4	27.9	18.1	14.8
1.85V	420	342	257	206	182	109	88.6	68.0	60.1	51.2	37.8	31.6	27.2	17.9	14.5

CHARGE CHARACTERISTIC 77°F (25°C)

REGULAR CYCLE CHARGE CHARACTERISTICS 77°F (25°C)

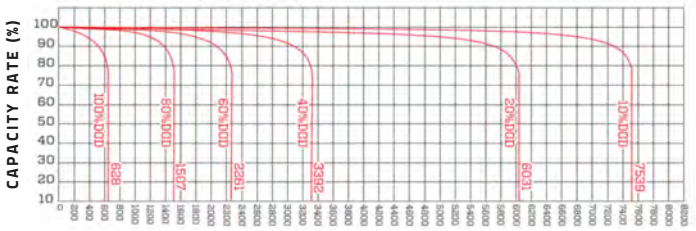


TEMPERATURE AND FLOAT SERVICE LIFE

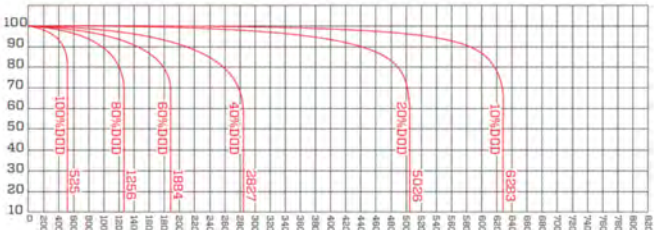


CYCLE LIFE CURVE GRAPH

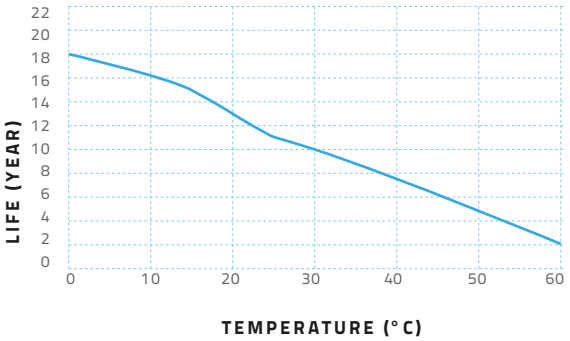
CYCLE LIFE CURVE GRAPH (25°C)



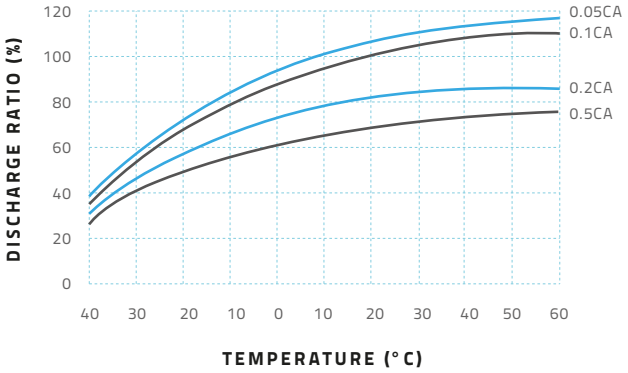
CYCLE LIFE CURVE GRAPH (40°C)



FLOAT SERVICE LIFE CURVE GRAPH



TEMPERATURE & DISCHARGE CAPACITY



4-EVFJ-150 8V / 150 A

Leadcrystal

Energy Evolved.

Performance: Robust, resilient, high performing. Lead Crystal® batteries can be discharged deeper, cycled more often (also in extreme temperatures) and have a longer service life. They recover to full rated capacity over and over again.

Technology: A unique micro-porous high absorbent mat (AGM), high-purity lead calcium selenium plates, safe Si02 electrolyte solution that solidifies into a white crystalline powder when charged/discharged.

Cleaner & Safer: Less acid, no cadmium, no antimony. Lead Crystal® batteries are up to 99% recyclable and are classified as non-hazardous goods for transport.

Markets: Lead Crystal® batteries are being used in telecoms, UPS, petrochem/marine, defence, renewable energy, health care, manufacturing, transportation and electric motion (wheelchairs, golf carts & trolleys).

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