



PERFORMANCE
SPECIFICATIONS





The DataSafe™ CX is an economical multicell flat plate battery. The CX Unit is optimized for high performance and provides excellent short duration discharge rates. Ideally suited for UPS but can be used in utility switchgear applications as well.

The Datasafe CX now features the Slide-Lock™ post seal design. The DataSafe CX features a larger copper insert in the Slide-Lock™ post. The number of plates and plate thickness are optimized with respect to the available electrolyte ensuring maximum performance during short duration discharges.

The DataSafe CX was designed for easier maintenance since all the posts and connectors reside above the cell cover; maintenance routines, including individual cell monitoring and intercell resistance measurements are simplified. The economical design and footprint, combined with Slide-Lock™ post and excellent performance in short duration discharges makes this an ideal battery in UPS and switchgear applications.

Features

- Slide-Lock™ post seal design.
- Calcium alloy grids for lowest water loss, resulting in lowest maintenance costs.
- Lead plated copper posts provide high 1-minute rates.
- 100% Initial capacity.
- 20 year life expectancy in floating applications where high ambient temperature is not a factor.
- The number of plates and the plate thickness have been optimized with respect to the available free electrolyte to ensure maximum performance during short duration discharges without sacrificing component integrity.
- Installation services and preventative maintenance packages available.

Standards

- Manufactured in EnerSys production facilities certified to ISO 9001: 2000.
- Manufactured in EnerSys production facilities certified to ISO 14001: 2004.
- Available testing to IEEE 450 standards as well as customer specific applications.

Specifications

- Plate thickness:
Positive: 0.20 in/5.1 mm
Negative: 0.14 in/3.6 mm
- Plate dimensions:

Height	Width
Pos: 7.75 in/197 mm	8.00 in/203 mm
Neg: 7.75 in/197 mm	8.00 in/203 mm
- Plate suspension type:
Positive: Bottom supported
Negative: Bottom supported
- Container:
Styrene Acrylonitrile Copolymer, optional PC
- Cover: Made from flame retardant PVC, (UL94-VO/L.O.I. 28%)
- Separators: Microporous plastic
- Bolt connectors: Stainless steel, Standard English measure, Hex-Head
- Interunit connectors: Lead-plated copper
- Electrolyte over plates: 2.38 in/60.5 mm
- Vent type: Flame Arrestor, Fused Alumina
- Float voltage settings: Acceptable min/max: 2.17/2.26 Vpc, Recommended: 2.25 Vpc
- Sediment space: 1.00 in/25.4 mm
- Post seal type: Slide-Lock™
- Specific gravity: 1.215 standard (1.250 available upon request)

NOTE: All inter-cell, inter-tier, inter-step, end-to-end inter-rack, and back-to-back inter-rack connectors for standard configurations are included with every battery. Across-aisle inter-rack connectors are not included.

General Specifications

TYPE*	NOM. Ah CAP ¹	Nominal Dimensions						Weights - Volumes							
		Length**		Width		Height		Unpacked		Domestic Packed		Electrolyte Only / 1.215 S.G.			
		in	mm	in	mm	in	mm	lbs	kg	lbs	kg	lbs	kg	gal	l
2CX-5M	65	7.0	178	9.0	229	14.8	375	44	20.0	49	22.2	10	4.5	1.0	3.8
3CX-5M	65	7.0	178	9.0	229	14.8	375	65	29.5	71	32.2	16	7.3	1.5	5.7
2CX-7M	98	7.0	178	9.0	229	14.8	375	49	22.2	53	24.0	9	4.1	0.9	3.4
3CX-7M	98	7.0	178	9.0	229	14.8	375	73	33.1	78	35.4	13	5.9	1.4	5.3
2CX-9M	130	12.2	310	9.0	229	14.8	375	72	32.7	81	36.7	24	10.9	2.4	9.1
3CX-9M	130	12.2	310	9.0	229	14.8	375	107	48.5	114	51.7	36	16.5	3.5	13.2
2CX-11M	162	12.2	310	9.0	229	14.8	375	76	34.5	87	39.5	21	9.5	2.1	7.9
3CX-11M	162	12.2	310	9.0	229	14.8	375	114	51.7	122	55.3	32	14.5	3.2	12.1
2CX-13M	195	12.2	310	9.0	229	14.8	375	81	36.7	88	39.9	20	9.1	2.0	7.6
3CX-13M	195	12.2	310	9.0	229	14.8	375	121	54.9	128	58.1	30	13.6	3.0	11.4
2CX-15M	227	12.2	310	9.0	229	14.8	375	84	38.1	90	40.8	21	9.5	2.0	7.6
3CX-15M	227	12.2	310	9.0	229	14.8	375	125	56.7	132	59.9	31	14.1	3.1	11.7

* Suffix number indicates total plates per cell. Prefix number indicates total cells per jar.

** 0.25" must be added between cells for spacing purposes when calculating total battery length.

¹Nominal Amp hour capacity at the 8 hour rate - 1.215 S.G.

1.215 Specific Gravity

Discharge Rates in Amperes per Cell to 1.75Vpc at 25°C (77°F)*

Type	NOM. Ah CAP. ¹	Minutes				Hours								
		1	5	15	30	1	1.5	2	3	4	5	6	7	8
CX-5M	65	146	128	96	68	44	33	27	19	15	13	11	9	8.1
CX-7M	98	219	192	143	102	66	49	40	29	23	19	16	14	12.2
CX-9M	130	292	256	191	136	87	66	53	39	30	25	21	18	16.3
CX-11M	162	365	320	239	170	109	82	66	48	38	31	27	23	20.3
CX-13M	195	437	384	287	203	131	99	80	58	46	28	32	28	24.4
CX-15M	227	510	448	335	237	153	115	93	68	53	44	37	32	28.4

1.250 Specific Gravity

Discharge Rates in Amperes per Cell to 1.75Vpc at 25°C (77°F)*

Type	NOM. Ah CAP. ¹	Minutes				Hours								
		1	5	15	30	1	1.5	2	3	4	5	6	7	8
CX-5MB	71	160	141	105	75	48	36	29	21	17	14	12	10	8.9
CX-7MB	107	241	211	158	112	72	54	44	32	25	21	18	15	13.4
CX-9MB	143	321	282	210	149	96	72	59	43	33	28	23	20	17.9
CX-11MB	179	401	352	263	187	120	90	73	53	42	34	29	25	22.4
CX-13MB	214	481	423	316	224	144	109	88	64	50	41	35	30	26.8
CX-15MB	250	561	493	368	261	168	127	102	74	59	48	41	35	31.3

1.215 Specific Gravity

Discharge Rates in Amperes per Cell to 1.67Vpc at 25°C (77°F)*

Type	NOM. Ah CAP. ¹	Minutes				Hours								
		1	5	15	30	1	1.5	2	3	4	5	6	7	8
CX-5M	65	175	156	110	74	45	33	27	19	15	13	11	9	8.1
CX-7M	98	262	233	165	111	68	50	40	29	23	19	16	14	12.2
CX-9M	130	350	311	220	148	91	67	54	39	30	25	21	18	16.3
CX-11M	162	437	389	275	185	113	84	67	48	38	31	27	23	20.3
CX-13M	195	525	467	330	222	136	100	80	58	46	38	32	28	24.4
CX-15M	227	612	545	385	258	158	117	94	68	53	44	37	32	28.4

1.250 Specific Gravity

Discharge Rates in Amperes per Cell to 1.67Vpc at 25°C (77°F)*

Type	NOM. Ah CAP. ¹	Minutes				Hours								
		1	5	15	30	1	1.5	2	3	4	5	6	7	8
CX-5MB	71	192	171	121	81	50	37	29	21	17	14	12	10	8.9
CX-7MB	107	289	257	182	122	75	55	44	32	25	21	18	15	13.4
CX-9MB	143	385	342	242	162	100	74	59	43	33	28	23	20	17.9
CX-11MB	179	481	428	303	203	124	92	74	53	42	34	29	25	22.4
CX-13MB	214	577	513	363	244	149	110	88	64	50	41	35	30	26.8
CX-15MB	250	673	599	424	284	174	129	103	75	59	48	41	35	31.3

*Ampere values listed represent 100% of the initial capacity. Includes intercell connector drop.

¹Nominal Amp hour capacity at the 8 hour rate.

All data subject to change without notice.

1.250 Specific Gravity

Discharge Rates in kW per Cell** to 1.75Vpc at 25°C (77°F)*

Type	Minutes															Hours			
	5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
CX-5MB	0.269	0.233	0.225	0.217	0.210	0.203	0.198	0.192	0.188	0.183	0.179	0.175	0.158	0.142	0.110	0.094	0.069	0.057	0.045
CX-7MB	0.404	0.349	0.337	0.326	0.315	0.305	0.297	0.289	0.282	0.275	0.269	0.263	0.237	0.213	0.166	0.142	0.103	0.086	0.067
CX-9MB	0.538	0.466	0.450	0.434	0.420	0.407	0.396	0.385	0.376	0.367	0.359	0.351	0.316	0.284	0.221	0.189	0.138	0.115	0.090
CX-11MB	0.673	0.583	0.562	0.543	0.525	0.509	0.495	0.482	0.470	0.459	0.449	0.439	0.395	0.355	0.277	0.237	0.172	0.144	0.113
CX-13MB	0.808	0.699	0.675	0.652	0.630	0.611	0.594	0.578	0.564	0.551	0.538	0.527	0.474	0.427	0.332	0.284	0.207	0.173	0.135
CX-15MB	0.942	0.816	0.788	0.761	0.736	0.713	0.693	0.674	0.658	0.643	0.628	0.615	0.553	0.498	0.388	0.332	0.242	0.202	0.158

1.250 Specific Gravity

Discharge Rates in kW per Cell** to 1.70Vpc at 25°C (77°F)*

Type	Minutes															Hours			
	5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
CX-5MB	0.289	0.253	0.244	0.236	0.228	0.221	0.215	0.209	0.204	0.199	0.194	0.190	0.169	0.151	0.118	0.099	0.069	0.057	0.046
CX-7MB	0.433	0.379	0.367	0.354	0.342	0.332	0.322	0.314	0.306	0.298	0.291	0.285	0.254	0.226	0.177	0.149	0.103	0.086	0.069
CX-9MB	0.578	0.506	0.489	0.472	0.457	0.443	0.430	0.418	0.408	0.398	0.389	0.380	0.339	0.302	0.236	0.199	0.138	0.115	0.092
CX-11MB	0.722	0.633	0.611	0.590	0.571	0.553	0.537	0.523	0.510	0.497	0.486	0.475	0.423	0.378	0.296	0.249	0.172	0.144	0.115
CX-13MB	0.867	0.759	0.734	0.709	0.685	0.664	0.645	0.628	0.612	0.597	0.583	0.570	0.508	0.453	0.355	0.299	0.207	0.173	0.138
CX-15MB	1.011	0.886	0.856	0.827	0.800	0.775	0.752	0.732	0.714	0.697	0.680	0.665	0.593	0.529	0.414	0.349	0.242	0.202	0.161

1.250 Specific Gravity

Discharge Rates in kW per Cell** to 1.67Vpc at 25°C (77°F)*

Type	Minutes															Hours			
	5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
CX-5MB	0.300	0.265	0.256	0.247	0.239	0.232	0.225	0.219	0.213	0.208	0.203	0.198	0.176	0.156	0.122	0.102	0.069	0.057	0.046
CX-7MB	0.451	0.397	0.384	0.371	0.359	0.348	0.338	0.328	0.320	0.312	0.305	0.298	0.264	0.234	0.184	0.154	0.103	0.086	0.070
CX-9MB	0.601	0.530	0.512	0.495	0.479	0.464	0.450	0.438	0.427	0.416	0.407	0.397	0.352	0.313	0.245	0.205	0.138	0.115	0.093
CX-11MB	0.751	0.663	0.640	0.619	0.598	0.580	0.563	0.548	0.534	0.521	0.508	0.496	0.440	0.391	0.307	0.256	0.172	0.144	0.116
CX-13MB	0.902	0.795	0.769	0.743	0.718	0.696	0.676	0.657	0.641	0.625	0.610	0.596	0.528	0.469	0.368	0.308	0.207	0.173	0.139
CX-15MB	1.052	0.928	0.897	0.867	0.838	0.812	0.788	0.767	0.747	0.729	0.712	0.695	0.617	0.547	0.430	0.359	0.242	0.202	0.163

1.250 Specific Gravity

Discharge Rates in kW per Cell** to 1.65Vpc at 25°C (77°F)*

Type	Minutes															Hours			
	5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
CX-5MB	0.318	0.275	0.265	0.256	0.248	0.240	0.233	0.226	0.220	0.215	0.210	0.205	0.182	0.162	0.126	0.105	0.069	0.057	0.047
CX-7MB	0.478	0.413	0.398	0.385	0.372	0.360	0.349	0.340	0.331	0.323	0.315	0.307	0.273	0.243	0.190	0.158	0.103	0.086	0.070
CX-9MB	0.637	0.550	0.531	0.513	0.496	0.480	0.466	0.453	0.441	0.430	0.420	0.410	0.364	0.325	0.253	0.211	0.138	0.115	0.094
CX-11MB	0.796	0.688	0.664	0.641	0.620	0.600	0.583	0.566	0.552	0.538	0.525	0.512	0.455	0.406	0.316	0.264	0.172	0.144	0.118
CX-13MB	0.956	0.825	0.797	0.770	0.744	0.720	0.699	0.680	0.662	0.645	0.630	0.615	0.546	0.487	0.380	0.317	0.207	0.173	0.141
CX-15MB	1.115	0.963	0.930	0.898	0.868	0.841	0.816	0.793	0.772	0.753	0.735	0.717	0.638	0.568	0.443	0.370	0.242	0.202	0.165

1.250 Specific Gravity

Discharge Rates in kW per Cell** to 1.60Vpc at 25°C (77°F)*

Type	Minutes															Hours			
	5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
CX-5MB	0.360	0.298	0.288	0.279	0.269	0.261	0.253	0.245	0.238	0.231	0.225	0.219	0.193	0.174	0.134	0.110	0.069	0.057	0.048
CX-7MB	0.540	0.448	0.432	0.418	0.404	0.392	0.380	0.368	0.357	0.347	0.338	0.329	0.290	0.261	0.201	0.166	0.103	0.086	0.072
CX-9MB	0.721	0.597	0.577	0.558	0.539	0.522	0.506	0.491	0.477	0.463	0.450	0.438	0.387	0.348	0.269	0.221	0.138	0.115	0.096
CX-11MB	0.901	0.747	0.721	0.697	0.674	0.653	0.633	0.614	0.596	0.579	0.563	0.548	0.484	0.435	0.336	0.277	0.172	0.144	0.120
CX-13MB	1.081	0.896	0.865	0.836	0.809	0.784	0.759	0.737	0.715	0.695	0.676	0.658	0.581	0.522	0.403	0.332	0.207	0.173	0.144
CX-15MB	1.261	1.046	1.010	0.976	0.944	0.914	0.886	0.860	0.834	0.811	0.788	0.767	0.678	0.609	0.470	0.388	0.242	0.202	0.168

1.215 Specific Gravity

Discharge Rates in kW per Cell** to 1.75Vpc at 25°C (77°F)*

Type	Minutes															Hours			
	5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
CX-5M	0.244	0.212	0.204	0.197	0.191	0.185	0.180	0.175	0.171	0.167	0.163	0.159	0.144	0.129	0.100	0.086	0.062	0.052	0.041
CX-7M	0.367	0.318	0.307	0.296	0.286	0.278	0.270	0.262	0.256	0.250	0.245	0.239	0.216	0.194	0.151	0.129	0.094	0.078	0.061
CX-9M	0.489	0.424	0.409	0.395	0.382	0.370	0.360	0.350	0.342	0.334	0.326	0.319	0.288	0.259	0.201	0.172	0.125	0.105	0.082
CX-11M	0.612	0.530	0.512	0.494	0.478	0.463	0.450	0.438	0.427	0.417	0.408	0.399	0.360	0.324	0.252	0.215	0.157	0.131	0.102
CX-13M	0.734	0.636	0.614	0.593	0.573	0.555	0.540	0.525	0.513	0.501	0.490	0.479	0.432	0.389	0.302	0.258	0.188	0.157	0.123
CX-15M	0.857	0.742	0.717	0.692	0.669	0.648	0.630	0.613	0.598	0.584	0.571	0.559	0.503	0.453	0.353	0.302	0.220	0.184	0.143

1.215 Specific Gravity

Discharge Rates in kW per Cell** to 1.70Vpc at 25°C (77°F)*

Type	Minutes															Hours			
	5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
CX-5M	0.262	0.230	0.222	0.214	0.206	0.201	0.195	0.190	0.184	0.179	0.175	0.172	0.153	0.138	0.107	0.090	0.062	0.052	0.041
CX-7M	0.394	0.345	0.333	0.321	0.310	0.302	0.292	0.285	0.276	0.269	0.263	0.259	0.229	0.207	0.161	0.135	0.094	0.078	0.062
CX-9M	0.525	0.460	0.444	0.428	0.413	0.402	0.391	0.380	0.368	0.359	0.351	0.345	0.306	0.277	0.215	0.180	0.125	0.105	0.083
CX-11M	0.656	0.575	0.555	0.535	0.517	0.503	0.488	0.475	0.460	0.449	0.439	0.432	0.382	0.346	0.269	0.225	0.157	0.131	0.104
CX-13M	0.788	0.690	0.666	0.642	0.620	0.604	0.586	0.570	0.553	0.539	0.527	0.518	0.459	0.415	0.322	0.270	0.188	0.157	0.125
CX-15M	0.919	0.805	0.777	0.749	0.724	0.704	0.684	0.666	0.645	0.629	0.615	0.601	0.536	0.485	0.376	0.315	0.220	0.184	0.146

1.215 Specific Gravity

Discharge Rates in kW per Cell** to 1.67Vpc at 25°C (77°F)*

Type	Minutes															Hours			
	5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
CX-5M	0.273	0.241	0.233	0.225	0.218	0.211	0.204	0.199	0.194	0.189	0.185	0.180	0.160	0.142	0.111	0.093	0.062	0.052	0.042
CX-7M	0.410	0.361	0.349	0.337	0.327	0.316	0.307	0.299	0.291	0.284	0.277	0.271	0.240	0.213	0.167	0.140	0.094	0.078	0.063
CX-9M	0.546	0.482	0.466	0.450	0.436	0.422	0.401	0.398	0.388	0.379	0.370	0.361	0.320	0.284	0.223	0.186	0.125	0.105	0.084
CX-11M	0.683	0.602	0.582	0.563	0.545	0.528	0.512	0.498	0.486	0.474	0.462	0.451	0.400	0.355	0.279	0.233	0.157	0.131	0.106
CX-13M	0.820	0.723	0.699	0.676	0.654	0.633	0.614	0.598	0.583	0.569	0.555	0.541	0.480	0.426	0.335	0.280	0.188	0.157	0.127
CX-15M	0.957	0.844	0.816	0.788	0.763	0.739	0.717	0.698	0.680	0.663	0.647	0.632	0.561	0.498	0.391	0.327	0.220	0.184	0.148

1.215 Specific Gravity

Discharge Rates in kW per Cell** to 1.65Vpc at 25°C (77°F)*

Type	Minutes															Hours			
	5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
CX-5M	0.289	0.250	0.241	0.233	0.225	0.218	0.212	0.206	0.201	0.195	0.191	0.186	0.165	0.147	0.115	0.096	0.062	0.052	0.043
CX-7M	0.434	0.375	0.362	0.350	0.338	0.327	0.318	0.309	0.301	0.293	0.286	0.279	0.248	0.221	0.172	0.144	0.094	0.078	0.064
CX-9M	0.579	0.500	0.403	0.467	0.451	0.436	0.424	0.412	0.402	0.391	0.382	0.372	0.331	0.295	0.230	0.192	0.125	0.150	0.086
CX-11M	0.724	0.625	0.604	0.583	0.564	0.546	0.530	0.515	0.502	0.489	0.477	0.466	0.414	0.369	0.287	0.240	0.157	0.131	0.107
CX-13M	0.869	0.750	0.725	0.700	0.677	0.655	0.636	0.618	0.603	0.587	0.573	0.559	0.497	0.443	0.345	0.288	0.188	0.157	0.129
CX-15M	1.014	0.876	0.846	0.817	0.790	0.765	0.742	0.722	0.703	0.685	0.669	0.652	0.580	0.517	0.403	0.337	0.220	0.184	0.150

1.215 Specific Gravity

Discharge Rates in kW per Cell** to 1.60Vpc at 25°C (77°F)*

Type	Minutes															Hours			
	5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
CX-5M	0.327	0.271	0.262	0.253	0.245	0.237	0.230	0.223	0.216	0.210	0.204	0.199	0.176	0.158	0.122	0.100	0.062	0.052	0.043
CX-7M	0.491	0.407	0.393	0.380	0.368	0.356	0.345	0.335	0.325	0.316	0.307	0.299	0.264	0.237	0.183	0.151	0.094	0.078	0.065
CX-9M	0.655	0.543	0.524	0.507	0.490	0.475	0.460	0.446	0.433	0.421	0.409	0.398	0.352	0.316	0.244	0.201	0.125	0.105	0.087
CX-11M	0.819	0.679	0.655	0.634	0.613	0.594	0.575	0.558	0.542	0.526	0.512	0.498	0.440	0.395	0.305	0.252	0.157	0.131	0.109
CX-13M	0.983	0.815	0.787	0.760	0.736	0.712	0.690	0.670	0.650	0.632	0.614	0.598	0.528	0.474	0.366	0.302	0.188	0.157	0.131
CX-15M	1.147	0.951	0.918	0.887	0.858	0.831	0.806	0.781	0.758	0.737	0.717	0.698	0.617	0.554	0.428	0.353	0.220	0.184	0.153

Initial Capacity shall be a minimum of 100% of these values per IEEE 450.

Values include intercell connector drop
All data subject to change without notice.



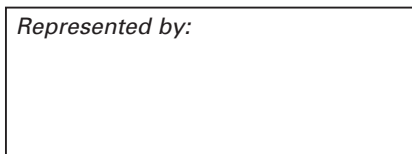
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