

The world's first 16V Front Terminal UPS battery

data safe®
HX-FT



Available exclusively from EnerSys®, the world leader in stored power solutions.



DataSafe® HX Front Terminal Batteries.

More power, less space, safer and easier maintenance.

Eliminate the difficult maintenance and burdensome space requirements of top terminated 12V Uninterruptible Power Supply (UPS) batteries. Revolutionary, DataSafe® HX front terminal 16V UPS batteries, available in 550 WPC, 800 WPC and 925 WPC sizes, are more space efficient, more cost effective and easier to maintain than 12V batteries. They use proven Valve Regulated Lead Acid (VRLA) technology, are conducive to incorporating monitoring systems and scale easily to larger capacity UPS systems with one-third fewer parallel battery strings.

Other benefits of DataSafe® HX Front Terminal 16V Batteries:

- Smaller footprint per kilowatt.
- Eliminates wasted headspace found in typical 12V top terminated designs.
- Simplifies installation.
- Easy front terminal access simplifies maintenance.
- Improves reliability.
- No costly slide out trays required to obtain terminal access.
- Complete front access.



DataSafe® HX Front Terminal 16V Batteries Save Valuable Space



EnerSys® engineers set out to develop a true UPS design, front terminal battery that would be cost effective, space efficient and easy to maintain. It also had to be conducive to incorporating monitoring systems, adaptable to existing cabinet designs, and built on proven electrochemistry and design practices. Finally, the battery had to be capable of scaling to larger capacities to minimize the number of strings in larger UPS systems.

Compared with top terminated 12V batteries, DataSafe® HX front terminated 16V batteries offer several distinct advantages:

- More than 20% space savings for a full 15 minute run time for 750kVA UPS systems
- 925 WPC design reduces the number of parallel strings required
- Up to 50% fewer connections means less maintenance
- No wasted space
- Scales easily to large capacity UPS systems
- Fits within many existing cabinet designs
- Cabinets are equipped with locking feature

DATASAFE® HX FRONT TERMINAL BATTERY CABINET SYSTEMS

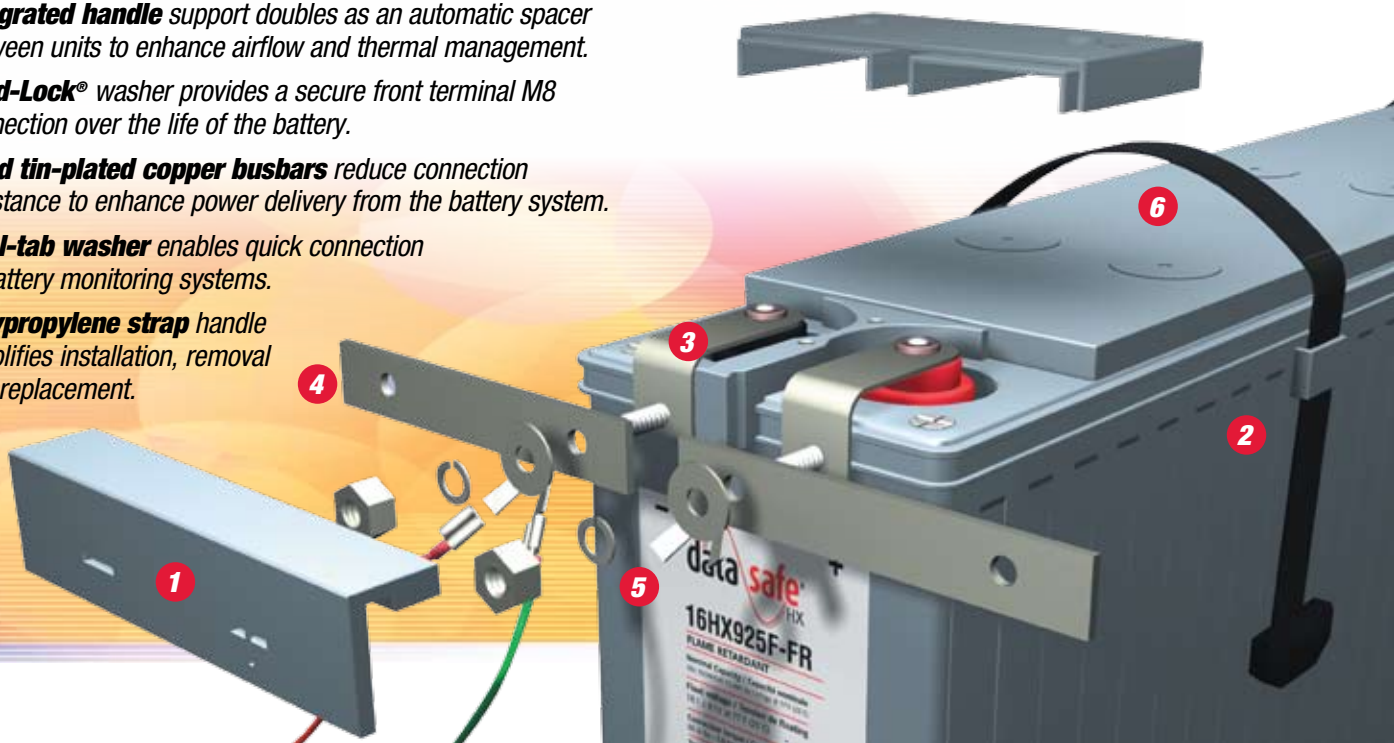
Cabinet System Model Number**	Battery Type	# Units	Width		Depth		Height		1 String System Weight	15 MIN KWH @ 1.67 at 77°F (25°C)				
			Inches	mm	Inches	mm	Inches	mm		1 String	2 String	3 String	4 String	
SS65550480BL600A	16HX550F-FR	30	480	42.5	1080	31.5	800	72.0	1829	5250	132.0	264.0	396.0	528.0
ST64550384BL600A	16HX550F-FR	24	384	32.0	813	31.5	800	72.0	1829	4400	105.6	211.2	316.8	422.4
ST65550480BL600A	16HX550F-FR	30	480	32.0	813	31.5	800	84.0	2134	5250	132.0	264.0	396.0	528.0
SS65800480BL600A	16HX800F-FR	30	480	60.8	1543	31.5	800	72.0	1829	8500*	192.0	384.0	576.0	768.0
ST64800384BL600A	16HX800F-FR	24	384	50.0	1270	31.5	800	72.0	1829	7000*	153.6	307.2	480.8	614.4
ST65800480BL600A	16HX800F-FR	30	480	50.0	1270	31.5	800	84.0	2134	8500*	192.0	384.0	576.0	768.0
SS65925480BL600A	16HX925F-FR	30	480	60.8	1543	31.5	800	72.0	1829	8960*	222.0	444.0	666.0	888.0
ST64925384BL600A	16HX925F-FR	24	384	50.0	1270	31.5	800	72.0	1829	7448*	177.6	355.2	532.8	710.4
ST65925480BL600A	16HX925F-FR	30	480	50.0	1270	31.5	800	84.0	2134	8960*	222.0	444.0	666.0	888.0

*HX800F-FR & HX925F-FR string consists of two cabinets, each cabinet weight is half the single-string system weight.

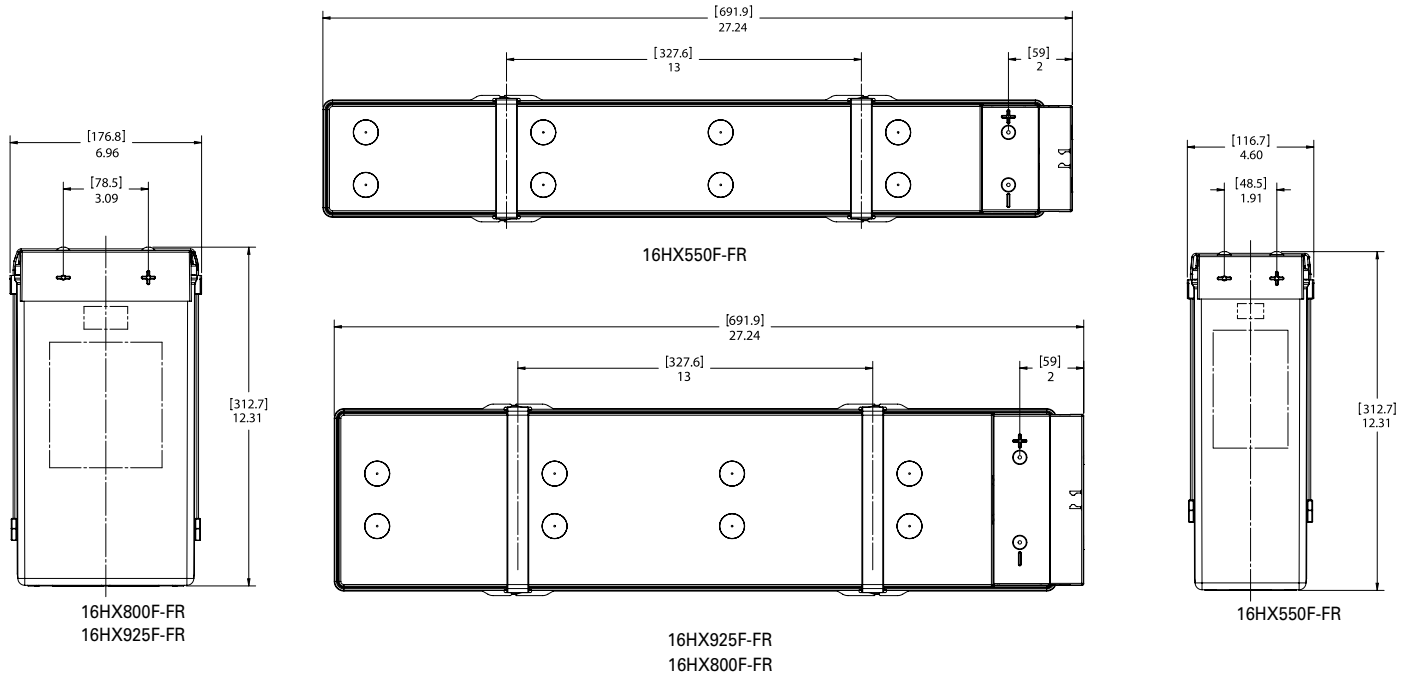
**Each cabinet system is single-string. For multi-string systems, order multiple cabinet systems.

Construction

- 1. Insulating covers** with voltmeter probe access enhance safety and simplify maintenance routines.
- 2. Integrated handle** support doubles as an automatic spacer between units to enhance airflow and thermal management.
- 3. Nord-Lock® washer** provides a secure front terminal M8 connection over the life of the battery.
- 4. Solid tin-plated copper busbars** reduce connection resistance to enhance power delivery from the battery system.
- 5. Dual-tab washer** enables quick connection to battery monitoring systems.
- 6. Polypropylene strap** handle simplifies installation, removal and replacement.



General Specifications



BATTERY SPECIFICATIONS

Type	Watts/Cell			Nominal Dimension								Unpacked	
	Number of Cells	Nominal Voltage (V)	15 min rate to 1.67 @77°F (25°C)	Length		Width		Height		kg	lbs		
				mm	in	mm	in	mm	in				
16HX550F-FR	8	16	550	692	27.2	117	4.6	313	12.3	68.5	151		
16HX800F-FR	8	16	800	692	27.2	177	7.0	313	12.3	105.2	232		
16HX925F-FR	8	16	925	692	27.2	177	7.0	313	12.3	112.5	248		

CONSTANT POWER 16HX550F-FR

Discharge Rates in Watts per cell at 25°C (77°F)

End Volts	Standby Time (Minutes)																						
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	25	30	45	60	90	120	240
1.75	802	761	725	691	660	632	606	582	561	539	517	497	479	461	445	430	370	324	239	190	136	106	58
1.70	859	811	769	731	696	665	637	611	587	564	543	521	500	481	463	446	380	332	242	191	136	106	58
1.67	884	835	790	750	713	680	650	622	596	572	550	529	508	488	469	452	382	332	242	191	136	106	58
1.65	898	849	802	760	723	688	656	627	601	576	554	532	512	491	472	453	382	332	242	191	136	106	58
1.63	910	860	813	769	730	694	661	631	604	579	556	534	513	491	472	453	382	332	242	191	136	106	58
1.60	926	873	825	779	738	700	666	635	607	581	556	534	513	491	472	453	382	332	242	191	136	106	58

16HX800F-FR

Discharge Rates in Watts per cell at 25°C (77°F)

End Volts	Standby Time (Minutes)																						
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	25	30	45	60	90	120	240
1.75	1113	1060	1012	967	926	889	855	823	794	767	742	718	696	675	655	636	556	493	370	297	216	170	93
1.70	1191	1146	1089	1038	993	951	912	876	842	811	783	756	730	707	684	663	576	508	378	301	216	170	93
1.67	1191	1191	1129	1075	1026	981	939	900	864	831	800	771	745	720	696	674	584	515	378	301	216	170	93
1.65	1191	1191	1154	1097	1045	998	954	914	876	842	810	780	752	727	703	681	588	516	378	301	216	170	93
1.63	1191	1191	1177	1117	1063	1013	967	925	886	851	818	787	759	733	708	686	590	516	378	301	216	170	93
1.60	1191	1191	1191	1143	1085	1032	984	939	899	862	827	796	767	740	715	691	590	516	378	301	216	170	93

CONSTANT POWER
16HX925F-FR

Discharge Rates in Watts per cell at 25°C (77°F)

End Volts	Standby Time (Minutes)																							
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	25	30	45	60	90	120	240	
1.75	1309	1271	1208	1151	1101	1056	1014	976	941	905	870	837	806	777	751	726	630	557	412	329	237	186	102	
1.70	1309	1309	1282	1218	1161	1111	1065	1023	983	947	913	878	842	810	780	752	646	570	417	330	237	186	102	
1.67	1309	1309	1308	1250	1189	1133	1084	1039	999	960	925	892	857	823	791	762	649	570	417	330	237	186	102	
1.65	1309	1309	1309	1267	1203	1144	1093	1047	1005	966	930	897	863	829	796	765	649	570	417	330	237	186	102	
1.63	1309	1309	1309	1281	1214	1153	1099	1052	1010	970	934	900	866	829	796	765	649	570	417	330	237	186	102	
1.60	1309	1309	1309	1296	1226	1163	1106	1057	1013	972	934	900	866	829	796	765	649	570	417	330	237	186	102	

CONSTANT CURRENT
16HX550F-FR

Discharge Rates in Amperes at 25°C (77°F)

End Volts	Minutes											Hours														
	1	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
1.85	393	350	278	227	193	168	149	134	121	111	103	95.3	89.0	64.2	50.5	41.7	35.7	27.8	22.8	19.4	16.8	14.8	13.3	12.0	10.1	5.20
1.80	485	404	321	258	216	187	164	147	133	121	111	103	95.7	68.6	53.7	44.3	37.8	29.4	24.1	20.5	17.8	15.7	14.0	12.7	10.7	5.40
1.75	570	453	353	284	233	199	173	154	139	127	116	107	99.7	70.5	54.7	44.9	38.2	29.6	24.2	20.5	17.8	15.7	14.0	12.7	10.7	5.40
1.73	602	471	364	292	238	202	176	156	141	128	117	107	99.7	70.5	54.7	44.9	38.2	29.6	24.2	20.5	17.8	15.7	14.0	12.7	10.7	5.40
1.71	635	489	374	299	242	205	178	157	141	128	117	107	99.7	70.5	54.7	44.9	38.2	29.6	24.2	20.5	17.8	15.7	14.0	12.7	10.7	5.40
1.69	667	506	384	304	245	206	178	157	141	128	117	107	99.7	70.5	54.7	44.9	38.2	29.6	24.2	20.5	17.8	15.7	14.0	12.7	10.7	5.40
1.67	690	522	391	309	247	206	178	157	141	128	117	107	99.7	70.5	54.7	44.9	38.2	29.6	24.2	20.5	17.8	15.7	14.0	12.7	10.7	5.40
1.65	690	537	398	312	247	206	178	157	141	128	117	107	99.7	70.5	54.7	44.9	38.2	29.6	24.2	20.5	17.8	15.7	14.0	12.7	10.7	5.40
1.63	690	553	403	314	247	206	178	157	141	128	117	107	99.7	70.5	54.7	44.9	38.2	29.6	24.2	20.5	17.8	15.7	14.0	12.7	10.7	5.40
1.60	690	578	410	314	247	206	178	157	141	128	117	107	99.7	70.5	54.7	44.9	38.2	29.6	24.2	20.5	17.8	15.7	14.0	12.7	10.7	5.40

16HX800F-FR

Discharge Rates in Amperes at 25°C (77°F)

End Volts	Minutes											Hours														
	1	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
1.85	505	467	388	328	284	250	223	202	185	171	158	148	139	101	80.1	66.7	57.1	44.5	36.7	31.3	27.3	24.3	21.9	19.9	16.9	8.90
1.80	641	553	446	373	320	281	249	224	204	187	173	161	150	109	85.5	70.9	60.7	47.2	38.8	33.1	28.8	25.6	23.1	21.0	17.8	9.30
1.75	777	632	498	411	349	302	266	238	215	197	182	169	157	113	87.9	72.4	61.8	47.8	39.2	33.3	29.0	25.7	23.1	21.0	17.8	9.30
1.73	831	662	517	424	357	308	271	242	219	200	184	171	159	113	87.9	72.4	61.8	47.8	39.2	33.3	29.0	25.7	23.1	21.0	17.8	9.30
1.71	850	690	535	435	365	314	275	245	222	202	185	171	159	113	87.9	72.4	61.8	47.8	39.2	33.3	29.0	25.7	23.1	21.0	17.8	9.30
1.69	850	718	552	445	371	318	279	248	222	202	185	171	159	113	87.9	72.4	61.8	47.8	39.2	33.3	29.0	25.7	23.1	21.0	17.8	9.30
1.67	850	744	568	454	377	322	281	248	222	202	185	171	159	113	87.9	72.4	61.8	47.8	39.2	33.3	29.0	25.7	23.1	21.0	17.8	9.30
1.65	850	770	582	462	382	325	281	248	222	202	185	171	159	113	87.9	72.4	61.8	47.8	39.2	33.3	29.0	25.7	23.1	21.0	17.8	9.30
1.63	850	794	595	469	387	325	281	248	222	202	185	171	159	113	87.9	72.4	61.8	47.8	39.2	33.3	29.0	25.7	23.1	21.0	17.8	9.30
1.60	850	830	612	478	387	325	281	248	222	202	185	171	159	113	87.9	72.4	61.8	47.8	39.2	33.3	29.0	25.7	23.1	21.0	17.8	9.30

16HX925F-FR

Discharge Rates in Amperes at 25°C (77°F)

End Volts	Minutes											Hours														
	1	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
1.85	687	584	462	383	329	288	255	230	209	192	177	165	155	112	88.5	73.3	62.5	48.5	39.7	33.7	29.3	26.0	23.4	21.3	18.0	9.40
1.80	839	677	536	434	368	320	282	252	228	208	192	178	166	120	94.0	77.7	66.3	51.3	42.0	35.6	31.0	27.4	24.7	22.4	18.9	9.80
1.75	850	758	591	477	395	340	299	266	239	218	200	186	173	123	96.0	79.0	67.3	51.8	42.3	35.8	31.1	27.5	24.7	22.4	18.9	9.80
1.73	850	788	610	491	402	345	303	269	243	220	202	186	173	123	96.0	79.0	67.3	51.8	42.3	35.8	31.1	27.5	24.7	22.4	18.9	9.80
1.71	850	817	626	503	408	350	307	271	243	220	202	186	173	123	96.0	79.0	67.3	51.8	42.3	35.8	31.1	27.5	24.7	22.4	18.9	9.80
1.69	850	844	640	513	414	353	307	271	243	220	202	186	173	123	96.0	79.0	67.3	51.8	42.3	35.8	31.1	27.5	24.7	22.4	18.9	9.80
1.67	850	850	652	521	417	353	307	271	243	220	202	186	173	123	96.0	79.0	67.3	51.8	42.3	35.8	31.1	27.5	24.7	22.4	18.9	9.80
1.65	850	850	662	528	417	353	307	271	243	220	202	186	173	123	96.0	79.0	67.3	51.8	42.3	35.8	31.1	27.5	24.7	22.4	18.9	9.80
1.63	850	850	670	531	417	353	307	271	243	220	202	186	173	123	96.0	79.0	67.3	51.8	42.3	35.8	31.1	27.5	24.7	22.4	18.9	9.80
1.60	850	850	680	531	417	353	307	271	243	220	202	186	173	123	96.0	79.0	67.3	51.8	42.3	35.8	31.1	27.5	24.7	22.4	18.9	9.80

Rates subject to change without notice.

DataSafe[®] 16V HX Front Terminal Battery Racks

DataSafe[®] HX Front Terminal 16V Series Battery Racks* (See Figure 1) are available in UBC Zone 0 as well as at or Below Grade Rated Zone 4. Visit our web site www.enersys.com to view the below specific size 16V Battery Rack Data Sheet.

16 Volt Battery	Zone 0 Data Sheet	Zone 4 Data Sheet
16HX500F-FR	US-UAPx-RK	US-UJPx-RK
16HX800F-FR	US-UAQx-RK	US-UJQx-RK
16HX925F-FR	US-UAQx-RK	US-UJQx-RK

* Battery Rack Accessories, inter-unit & inter-tier connectors etc., are not included in Rack or Battery prices as their size varies based on the specific site application or rates. Once properly sized and quoted by EnerSys, Battery Rack Accessories are available and sold as separate line items.

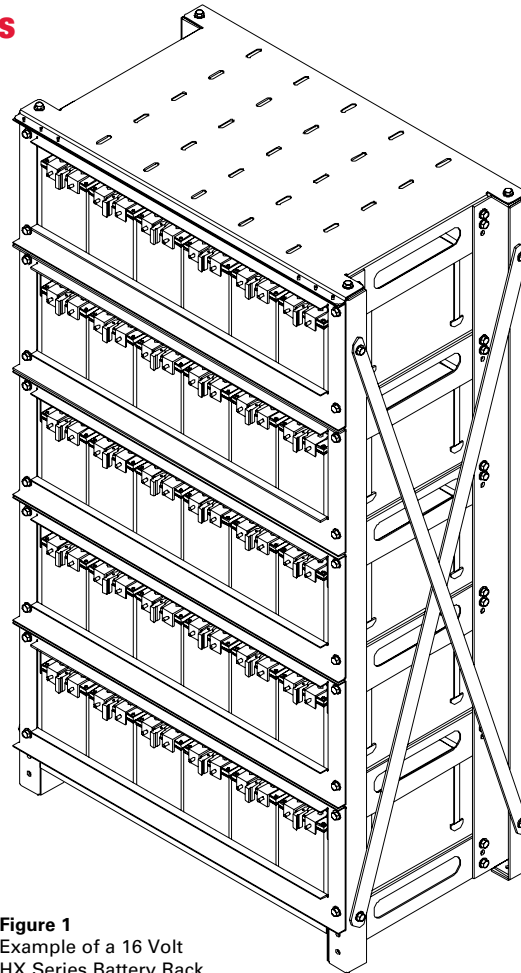


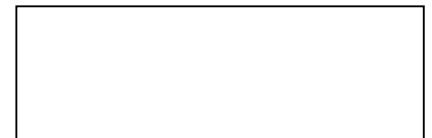
Figure 1
Example of a 16 Volt
HX Series Battery Rack



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