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Crystal Batteries

German
Quality
Guaranteed

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Product Range

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New Technology

The energy storage market has grown multifold and with increased environmental awareness, more and more customers are demanding environmentally safe, longer-lasting and sustainable batteries.

The invention of the Lead Crystal Battery is a breakthrough in developments of batteries, and it has the great advantages and low-medium price range compared with lithium batteries and all types of lead-acid batteries including AGM and gel-cells batteries.

The Lead Crystal battery technology is patented. AE Solar Crystal batteries are manufactured in accordance with environmental protection ISO-14001 standards and Occupational Health and Safety Act. AE Solar Crystal battery is ideally suited for numerous global industries such as Telecommunications, Renewable Energy Storage, Power Generation and Utilities, Defence, Health, Transportation, Data Centres and various other industries.

Breakthrough Technology

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Advantages

AE Solar Crystal battery's electrolyte is made using non-corrosive SiO2 solution. The first few charge/discharge cycles cause the electrolyte to solidify and form a non-toxic crystalline substance. This process makes battery safer, higher in performance and environmentally friendlier comparing to other existing technologies.

The battery is placed in a high quality, flame-retardant PC-ABS smoulder-free plastic case and cover. Models are compliant with 48 cm, 58 cm, and industrial standard racking dimensions. As these batteries are dry, thus they can be mounted on the side with no risk of spillage or losses during their operation.

AE Solar Crystal batteries can withstand extreme temperatures ranging from -40ºC to +65ºC and outperform in such conditions any other battery since there is no fluid that can freeze, expand and no plates' deformation.

Performs at extreme temperatures

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In AE Solar Crystal batteries the electrolyte is not affected by internal temperature generated during charge and discharge cycles. The batteries have absolutely no risk of leakage and have high-performance terminal seal design. They are safe to transport and no special transportation permissions and conditions are applied. They are approved as non-hazardous cargo for ground, sea and air transportation, also to be transported with general goods in the same containers with no risk of contamination.

AE Solar Crystal batteries emit almost no vapors or gases, unlike conventional lead-acid batteries, making ventilation of battery chamber easier and less costly.
AE Solar Crystal Batteries are designed to work with a 5% ripple current.

AE Solar Crystal Batteries contain almost no harmful chemicals or acids making them recyclable and environmentally friendly.

Environmental friendly

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Comparative Table

	Lead Acid	Lead Gel	AE SOLAR crystal	Lead Carbon	Lithium
Max. operation temperature	-18°C - +45°C	-18°C - +50°C	**-40°C - +65°C**	-40°C - +50°C	-20°C - +65°C
Life cycle	2-3 years	3-4 years	8-12 years	**14-16 years**	5-6 years
Environment	Not friendly	Not friendly	**Friendly**	Not friendly	**Friendly**
Transportation safety	Poor	Average	**Excellent**	Average	Average
Handling safety	Average	Good	**Excellent**	Good	Average
Discharge cycle at 80%	350	400	1400	**1600**	1000
Discharge ability at high current	Poor	Poor	**Excellent**	Average	Average
Performance	Average	Average	**Excellent**	Good	Good
Recyclability	Good	Good	**Excellent**	Average	Poor
Price	**Lowest**	Low	Low-Med	High	Very High

● High in performance

Cost-effective energy storage solution

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Specifications

NO.	Model Number	Voltage (V)	10 Hour Capacity (Ah)	Dimensions in mm (±2mm)				weight (KG)
				L	W	H	TH	
1	AE-CB-12-4	12	4	90	70	101	106	1.6
2	AE-CB-12-7.2	12	7.2	151	65	94	102	2.25
3	AE-CB-12-8.5	12	8.5	151	65	94	102	2.55
4	AE-CB-12-10	12	10	151	99	94	100	3.5
5	AE-CB-12-12	12	12	151	99	94	100	4.15
6	AE-CB-12-14	12	14	151	99	98	102	4.35
7	AE-CB-12-18	12	18	181	76	170	170	6.3
8	AE-CB-12-20	12	20	181	76	167	167	5.9
9	AE-CB-12-22	12	22	181	76	167	170	6.9
10	AE-CB-12-24	12	24	175	166	125	125	7.8
11	AE-CB-12-28	12	28	175	166	125	125	8.7
12	AE-CB-12-35	12	35	222	105	175	175	11
13	AE-CB-12-40	12	40	196	166	176	176	13
14	AE-CB-12-45	12	45	222	120	175	175	12.5
15	AE-CB-12-55	12	55	229	138	210	215	16.9
16	AE-CB-12-65	12	65	350	366	175	175	21
17	AE-CB-12-70	12	70	260	169	216	220	22
18	AE-CB-12-80	12	80	306	169	206	225	25
19	AE-CB-12-90	12	90	306	174	206	240	28
20	AE-CB-12-100	12	100	327	172	206	210	31.5
21	AE-CB-12-120	12	120	408	174	211	234	37
22	AE-CB-12-150	12	150	486	170	241	241	45
23	AE-CB-12-160	12	160	532	207	215	220	50
24	AE-CB-12-180	12	180	522	240	219	224	60
25	AE-CB-12-200	12	200	522	240	219	224	62
26	AE-CB-12-230	12	230	520	269	220	225	70
27	AE-CB-12-250	12	250	520	269	223	223	73

UPS, Telecom, Storage and Industrial application

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NO.	Model Number	Voltage (V)	10 Hour Capacity (Ah)	Dimensions in mm (±2mm)				weight (KG)
				L	W	H	TH	
1	AE-CB-2-100	2	100	172	72	205	210	5.8
2	AE-CB-2-150	2	150	172	102	205	227	8.2
3	AE-CB-2-200	2	200	172	110	330	335	13.5
4	AE-CB-2-300	2	300	175	155	330	335	21
5	AE-CB-2-375	2	375	210	175	330	365	26
6	AE-CB-2-400	2	400	210	175	330	335	27
7	AE-CB-2-450	2	450	244	175	330	365	30
8	AE-CB-2-500	2	500	241	175	330	335	31
9	AE-CB-2-600	2	600	301	175	330	335	38
10	AE-CB-2-800	2	800	412	175	330	335	55
11	AE-CB-2-1000	2	1000	480	175	330	335	65
12	AE-CB-2-1150	2	1150	475	175	330	340	66.5
13	AE-CB-2-1200	2	1200	346	310	328	335	71
14	AE-CB-2-1300	2	1300	346	310	328	335	73
15	AE-CB-2-1500	2	1500	400	351	340	345	108
16	AE-CB-2-2000	2	2000	491	351	342	347	125
17	AE-CB-2-2500	2	2500	491	351	342	347	141.5
18	AE-CB-2-3000	2	3000	712	351	341	346	192

UPS, Telecom, Storage and Industrial application

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NO.	Model Number	Voltage (V)	10 Hour Capacity (Ah)	Dimensions in mm (±2mm)				weight (KG)
				L	W	H	TH	
1	AE-CB-6-4	6	4	70	47.5	100	105	0.7
2	AE-CB-6-7.2	6	7.2	151	35	94	102	1.2
3	AE-CB-6-10	6	10	151	50	94	100	1.9
4	AE-CB-6-12	6	12	151	50	94	100	2.1
5	AE-CB-6-160	6	160	298	172	227	230	25
6	AE-CB-6-180	6	180	306	168	222	225	28
7	AE-CB-6-200	6	200	323	178	226	230	30.5

Electric Vehicle and Energy application

NO.	Model Number	Voltage (V)	10 Hour Capacity (Ah)	Dimensions in mm (±2mm)				weight (KG)
				L	W	H	TH	
1	AE-CBT-12-55	12	55	277	106	223	228	16.8
2	AE-CBT-12-90	12	95	390	108	286	286	34.5
3	AE-CBT-12-100	12	100	560	125	228	228	34.5
4	AE-CBT-12-170	12	170	546	125	320	320	50

Telecom application

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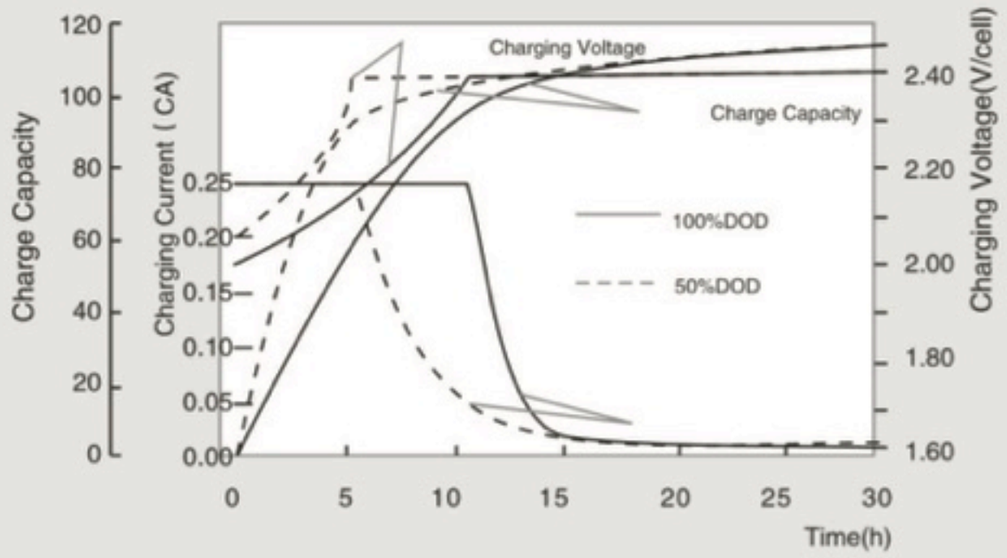
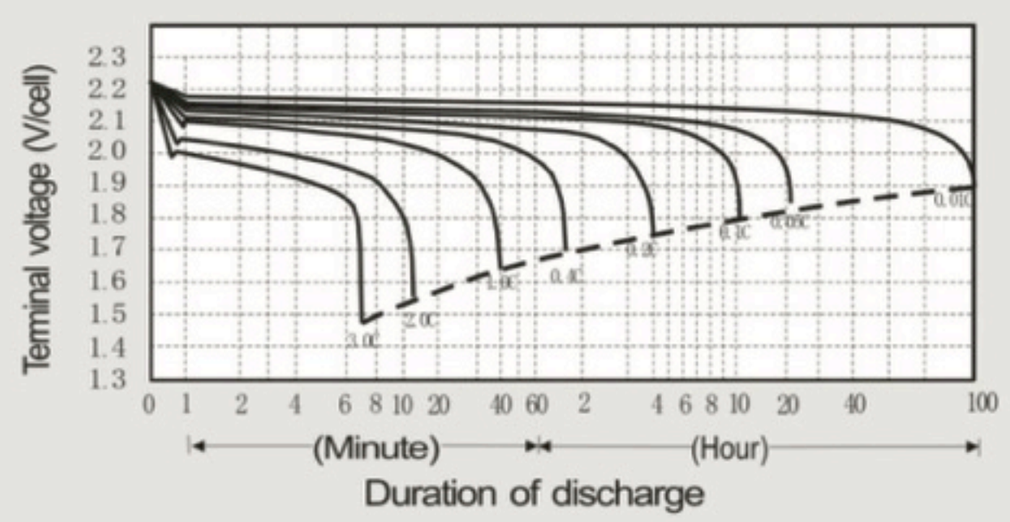
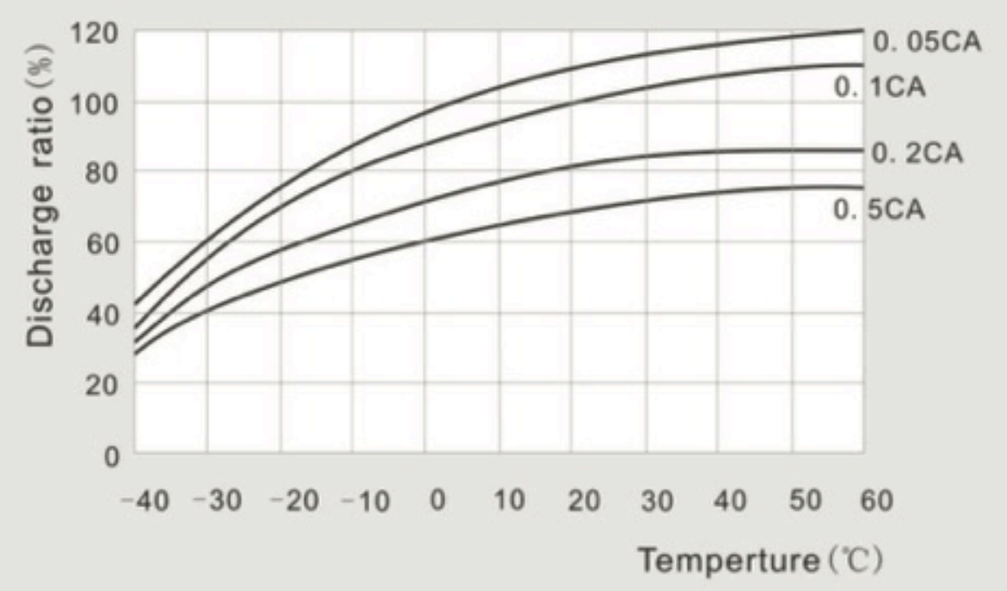
Technical Parameters



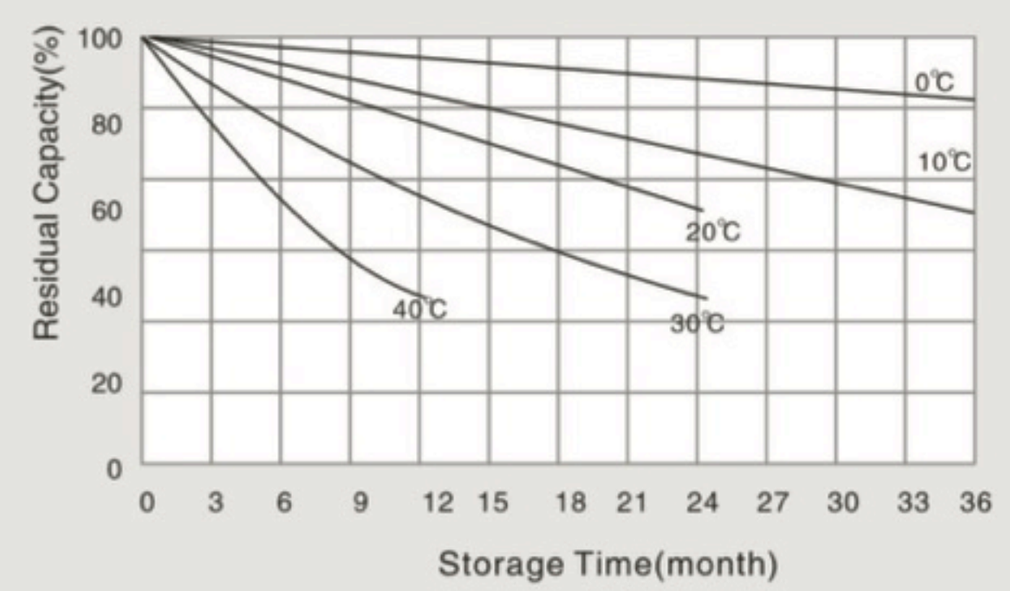
Charging characteristics



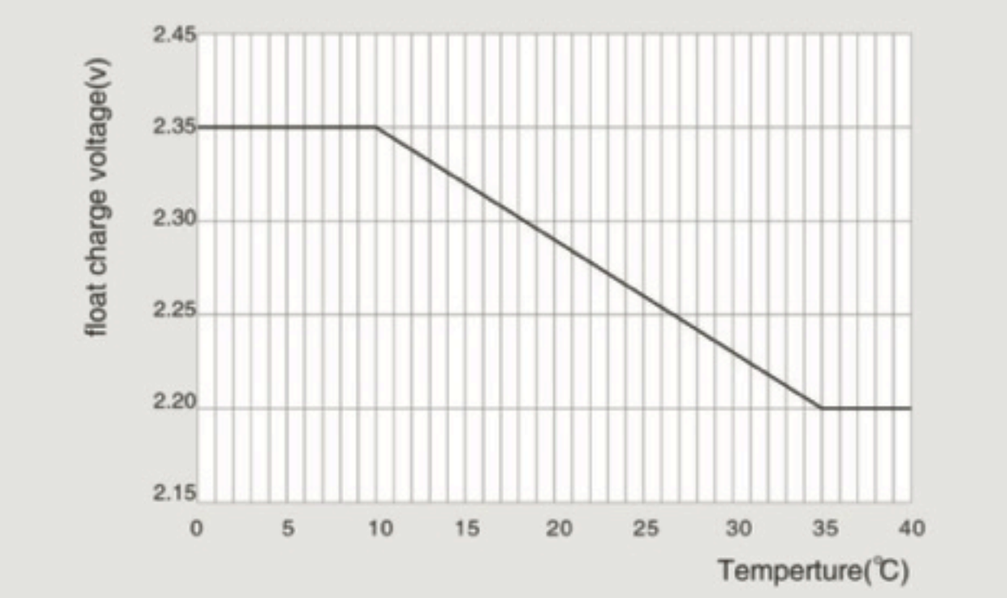
Discharge characteristic



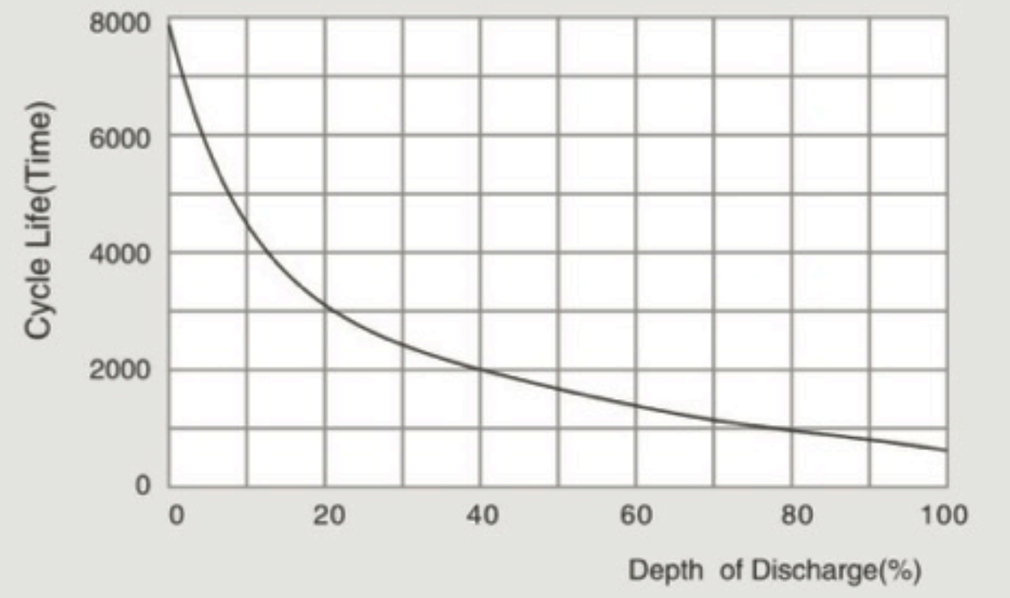
Temperature and capacity



Storage time and temperature



Temperature and float voltage



Discharge depth and life

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Key Facts

Long Battery Life
Design life 18 years and up to 6000 charge/discharge cycle (20%DOD)

Long Shelf Life
Storable for two years without need of refresh charging

Better Performance
Charges two times faster then alternatives

Full Recovery
Can be discharged 100% and charged in daily basis

Guarantee
3 years (Terms & Conditions apply)

Recyclable
up to 99%

Cleaner
No Cadmium or Antimony and less acid

Safer
No leakage

Easy to transport
Non-hazardous for any kind of transportation

Works on extreme temperatures
From -40ºC up to +65ºC

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Areas of use

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