



**data safe<sup>®</sup>** CX-M  
*100% Initial Capacity*

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**BATTERY  
PERFORMANCE  
SPECIFICATIONS**

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The DataSafe® CX-M battery is an economical multi-cell flat plate battery. The CX-M unit is optimized for high performance and provides excellent short duration discharge rates.

The DataSafe CX-M battery now features the Slide-Lock™ post seal design. The DataSafe CX-M battery 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-M battery 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: 2008
- Manufactured in EnerSys production facilities certified to ISO 14001: 2004
- Available testing to IEEE 450 standards as well as customer specific applications

## Specifications

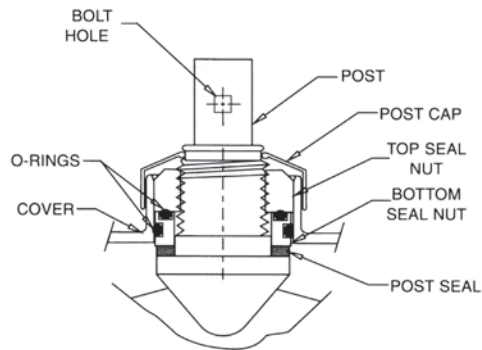
- Plate thickness:  
Positive: 0.20 in/5.1 mm  
Negative: 0.14 in/3.6 mm
- Plate dimensions:  
Height  
Positive: 7.75 in/197 mm  
Negative: 7.75 in/197 mm  
Width  
8.00 in/203 mm  
8.00 in/203 mm
- Plate suspension type:  
Positive: Bottom supported  
Negative: Bottom supported
- Container: Styrene 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
- Inter-unit connectors: Tin-plated copper, Optional lead-plated copper
- Electrolyte over plates: 2.38 in/60.5 mm
- Vent type: Flame Arrestor, Fused Alumina
- Float voltage settings (1.215 S.G.): Acceptable min/max: 2.17/2.26 Vpc, Recommended: 2.21 Vpc
- Float voltage settings (1.250 S.G.): Acceptable min/max: 2.21/2.30 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. Cross-aisle inter-rack connectors are not included.*

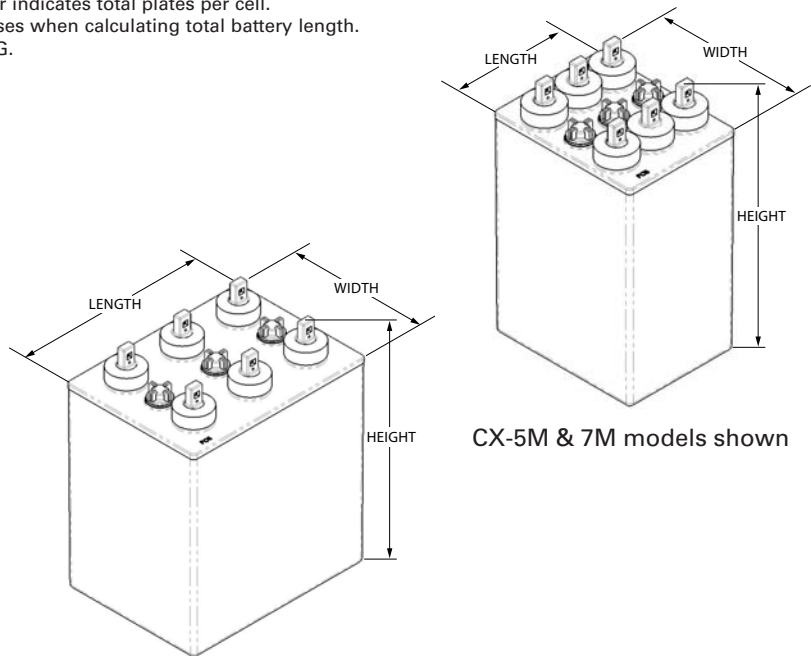
## General Specifications

DataSafe® CX-M battery TYPE*	NOM. Ah CAP <sup>1</sup>	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
<b>2CX-5M</b>	105	7.0	178	9.0	229	14.8	375	44	20.0	49	22.2	10	4.7	1.0	3.9
<b>3CX-5M</b>	105	7.0	178	9.0	229	14.8	375	65	29.5	71	32.2	16	7.1	1.5	5.8
<b>2CX-7M</b>	130	7.0	178	9.0	229	14.8	375	49	22.2	53	24.0	9	4.2	0.9	3.4
<b>3CX-7M</b>	130	7.0	178	9.0	229	14.8	375	73	33.1	78	35.4	14	6.3	1.4	5.2
<b>2CX-9M</b>	185	12.2	310	9.0	229	14.8	375	72	32.7	81	36.7	24	11.0	2.4	9.0
<b>3CX-9M</b>	185	12.2	310	9.0	229	14.8	375	107	48.5	114	51.7	36	16.3	3.5	13.4
<b>2CX-11M</b>	215	12.2	310	9.0	229	14.8	375	76	34.5	87	39.5	22	9.8	2.1	8.0
<b>3CX-11M</b>	215	12.2	310	9.0	229	14.8	375	114	51.7	122	55.3	33	14.7	3.2	12.1
<b>2CX-13M</b>	240	12.2	310	9.0	229	14.8	375	81	36.7	88	39.9	20	9.1	2.0	7.4
<b>3CX-13M</b>	240	12.2	310	9.0	229	14.8	375	121	54.9	128	58.1	30	13.8	3.0	11.3
<b>2CX-15M</b>	260	12.2	310	9.0	229	14.8	375	84	38.1	90	40.8	19	8.5	1.9	7.0
<b>3CX-15M</b>	260	12.2	310	9.0	229	14.8	375	125	56.7	132	59.9	28	12.9	2.8	10.6

\* Prefix number indicates total cells per jar. Suffix number indicates total plates per cell.  
 \*\* 0.25" must be added between units for spacing purposes when calculating total battery length.  
<sup>1</sup> Nominal Amp hour capacity at the 8 hour rate - 1.215 S.G.



Exclusive Slide-Lock™ Post Seal



CX-9M & 15M models shown

CX-5M & 7M models shown

### CX-M Catalog Rint and Isc Catalog Values\*

DataSafe® CX-M battery TYPE	Resistance (u-ohms)	Isc (Amps)
<b>CX-5M</b>	1090	1830
<b>CX-7M</b>	750	2670
<b>CX-9M</b>	528	3790
<b>CX-11M</b>	444	4500
<b>CX-13M</b>	382	5240
<b>CX-15M</b>	333	6010

### CX-MB Catalog Rint and Isc Catalog Values\*

DataSafe® CX-M battery TYPE	Resistance (u-ohms)	Isc (Amps)
<b>CX-5MB</b>	1090	1870
<b>CX-7MB</b>	750	2710
<b>CX-9MB</b>	528	3860
<b>CX-11MB</b>	444	4580
<b>CX-13MB</b>	382	5330
<b>CX-15MB</b>	333	6110

\* Short Circuit and Internal Resistance Values Calculated by IEEE-946 method.

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

DataSafe® CX-M battery Type	Standby Time (Minutes)																Standby Time (Hours)			
	Nom Ah	5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
<b>CX-5MB</b>	115	0.307	0.259	0.251	0.245	0.238	0.232	0.227	0.221	0.216	0.212	0.207	0.203	0.185	0.170	0.138	0.117	0.091	0.076	0.057
<b>CX-7MB</b>	140	0.466	0.385	0.372	0.361	0.350	0.340	0.331	0.322	0.314	0.306	0.299	0.292	0.262	0.238	0.188	0.157	0.120	0.099	0.073
<b>CX-9MB</b>	200	0.659	0.529	0.509	0.492	0.475	0.460	0.446	0.433	0.420	0.409	0.398	0.388	0.345	0.310	0.243	0.203	0.156	0.129	0.097
<b>CX-11MB</b>	235	0.806	0.650	0.626	0.605	0.585	0.566	0.549	0.532	0.517	0.503	0.490	0.478	0.424	0.381	0.298	0.247	0.189	0.155	0.116
<b>CX-13MB</b>	265	0.949	0.768	0.740	0.715	0.692	0.670	0.649	0.630	0.612	0.595	0.580	0.565	0.501	0.451	0.350	0.290	0.220	0.180	0.133
<b>CX-15MB</b>	290	1.086	0.882	0.851	0.822	0.795	0.770	0.746	0.724	0.704	0.685	0.667	0.650	0.576	0.518	0.401	0.331	0.249	0.203	0.149

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

DataSafe® CX-M battery Type	Standby Time (Minutes)																Standby Time (Hours)			
	Nom Ah	5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
<b>CX-5MB</b>	115	0.325	0.271	0.264	0.256	0.249	0.242	0.236	0.231	0.225	0.220	0.215	0.210	0.191	0.174	0.141	0.119	0.092	0.076	0.057
<b>CX-7MB</b>	140	0.502	0.409	0.395	0.382	0.370	0.359	0.348	0.338	0.329	0.320	0.312	0.304	0.271	0.245	0.192	0.159	0.120	0.099	0.073
<b>CX-9MB</b>	200	0.726	0.571	0.548	0.527	0.507	0.489	0.473	0.458	0.444	0.430	0.417	0.405	0.357	0.320	0.247	0.204	0.156	0.129	0.097
<b>CX-11MB</b>	235	0.888	0.703	0.675	0.649	0.625	0.603	0.584	0.565	0.547	0.531	0.515	0.500	0.441	0.394	0.304	0.249	0.189	0.155	0.116
<b>CX-13MB</b>	265	1.046	0.832	0.799	0.769	0.741	0.716	0.692	0.670	0.649	0.630	0.611	0.594	0.522	0.466	0.358	0.293	0.220	0.180	0.133
<b>CX-15MB</b>	290	1.199	0.957	0.920	0.886	0.854	0.825	0.798	0.772	0.748	0.726	0.704	0.684	0.601	0.537	0.411	0.335	0.250	0.203	0.149

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

DataSafe® CX-M battery Type	Standby Time (Minutes)																Standby Time (Hours)			
	Nom Ah	5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
<b>CX-5MB</b>	115	0.333	0.277	0.268	0.261	0.253	0.246	0.240	0.234	0.228	0.223	0.218	0.213	0.192	0.175	0.141	0.119	0.092	0.076	0.057
<b>CX-7MB</b>	140	0.520	0.419	0.405	0.391	0.378	0.365	0.354	0.344	0.334	0.324	0.316	0.308	0.273	0.246	0.192	0.159	0.120	0.099	0.073
<b>CX-9MB</b>	200	0.761	0.591	0.566	0.543	0.522	0.502	0.484	0.468	0.452	0.438	0.425	0.412	0.361	0.322	0.247	0.204	0.156	0.129	0.097
<b>CX-11MB</b>	235	0.932	0.728	0.698	0.670	0.644	0.620	0.598	0.578	0.559	0.541	0.525	0.509	0.446	0.398	0.304	0.249	0.189	0.155	0.116
<b>CX-13MB</b>	265	1.098	0.862	0.827	0.795	0.764	0.736	0.710	0.686	0.664	0.643	0.623	0.604	0.529	0.471	0.358	0.293	0.220	0.180	0.133
<b>CX-15MB</b>	290	1.258	0.993	0.953	0.916	0.881	0.849	0.819	0.792	0.766	0.742	0.719	0.697	0.610	0.543	0.411	0.335	0.250	0.203	0.149

\* 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.

1.250 Specific Gravity  
Discharge Rates in kW per Cell to 1.63Vpc at 25°C (77°F)\*

DataSafe® CX-M battery Type	Nom Ah	Standby Time (Minutes)															Standby Time (Hours)			
		5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
<b>CX-5MB</b>	115	0.341	0.281	0.272	0.264	0.256	0.249	0.242	0.236	0.230	0.224	0.219	0.214	0.193	0.176	0.141	0.119	0.092	0.076	0.057
<b>CX-7MB</b>	140	0.538	0.429	0.413	0.398	0.384	0.371	0.359	0.347	0.337	0.327	0.318	0.310	0.274	0.247	0.192	0.159	0.120	0.099	0.073
<b>CX-9MB</b>	200	0.804	0.612	0.584	0.559	0.536	0.514	0.494	0.476	0.459	0.444	0.430	0.417	0.362	0.322	0.247	0.204	0.156	0.129	0.097
<b>CX-11MB</b>	235	0.984	0.755	0.721	0.690	0.662	0.635	0.611	0.588	0.568	0.549	0.532	0.516	0.448	0.398	0.304	0.249	0.189	0.155	0.116
<b>CX-13MB</b>	265	1.159	0.895	0.856	0.819	0.786	0.755	0.726	0.699	0.675	0.653	0.633	0.613	0.532	0.472	0.358	0.293	0.220	0.180	0.133
<b>CX-15MB</b>	290	1.328	1.031	0.987	0.946	0.907	0.871	0.838	0.808	0.781	0.755	0.731	0.709	0.615	0.544	0.411	0.335	0.250	0.203	0.149

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

DataSafe® CX-M battery Type	Nom Ah	Standby Time (Minutes)															Standby Time (Hours)			
		5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
<b>CX-5MB</b>	115	0.341	0.283	0.273	0.265	0.257	0.250	0.243	0.236	0.230	0.225	0.219	0.214	0.193	0.176	0.141	0.119	0.092	0.076	0.057
<b>CX-7MB</b>	140	0.548	0.433	0.416	0.400	0.386	0.372	0.360	0.349	0.338	0.328	0.319	0.310	0.274	0.247	0.192	0.159	0.120	0.099	0.073
<b>CX-9MB</b>	200	0.833	0.623	0.593	0.566	0.542	0.519	0.499	0.479	0.461	0.446	0.431	0.417	0.362	0.322	0.247	0.204	0.156	0.129	0.097
<b>CX-11MB</b>	235	1.019	0.769	0.733	0.700	0.670	0.642	0.617	0.593	0.572	0.552	0.534	0.516	0.448	0.398	0.304	0.249	0.189	0.155	0.116
<b>CX-13MB</b>	265	1.200	0.912	0.870	0.832	0.796	0.764	0.734	0.706	0.680	0.657	0.635	0.614	0.532	0.472	0.358	0.293	0.220	0.180	0.133
<b>CX-15MB</b>	290	1.373	1.052	1.005	0.960	0.920	0.882	0.848	0.816	0.787	0.760	0.735	0.711	0.615	0.544	0.411	0.335	0.250	0.203	0.149

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

DataSafe® CX-M battery Type	Nom Ah	Standby Time (Minutes)															Standby Time (Hours)			
		5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
<b>CX-5M</b>	105	0.271	0.227	0.221	0.215	0.209	0.204	0.199	0.195	0.190	0.186	0.183	0.179	0.163	0.150	0.122	0.104	0.082	0.068	0.051
<b>CX-7M</b>	130	0.415	0.341	0.330	0.320	0.310	0.301	0.293	0.285	0.278	0.271	0.264	0.258	0.232	0.210	0.167	0.140	0.107	0.088	0.065
<b>CX-9M</b>	185	0.585	0.468	0.450	0.434	0.420	0.406	0.394	0.382	0.370	0.360	0.351	0.342	0.304	0.274	0.216	0.180	0.139	0.116	0.088
<b>CX-11M</b>	215	0.713	0.574	0.553	0.534	0.516	0.500	0.484	0.470	0.456	0.443	0.432	0.421	0.374	0.336	0.263	0.219	0.168	0.139	0.104
<b>CX-13M</b>	240	0.840	0.679	0.655	0.632	0.611	0.592	0.574	0.556	0.540	0.526	0.512	0.499	0.442	0.398	0.310	0.257	0.196	0.161	0.119
<b>CX-15M</b>	260	0.960	0.780	0.752	0.727	0.703	0.680	0.660	0.640	0.621	0.605	0.589	0.574	0.508	0.457	0.354	0.293	0.220	0.180	0.133

\* 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.

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

DataSafe® CX-M battery Type	Standby Time (Minutes)																Standby Time (Hours)			
	Nom Ah	5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
<b>CX-5M</b>	105	0.288	0.239	0.232	0.225	0.219	0.213	0.208	0.203	0.198	0.193	0.189	0.185	0.168	0.154	0.125	0.106	0.082	0.068	0.051
<b>CX-7M</b>	130	0.453	0.365	0.352	0.340	0.328	0.318	0.309	0.300	0.291	0.284	0.276	0.269	0.240	0.217	0.171	0.142	0.108	0.088	0.065
<b>CX-9M</b>	185	0.652	0.507	0.486	0.466	0.448	0.432	0.417	0.403	0.390	0.379	0.367	0.357	0.315	0.282	0.219	0.182	0.139	0.116	0.088
<b>CX-11M</b>	215	0.797	0.625	0.600	0.576	0.554	0.534	0.516	0.499	0.483	0.469	0.455	0.442	0.389	0.348	0.269	0.222	0.168	0.139	0.104
<b>CX-13M</b>	240	0.939	0.742	0.712	0.685	0.659	0.635	0.614	0.594	0.575	0.558	0.541	0.526	0.463	0.413	0.318	0.262	0.197	0.161	0.119
<b>CX-15M</b>	260	1.075	0.855	0.821	0.790	0.760	0.734	0.709	0.686	0.665	0.644	0.625	0.608	0.534	0.476	0.365	0.299	0.223	0.181	0.133

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

DataSafe® CX-M battery Type	Standby Time (Minutes)																Standby Time (Hours)			
	Nom Ah	5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
<b>CX-5M</b>	105	0.295	0.243	0.236	0.229	0.222	0.216	0.210	0.205	0.200	0.195	0.191	0.187	0.169	0.155	0.125	0.106	0.082	0.068	0.051
<b>CX-7M</b>	130	0.470	0.374	0.360	0.347	0.336	0.324	0.314	0.305	0.296	0.288	0.280	0.273	0.243	0.219	0.171	0.142	0.108	0.088	0.065
<b>CX-9M</b>	185	0.687	0.524	0.501	0.480	0.460	0.442	0.425	0.411	0.397	0.385	0.373	0.362	0.317	0.283	0.219	0.182	0.139	0.116	0.088
<b>CX-11M</b>	215	0.840	0.648	0.620	0.594	0.570	0.548	0.528	0.510	0.493	0.478	0.463	0.449	0.394	0.351	0.269	0.222	0.168	0.139	0.104
<b>CX-13M</b>	240	0.991	0.770	0.737	0.707	0.679	0.654	0.630	0.608	0.588	0.570	0.552	0.536	0.469	0.418	0.319	0.262	0.197	0.161	0.119
<b>CX-15M</b>	260	1.135	0.890	0.852	0.817	0.786	0.756	0.729	0.705	0.682	0.660	0.640	0.621	0.543	0.483	0.367	0.299	0.223	0.181	0.133

1.215 Specific Gravity  
Discharge Rates in kW per Cell to 1.63Vpc at 25°C (77°F)\*

DataSafe® CX-M battery Type	Standby Time (Minutes)																Standby Time (Hours)			
	Nom Ah	5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
<b>CX-5M</b>	105	0.297	0.246	0.238	0.230	0.224	0.218	0.212	0.206	0.201	0.196	0.192	0.187	0.169	0.155	0.125	0.106	0.082	0.068	0.051
<b>CX-7M</b>	130	0.487	0.381	0.367	0.353	0.340	0.329	0.318	0.308	0.299	0.290	0.282	0.275	0.243	0.219	0.171	0.142	0.108	0.088	0.065
<b>CX-9M</b>	185	0.727	0.539	0.514	0.491	0.470	0.451	0.433	0.417	0.402	0.389	0.376	0.365	0.318	0.283	0.219	0.182	0.139	0.116	0.088
<b>CX-11M</b>	215	0.891	0.669	0.638	0.610	0.585	0.561	0.539	0.519	0.501	0.484	0.469	0.454	0.395	0.351	0.269	0.222	0.168	0.139	0.104
<b>CX-13M</b>	240	1.051	0.798	0.762	0.728	0.698	0.670	0.644	0.620	0.599	0.579	0.561	0.543	0.472	0.419	0.319	0.262	0.197	0.161	0.119
<b>CX-15M</b>	260	1.205	0.924	0.883	0.845	0.810	0.788	0.748	0.721	0.696	0.673	0.651	0.631	0.549	0.485	0.367	0.299	0.223	0.181	0.133

\* 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.

1.215 Specific Gravity

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

DataSafe® CX-M battery Type	Nom Ah	Standby Time (Minutes)															Standby Time (Hours)			
		5	10	11	12	13	14	15	16	17	18	19	20	25	30	45	1	1.5	2	3
<b>CX-5M</b>	105	0.297	0.246	0.238	0.230	0.224	0.218	0.212	0.206	0.201	0.196	0.192	0.187	0.169	0.155	0.125	0.106	0.082	0.068	0.051
<b>CX-7M</b>	130	0.495	0.384	0.368	0.354	0.342	0.330	0.319	0.309	0.299	0.291	0.283	0.275	0.243	0.219	0.171	0.142	0.108	0.088	0.065
<b>CX-9M</b>	185	0.752	0.548	0.520	0.496	0.474	0.454	0.435	0.418	0.402	0.389	0.376	0.365	0.318	0.283	0.219	0.182	0.139	0.116	0.088
<b>CX-11M</b>	215	0.923	0.681	0.647	0.618	0.591	0.566	0.543	0.522	0.503	0.485	0.470	0.455	0.395	0.351	0.269	0.222	0.168	0.139	0.104
<b>CX-13M</b>	240	1.090	0.813	0.774	0.739	0.707	0.678	0.650	0.625	0.603	0.582	0.563	0.545	0.472	0.419	0.319	0.262	0.197	0.161	0.119
<b>CX-15M</b>	260	1.251	0.942	0.898	0.859	0.822	0.788	0.757	0.728	0.701	0.678	0.655	0.634	0.549	0.485	0.367	0.299	0.223	0.181	0.133

\* Initial Capacity shall be a minimum of 100% of these values per IEEE 450. Values include intercell connector drop.  
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